Block D Panhandle Soil Remedial Action Plan Lockheed Martin Middle River Complex 2323 Eastern Boulevard Middle River, Maryland

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TABLE OF CONTENTS

Section **Page**

ACRONYMS ..... **vii**

GLOSSARY ..... **ix**

EXECUTIVE SUMMARY **ES-1**

1 INTRODUCTION **1-1**

1.1 PURPOSE OF THE REMEDIAL ACTION PLAN 1-1

1.2 SCOPE 1-2

1.3 ORGANIZATION 1-2

2 MIDDLE RIVER COMPLEX BLOCK D PANHANDLE OVERVIEW **2-1**

2.1 MIDDLE RIVER COMPLEX BACKGROUND 2-1

2.2 BLOCK D PANHANDLE BACKGROUND 2-2

2.3 BLOCK D PANHANDLE PREVIOUS INVESTIGATIONS 2-3

2.3.1 Phase I Environmental Site Assessment (2003) 2-4

2.3.2 Phase II Investigation (Autumn/Winter 2003) 2-5

2.3.3 Historical Survey (2004) 2-6

2.3.4 Site-Wide Phase II Investigation (2004) 2-6

2.3.5 Phase II Soil Investigation (Summer 2005) 2-6

2.3.6 Site Characterization Report (May 2006) 2-7

2.3.7 Additional Soil Characterization (Fall 2007) 2-7

2.3.8 Final Soil Delineation (Blocks D, F, G, and H, Autumn 2009) 2-9

2.3.9 Data Gap Investigation (Fall 2010) 2-9

2.3.10 Pandhandle Investigation (Spring 2012) 2-10

2.3.11 Human Health Risk Assessment 2-12

TABLE OF CONTENTS (continued)

Section **Page**

2.4 CONCEPTUAL SITE MODEL 2-13

2.4.1 Contaminant Sources and Soil Contaminants of Concern 2-14

2.4.2 Land Use Scenario and Exposure Pathways 2-14

3 EXPOSURE ASSESSMENT 3-1

3.1 CURRENT AND FUTURE LAND USE 3-1

3.2 POTENTIAL CONTAMINANT-RELEASE MECHANISMS AND TRANSPORT PATHWAYS 3-1

3.3 FATE AND TRANSPORT OF PRIMARY SITE CHEMICALS OF POTENTIAL CONCERN (COPC) IN SOIL 3-2

3.4 POTENTIAL CURRENT AND FUTURE RECEPTORS OF CONCERN AND EXPOSURE PATHWAYS 3-2

4 PRELIMINARY REMEDIAL GOALS 4-1

4.1 REMEDIAL ACTION OBJECTIVES 4-1

4.2 CHEMICALS OF CONCERN 4-1

4.3 PRELIMINARY REMEDIAL GOAL 4-2

4.4 RESIDUAL-RISK ANALYSIS 4-3

4.5 ATTAINING PRELIMINARY REMEDIAL GOALS AND REMEDIAL ACTION OBJECTIVES 4-5

5 REMEDIAL ACTION ALTERNATIVE EVALUATION AND SELECTION 5-1

5.1 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS AND GENERAL RESPONSE ACTIONS 5-1

5.2 SCREENING OF TECHNOLOGIES AND PROCESS OPTIONS 5-3

5.3 DEVELOPMENT AND DETAILED ANALYSES OF ALTERNATIVES 5-4

5.3.1 Development of Alternatives 5-4

TABLE OF CONTENTS (continued)

Section **Page**

5.3.2 Evaluation Criteria 5-7

5.3.3 Detailed Analyses of Alternatives 5-11

5.4 COMPARATIVE ANALYSIS OF ALTERNATIVES AND PROPOSED ALTERNATIVE 5-24

6 DESIGN CHARACTERIZATION SAMPLING 6-1

7 CONTINGENCY MEASURES FOR THE SELECTED REMEDIAL ACTION 7-1

8 PROPOSED REMEDIAL ACTIONS 8-1

8.1 SUMMARY OF MAJOR COMPONENTS 8-1

8.1.1 Excavation 8-2

8.1.2 Dewatering 8-3

8.1.3 Confirmation Soil Sampling 8-3

8.1.4 Waste Characterization and Disposal 8-4

8.1.5 Backfilling 8-5

8.1.6 Restoration 8-5

8.2 INSTITUTIONAL CONTROLS 8-6

9 PERMITS AND NOTIFICATIONS 9-1

9.1 PERMITS 9-1

9.2 NOTIFICATIONS 9-2

10 IMPLEMENTATION SCHEDULE 10-1

11 REFERENCES 11-1

TABLE OF CONTENTS (continued)

APPENDICES

APPENDIX A— VOLUNTARY CLEANUP PROGRAM WITHDRAWAL LETTER

APPENDIX B— EXCEEDANCES OF RISK-BASED SCREENING CRITERIA BASED ON RECREATIONAL EXPOSURE TO BLOCK D PANHANDLE SOILS (table)

APPENDIX C— SOIL DATA FROM PREVIOUS INVESTIGATIONS (table)

APPENDIX D— RESIDUAL-RISK ANALYSIS

APPENDIX E— BaPEq CALCULATION

APPENDIX F— BLOCK D PANHANDLE DEPTH-TO-WATER CONTOURS

APPENDIX G— *SITEWISE*™ INFORMATION

APPENDIX H— TOTAL COST ANALYSIS

APPENDIX I— *CRITERIUM*® *DECISIONPLUS*® ANALYSIS

APPENDIX J— PERMITS

LIST OF FIGURES

Page

Figure 1-1 Middle River Complex Location Map 1-5

Figure 2-1 Middle River Complex Tax Blocks 2-23

Figure 2-2 Previous Soil Sampling Locations 2-24

Figure 2-3 Summary of Exceedances of Recreational Land Use Screening-Values in Soil 2-25

Figure 4-1 Soil Remediation Areas Based on Residual-Risk Analysis in Surface and Subsurface Soil 4-7

Figure 6-1 Design Characterization Sampling Locations 6-3

TABLE OF CONTENTS (continued)

LIST OF TABLES

		Page
Table 2-1	Historical Soil Investigations	2-16
Table 2-2	Applicable Soil Screening Criteria	2-17
Table 2-3	Summary of 2003 to 2005 Panhandle Soil Samples	2-18
Table 2-4	Summary of 2007–2009 Soil Samples	2-19
Table 2-5	Summary of 2010 Data Gap Investigation Samples	2-20
Table 2-6	Summary of 2012 Panhandle Investigation Samples	2-22
Table 5-1	Chemical-Specific Applicable or Relevant and Appropriate Requirements and To-Be-Considered Guidance	5-27
Table 5-2	Location-Specific Applicable and Relevant and Appropriate Requirements and To-Be-Considered Guidance	5-28
Table 5-3	Action-Specific Applicable or Relevant and Appropriate Requirements and To-Be-Considered Guidance	5-29
Table 5-4	Remedial Action Objectives and General Response Actions	5-32
Table 5-5	Results of Preliminary Technology Screening	5-33
Table 5-6	Technologies and Process Options for Soil Remedial Action	5-40
Table 5-7	Development of Remedial Alternatives	5-41
Table 5-8	Ranking of Alternatives Based on Preliminary Screening	5-42
Table 5-9	Comparative Analysis of Alternatives	5-43
Table 5-10	Criteria Weighting and Ranking	5-48
Table 8-1	Backfill Material Acceptance Criteria	8-7

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ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
API	American Petroleum Institute
ARARs	applicable or relevant and appropriate requirements
ASTM	ASTM International Inc.
ATC	anticipated typical concentration
BaPEq	benzo(a)pyrene equivalent
bgs	below ground surface
CDP	*Criterium® DecisionPlus®*
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	*Code of Federal Regulations*
CHS	Controlled Hazardous Substances
COC	chemical(s) of concern
COMAR	*Code of Maryland Regulations*
COPC	chemical(s) of potential concern
CSM	conceptual site model
DRO	diesel-range organics
EM	electromagnetic
EPC	exposure-point concentration
ESA	environmental site assessment
FRTR	Federal Remediation Technologies Roundtable
gal	gallon(s)
GPR	ground-penetrating radar
GRA	general response action
GRO	gasoline-range organics
HHRA	human health risk assessment
HI	hazard index
ICs	institutional controls
ILCR	incremental lifetime-cancer-risk
ITRC	Interstate Technology and Regulatory Council
LUCs	land use controls
LMCPI	LMC Properties, Inc.
Lockheed Martin	Lockheed Martin Corporation
MDE	Maryland Department of the Environment

µg/kg	microgram(s) per kilogram
mg/kg	milligram(s) per kilogram
MMBTU	million British thermal units
MRC	Middle River Complex
msl	mean sea level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
No.	number
NO_x	nitrogen oxides
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
pH	a measure of hydrogen-ion content indicating the relative acidity or alkalinity of a solution; pH below 7 indicates an acidic solution, and pH above 7 indicates an alkaline or basic solution. Pure water has a pH very close to 7.
PM_{10}	particulate matter, smaller than 10 microns
PPE	personal protective equipment
PRG	preliminary remedial goal
RAO	remedial action objective
RAP	remedial action plan
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RRA	residual-risk analysis
RSL	regional screening level
SARA	Superfund Amendments and Reauthorization Act
SB	soil boring or subsurface (soil sample)
SIM	selective ion-monitoring
SO_x	sulfur oxides
SVOC	semivolatile organic compound
TBC	to be considered
TCA	total cost analysis
TCLP	toxicity characteristic leaching procedure
TEF	toxicity equivalence factor
Tetra Tech	Tetra Tech, Inc.
TPH	total petroleum hydrocarbons
TSDF	treatment, storage, and disposal facility
UCL	upper confidence limit
USEPA	United States Environmental Protection Agency
VCP	Voluntary Cleanup Program
VOC	volatile organic compound

GLOSSARY

alkyl polycyclic aromatic-hydrocarbons—Polycyclic aromatic hydrocarbons (PAHs; see glossary term) that contain carbon side chains appended at one or more location(s). The mobility and toxicity of a PAH compound are impacted by, among other things, the fundamental structure of the PAH parent compound and the number and location of the carbon side chains. Alkylated PAHs are named and characterized by the total number of alkyl carbon atoms on the parent PAH compound.

applicable or relevant and appropriate requirements (ARARs)—Environmental cleanup standards and requirements (i.e., federal and state laws and regulations) that must be attained during cleanup and maintained at project completion (required by a directive of the federal Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]).

Aroclor—Aroclor is one of the most commonly known trade names for polychlorinated biphenyl (PCBs; see glossary term) mixtures produced from approximately 1930 to 1979. Each Aroclor has a distinguishing suffix number that indicates its degree of chlorination: the first two digits refer to the number of carbon atoms in the phenyl rings (for PCBs this is 12), the second two numbers indicate the chlorine percentage by mass. For example, the name Aroclor 1254 means that the mixture contains approximately 54% chlorine by weight.

background (background level)—As defined by the United States Environmental Protection Agency (USEPA), substances in the environment that are not influenced by releases from a site and usually described as naturally occurring or anthropogenic. Naturally occurring is defined as substances in the environment in forms that have not been influenced by human activity. Anthropogenic is defined as natural and human-made substances in the environment because of human activities, but not specifically related to the site in question.

benzene ring—A chemical structure consisting of six carbon atoms with alternating single and double bonds between them, with each carbon atom bonded to a hydrogen atom in a closed hexagon configuration. Individual polycyclic aromatic hydrocarbons (see below) consist of two or more fused benzene rings. These types of “ringed” compounds are referred to as aromatic compounds, rather than straight chain compounds.

benzo(a)pyrene equivalent (BaPEq)—A risk-weighted concentration which is representative of the additive effects of seven polycyclic aromatic hydrocarbons (PAHs): benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and chrysene. The BaPEq value is a calculated concentration accounting for the combined toxicity of individual PAHs relative to benzo(a)pyrene. Toxicity equivalency factors (TEFs) are used to convert each individual PAH concentration into an equivalent concentration of benzo(a)pyrene; the sum of these equivalent concentrations (for the six other PAHs mentioned above) and benzo(a)pyrene is the calculated BaPEq concentration.

carcinogen—Any substance that can cause cancer.

cathodic protection—An engineered protective feature installed on underground storage tanks (UST) to prevent corrosion. Cathodic protection usually consists of a sacrificial anode coated with a material that has suitable dielectric properties to electrically isolate the tank from its environment. For example, cathodic protection on a UST isolates the tank from potential electrical charges in the surrounding environment and thus slows or prevents degradation of the tank.

chemical(s) of concern (COC)—Chemicals identified through the baseline risk assessment that, by regulatory definition, may potentially cause unacceptable adverse effects to human health and/or ecological receptors.

chemical(s) of potential concern (COPC)—Chemicals identified through a preliminary screening (typically in the first step in a baseline risk assessment) that should be considered further in the site evaluation.

cleanup—Actions to address a release or threat of release of a hazardous substance that could affect humans and/or the environment. The term "cleanup" is sometimes used interchangeably with the terms remedial action, removal action, response action, or corrective action.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—Commonly called Superfund, a federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). Among other things, this law addresses the remediation of sites where one or more hazardous substances have been disposed of or released to the environment. CERCLA is a cleanup statute, whereas RCRA (see glossary item) is a waste management statute that also includes cleanup provisions.

conceptual site model (CSM)—A written and/or schematic representation of an environmental system and the physical, chemical, and biological processes that affect the transport of chemicals from sources through environmental media (e.g., air, soil, water, sediment, or tissue) to humans and ecological receptors in the system. The CSM is periodically revised as additional data become available at a site.

containment—A technology or design that prevents the movement of contaminants outside of an originating source or property, or onto an outside property, but does not necessarily treat or remove the contaminants.

Controlled Hazardous Substances (CHS) regulations—The statutory and regulatory requirements for hazardous waste sites under the Maryland Department of the Environment Controlled Hazardous Substance Enforcement Division are found in Section 7-222 of the "Environment Article" and in *Code of Maryland Regulations* (COMAR) 26.14. Remediation of hazardous waste sites is effected through a three-phase process: assessment, cleanup, and operation, maintenance, and monitoring.

***ex situ*—**Away from the original location or place where pollutants are found. In this report, *ex situ* means on-site and at the surface, but not in place. For example, an *ex situ* treatment of contaminated soil or groundwater will remove (through digging or pumping, for example) the soil or groundwater from where it was found, and subsequently subject it to a treatment process. (See also *in situ,* below.)

exposure assessment—One step in the human or ecological risk assessment processes. An exposure assessment measures or estimates the magnitude, frequency, duration, and route of exposure for a receptor (human or ecological) that may come into contact with an environmental contaminant (for example, by touching contaminated soils). A quantitative result achieved by an exposure assessment is the calculation of an exposure dose or intake (i.e., the amount to which the receptor is exposed).

exposure pathway—The path from contaminated media (including air, soil, sediment, water, or food) to humans and ecological receptors.

exposure route—The way a contaminant enters an organism after contact (i.e., by ingestion, inhalation, or dermal absorption).

exposure scenario—A tool to develop estimates of potential exposure, dose, and risk, typically for a specific group of people, such as construction workers or residents. An exposure scenario generally includes facts, data, assumptions, inferences, and, sometimes, professional judgment about how the exposure for the specific group takes place.

hazard index (HI)—A numerical indicator of the potential for adverse non-carcinogenic health effects (i.e., any health effect other than cancer) that is derived by summing the individual-chemical hazard quotients. A hazard index greater than 1 suggests that adverse health effects are possible, whereas a hazard index equal to or less than 1 does not.

hazard quotient (HQ)—The ratio of estimated site-specific exposure to a single chemical to a selected toxicity threshold for a single chemical, which is either the level at which no adverse health effects are likely to occur (i.e., the no-observed-adverse-effect level) or at which effects are likely to occur (i.e., the lowest-observed-adverse-effect level).

hazardous substance—From CERCLA, a hazardous substance is: "(A) any substance designated pursuant to section 311(b)(2)(A) of the Federal Water Pollution Control Act [33 U.S.C. 1321(b)(2)(A)], (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title (i.e., CERCLA), (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C. 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C. 6901 et seq.] has been suspended by Act of Congress), (D) any toxic pollutant listed under section 307(a) of the Federal Water Pollution Control Act [33 U.S.C. 1317(a)], (E) any hazardous air pollutant listed under Section 112 of the Clean Air Act [42 U.S.C. 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the (USEPA) Administrator has taken action pursuant to Section 7 of the Toxic Substances Control Act [15 U.S.C. 2606]. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

impacted soil—Soils identified in the residual-risk analysis (RRA) that have chemical(s) of concern (COC) concentrations associated with an incremental lifetime cancer risk (ILCR) greater than one in 100,000 (i.e., 1×10^{-5}).

***in situ*—**In this report, *in situ* means on-site and in place. For example, an *in situ* treatment of contaminated soil or groundwater will treat these environmental media in place, without removing soil or groundwater to treat it.

institutional controls—Non-engineering measures intended to affect human activities in such a way as to prevent or reduce exposure to hazardous substances. They are almost always used in conjunction with, or as a supplement to, other measures such as waste removal, treatment or containment. Institutional controls fall into four categories: governmental controls, proprietary controls, enforcement tools, and informational devices**.**

iteratively—In the context of the residual-risk assessment, a step that is repeated over and over again until the desired outcome or goal is achieved.

land use controls (LUCs)—Engineered and non-engineered (administrative) controls formulated and enforced to regulate current and future land use options. Engineered controls include fencing and signs. Non-engineered controls typically consist of administrative restrictions that prohibit certain types of development and/or groundwater use.

leachability—The relative tendency of chemicals to be transferred from soil to groundwater based on contaminant characteristics, soil properties, and groundwater conditions.

Middle River Complex (MRC)—The site of a Lockheed Martin Corporation (Lockheed Martin) Mission Systems and Training facility; Applied NanoStructured Solutions, which is a Lockheed Martin subsidiary; and General Electric Company's MRA Systems, Inc., subsidiary, ("Middle River Aircraft Systems"); also known locally as Plant 1.

naphthalene—Naphthalene is an aromatic volatile or semi-volatile organic compound that occurs naturally in coal and oil. It has a strong odor that smells like tar or mothballs. Naphthalene is used to make products like moth balls, dyes, leather goods, and insecticides.

***National Oil and Hazardous Substances Pollution Contingency Plan* (NCP)—**A federal plan that determines the party or parties that will respond and actions that will be taken in response to a spill or release, or threat of release, of oil or a hazardous substance. It establishes a National Response Team, headed by USEPA, and outlines requirements for accident reporting, spill containment, and cleanup.

non-detect—Data point for which the chemical of interest was not detected in the chemical analysis of an environmental sample.

polychlorinated biphenyls (PCBs)—PCBs are man-made organic chemicals manufactured and used in construction materials and electrical products produced before 1979. PCBs belong to the broad family of organic chemicals known as chlorinated hydrocarbons, and vary in consistency from thin, light-colored liquids to yellow or black waxy solids. They have a range of toxicity, including carcinogenic and non-carcinogenic effects. Due to their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including electrical transformers, hydraulic equipment, thermal insulation, fluorescent lights, oil-based paint, carbonless copy paper, and many other industrial applications. The manufacture of PCBs was banned in the United States in 1979.

polycyclic aromatic hydrocarbons (PAHs)—A group of semivolatile organic chemicals often found together that are created when products like coal, oil, gas, and garbage are burned, but the burning process is not complete. PAHs can also be the result of natural processes such as wild fires. PAHs are a concern because they are persist in the environment, meaning they do not degrade readily and remain in the environment for long periods of time. A subset of PAHs are considered probable carcinogens, based on animal toxicity studies.

preliminary remedial goal (PRG)— An acceptable contaminant level or range of levels for a given medium that can be used to support an evaluation of remedial alternatives. Although the preliminary remedial goals are established based on readily available information, the final acceptable exposure levels should be determined on the basis of the results of the baseline risk assessment and the evaluation of the expected exposures and associated risks for each alternative.

recognized environmental condition (REC)— A condition that is, per ASTM International (ASTM) E 1527-05, defined as "the presence or likely presence (as documented in public or other available records) of any hazardous substances or petroleum products on a property, under conditions that indicate a potential for an existing release, a possible past release, or a material threat of a release of the hazardous materials into structures or into the soil, groundwater, or surface water of the property."

remediation—The process of correcting and/or cleaning up environmental contamination, governed by various federal and state laws, regulations, and other requirements.

response action— A response action is an action or series of actions to reduce, isolate, or remove contamination from an environmental medium (e.g., soil, air, groundwater, surface water), with the goal of preventing harmful exposure to people or animals and reducing its impact to the environment.

remedial action objective (RAO)— Cleanup objective specifying contaminants to be cleaned up and the level (i.e., the reduction in contaminant concentrations), area, and time required to achieve a cleanup adequate to protect human health and the environment.

remedial action plan (RAP)— Remedial action is defined in the USEPA National Contingency Plan, in part, as "those actions consistent with a permanent remedy taken instead of, or in addition to, a removal action(s) in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate or cause substantial danger to present or future public health or welfare, or the environment." The RAP presents an evaluation of remedial alternatives (i.e., a feasibility study) and details the remedial measures to be taken to minimize environmental and health risks associated with known release(s) of hazardous substances. Depending on known or anticipated risks to human health and the environment, appropriate action can include site closure, monitoring and data collection, active or passive remediation, containment, or imposition of institutional controls.

risk assessment—A qualitative or quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence or release of hazardous substances, pollutants or contaminants.

site—The Middle River Complex; in this document, specifically Tax Block D Panhandle, a 1.4 acre portion of the total property owned by LMC Properties, Inc.

solubility—A measure of the amount of solute that will dissolve in a solution. It is the ability or tendency of one substance to dissolve into another at a given temperature and pressure and is generally expressed in terms of the amount of solute that will dissolve in a given amount of solvent to produce a saturated solution.

standard proctor—A standardized mechanical testing method used to determine the compaction property of soil. The test is described in American Association of State Highway and Transportation Officials (AASHTO) specifications T-99 and ASTM International Inc. (ASTM) standard D698-12.

total petroleum hydrocarbons (TPH)—The concentration or mass of petroleum hydrocarbon constituents present in a given amount of air, soil, or water.

toxicity equivalency factor (TEF)—TEFs are estimates of compound-specific toxicity relative to the toxicity of an index chemical (e.g., benzo[a]pyrene). TEFs are used in a risk assessment to evaluate the risks associated with exposure to a mixture of similar compounds for human or ecological receptors.

volatile organic compounds (VOCs)—A group of organic compounds that will vaporize or evaporate into the atmosphere at room temperature. They often have a sharp smell and can come from many products, such as office equipment, adhesives, carpeting, upholstery, paints, petroleum products, solvents, and cleaning products. Trichloroethene is an example of a VOC.

Voluntary Cleanup Program (VCP)— A Maryland Department of the Environment (MDE) administered program providing oversight for voluntary cleanups of properties contaminated with hazardous substances. The program was established in 1997 as an agreement between MDE and the USEPA. The program provides liability protection for participants such that USEPA will consider sites in the VCP of “no further interest” provided they are successful in cleanup and MDE issues a No Further Requirements Determination or Certificate of Completion. The goal of the program is to increase the number of sites cleaned by streamlining the cleanup process while ensuring compliance with existing environmental regulations.

Executive Summary

Ensuring environmental stewardship associated with our activities is an important aspect of Lockheed Martin Corporation's (Lockheed Martin) commitment to the communities in which we operate. Accordingly, the Corporation has assumed responsibility to assess and clean up environmental impacts associated with the Lockheed Martin Middle River Complex (MRC) located at 2323 Eastern Boulevard in Middle River, Maryland (see Figure 1-1). Tetra Tech Inc. has prepared this soil remedial action plan (RAP) for the panhandle portion of Tax Block D at the Middle River Complex (see Figure 2-1) in accordance with the requirements of the Maryland Department of the Environment "Controlled Hazardous Substances" regulations promulgated under (Section 7-222 of the "Environment Article," *Annotated Code of Maryland*). This remedial action plan presents an evaluation of remedial alternatives (i.e., a feasibility study) for remediation of soils in the Tax Block D panhandle, which comprises 1.4 acres of the total Tax Block D acreage (13.78 acres). Tax Block D is one of eight main land parcels that comprise the Middle River Complex. The Block D panhandle is a narrow strip of land in the southeastern portion of Block D in the Middle River Complex. The northern portion of the panhandle is an asphalt-paved extension of parking lot No. 6; the southern portion is an undeveloped grassed area.

The Tax Block D panhandle, along with other portions of the Middle River Complex, was accepted into the Maryland Department of the Environment Voluntary Cleanup Program in 2006. They were withdrawn from the program in 2013 in order to combine all elements of the Middle River Complex remediation project including soils, groundwater, and offshore sediments into a single regulatory program. A copy of the withdrawal letter documenting this change is in Appendix A.

The goal for the Tax Block D panhandle under this remedial action plan is to receive a "No Further Action" letter from the Maryland Department of the Environment (MDE) under a recreational future land use category. The remediation proposed in this soil remedial action plan is targeted for future recreational land use. This does not prohibit Tax Block D panhandle from

other future development for residential use; however, additional remediation may be required to meet residential land use.

Lockheed Martin will submit remedial action plans for Tax Blocks D, E, F, G, and H to the Maryland Department of the Environment in the fall of 2013. Block E is on a different schedule because polychlorinated biphenyl (PCB) concentrations above 50 milligrams per kilogram (mg/kg) were detected in some soils, storm drains, and off-site shore sediment. Concentrations above this threshold require the review and approval of the United States Environmental Protection Agency (USEPA), in addition to the reviews and approvals required by the Maryland Department of the Environment. The Block E remedial action plan will be completed concurrently with those of other tax blocks, but remedial activities in Block E are expected to occur later than in the other blocks because additional agency reviews and approvals will be required.

A response action for groundwater at the Middle River Complex is presented in a separate groundwater response action plan. This plan was approved by Maryland Department of the Environment in September 2012. Design of the groundwater remedy is underway, with construction completion anticipated in early 2014.

Remediation of impacted offshore sediments near the Middle River Complex is also being addressed within the bounds of the Controlled Hazardous Substances regulations, despite their location within waters of the United States (which are not Lockheed Martin property). A feasibility study for sediment remediation was submitted to the Maryland Department of the Environment and the United States Environmental Protection Agency in December 2012. Sediment remediation will likely occur in near-shore sediments of Dark Head Cove and Cow Pen Creek. Remediation will be completed pending regulatory approvals and extensive remediation permitting.

***Nature and extent of contamination*—**Investigations associated with the Block D panhandle have been conducted since 2003 and include record reviews, discussions with Middle River Complex personnel, geophysical surveys, and soil and groundwater sampling. Most impacted soil at Block D panhandle appears to be associated with fill material historically placed throughout the Middle River Complex. Polycyclic aromatic hydrocarbons are commonly found in asphalt and in fill material, particularly in the form of coal or wood ash. The results of these

investigations show that surface and subsurface soils are primarily contaminated with polycyclic aromatic hydrocarbons randomly distributed in the soil matrix. As presented in the *Human Health Risk Assessment (HHRA) for Blocks D, E, F, G, and H Soils* (Tetra Tech, 2012), polycyclic aromatic hydrocarbons are the primary risk drivers for lifelong recreational users in Block D panhandle and have been identified in soils at concentrations exceeding recreational risk-based preliminary remedial goals.

Exposure assessment—An exposure assessment has been completed for the site to predict human health risks associated with exposure to site contaminants under current and future exposure scenarios. The results indicate that, in some areas, contaminated site soils pose unacceptable risks to human receptors according to regulatory standards.

Remedial goals—Remedial goals for Block D panhandle soil were established using a two-step process. First, a human health risk assessment was conducted to identify contaminants of concern based on exposure to human receptors. The risk assessment also identified preliminary remedial goals for final contaminants of concern. Risk is defined herein as the probability of adverse health effect resulting from exposure to contamination. A residual-risk analysis was then conducted to identify areas with impacted soils in the Block D panhandle; these areas must be remediated to meet a recreational-use, human health residual-risk level of 1×10^{-5} (i.e., a one in 100,000 increased probability of cancer). A 1×10^{-5} risk level is the Maryland Department of the Environment upper-end risk threshold for carcinogenic compounds. Preliminary remedial goals were based on cancer risk only because calculated non-cancer risks for recreational users exposed to chemicals of concern in surface soil was less than the acceptable regulatory non-cancer risk limit (a hazard index of unity, or one).

The risk assessment process resulted in identifying chemicals of concern that will require remediation if a typical recreational user is the receptor of concern. The risk assessment consists of the following six components:

- data evaluation
- toxicity assessment
- uncertainty analysis
- exposure assessment
- risk characterization
- development of preliminary remedial goal options

Residual-risk analysis for surface soils (soils from zero to two feet below ground surface) was performed separately from the residual-risk analysis for subsurface soils (soils from two feet below ground surface to the groundwater table). Polycyclic aromatic hydrocarbons, arsenic, and hexavalent chromium were selected in the risk assessment as chemicals of concern, but polycyclic aromatic hydrocarbons (expressed as benzo(a)pyrene equivalent concentrations [BaPEq]) were identified as the primary chemicals of concern (i.e., risk drivers) in panhandle soils. The residual-risk analysis identified impacted soil areas that require remediation to meet the recreational-risk-based preliminary remedial goal for BaPEq to within a 95% upper confidence level for the whole Block D panhandle area.

Residual-risk analysis involves sequentially (and hypothetically) "removing" contaminated soil samples from the risk calculation, beginning with the highest concentration and continuing to "remove" contaminated soil samples from the analysis until the average soil concentration is equal to or less than the recreational-risk-based preliminary remedial goal with a 95% certainty. In addition, the arsenic and hexavalent chromium 95% upper concentration limits were recalculated. Once samples with arsenic and hexavalent chromium concentrations above background had been removed from the residual-risk analysis, the (regulatorily) unacceptable risk for recreational users was eliminated. The residual-risk analysis entailed five steps:

- identify the chemicals of concern
- determine the preliminary remedial goals
- rank locations
- iteratively remove samples from the surface and subsurface data set (from highest concentration to lowest concentration) and recalculate the recreational-based exposure and residual risk for the block as a whole
- once the 1×10^{-5} residual risk criterion has been achieved, examine the remaining areas of contamination and, using professional judgment, remove additional elevated-concentration samples from the data set to provide a margin of safety, then recalculate exposure and residual-risk

Figure 4-1 shows the areas identified for remediation in the residual-risk analysis, based on the BaPEq, arsenic, and hexavalent chromium concentrations detected in surface and subsurface soils from zero- to four-feet below ground surface. Areas of arsenic and hexavalent chromium

contamination targeted for soil removal (based on reducing contaminant concentrations to background levels) are also identified in Figure 4-1.

Remedial action objective—The following remedial action objective was developed to obtain a "No Further Action" letter under a recreational future land use for impacted soils at Block D panhandle (see Section 4):

Remedial action objective	Description
1	Reduce site-related organic chemicals of concern in Block D panhandle soils to 1×10^{-5} human health cancer-risk limits for recreational users exposed to contaminants of concern via ingestion, dermal contact, and inhalation; and reduce site-related inorganic chemicals of concern to background levels.

Remedial action alternatives—After identifying the remedial action objective, remedial action alternatives for soil were identified and evaluated. Various technologies and process options were considered and then separated into seven general response action categories. The general remedial action categories include "no action," "limited action," "containment," "removal," "*in situ* treatment," "*ex situ* treatment," and "disposal." A detailed screening of available process options initially resulted in the following eight remedial alternatives:

- **Alternative 1:** No action (baseline for comparison to remaining alternatives)
- **Alternative 2:** Institutional controls
- **Alternative 3:** Excavation and off-site disposal of impacted soils to a depth of two feet and institutional controls
- **Alternative 4:** Excavation and off-site disposal of impacted soils to the groundwater table and institutional controls
- **Alternative 5:** Limited excavation and soil cover over impacted areas and institutional controls
- **Alternative 6:** Enhanced bioremediation of impacted soils to a depth of two feet and institutional controls
- **Alternative 7:** *In situ* stabilization of impacted soils to the groundwater table and institutional controls
- **Alternative 8:** Phytoremediation in the impacted areas and institutional controls

Each of the alternatives identified above was then subjected to a detailed evaluation according to the following criteria (see Section 5.3):

- long-term effectiveness and permanence
- reduction in toxicity, mobility, and volume through treatment
- short-term effectiveness
- implementability
- environmental impacts
- costs

Following the initial evaluation, Alternatives 1 through 7 were selected for further evaluation. The seven remaining alternatives were then compared to each other qualitatively and quantitatively, based on these same criteria.

Proposed remedial action—For Lockheed Martin Corporation, success depends on how well we recognize and fulfill our responsibilities to the environment, to a safe workplace, to stewardship of scarce natural resources, and to our customers and shareholders. All of these responsibilities were considered in selecting the remedial action for Block D panhandle. This evaluation led to selection of Alternative 4 (excavation and disposal of impacted soils to the groundwater table and institutional controls) as the remedial action for soil for the Block D panhandle at the Middle River Complex.

Alternative 4 will reduce human health risk (based on a recreational exposure scenario) to less than a 1×10^{-5} risk level (i.e., less than a one in 100,000 probability) by removing impacted soils down to the groundwater table, along with institutional controls. The selected alternative will therefore ensure that the remedial action objective is met. Acceptance of the proposed remedial action by the Maryland Department of the Environment is required. A No Further Action letter will be sought by Lockheed Martin Corporation from the Maryland Department of the Environment once the soil remedial action is complete (i.e., when the RAO has been met). In that letter, the Maryland Department of the Environment will establish the institutional controls for the Block D panhandle. The proposed remediation is based on human health risk associated with the anticipated future land use (namely, recreational use). This does not prohibit the site from future development for residential use. However, additional remedial activities may be required should future site use change (e.g., residential use).

Schedule—A schedule of the remedial action implementation for Block D panhandle soil is in Section 10. Its major activities include:

- submit final remedial action plan—fall 2014
- remedial action implementation—early 2015

Communication and community relations—Lockheed Martin Corporation is committed to its partnership with the Middle River community and to maintaining a high level of community outreach, stakeholder engagement, and communication as work progresses. The Corporation has and will continue to invest in the environmental, health, and economic needs of the community. Lockheed Martin Corporation also will provide remediation program updates to civic association leadership and, upon request, will attend civic association meetings to provide updates, answer questions, and listen to issues and concerns. Lockheed Martin Corporation will hold a public information availability session before the remedial action begins to inform and educate interested stakeholders about this project. Lockheed Martin Corporation remains committed to two-way communication with the community to ensure that questions are answered and issues and concerns are addressed in a timely manner.

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Section 1
Introduction

1.1 PURPOSE OF THE REMEDIAL ACTION PLAN

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. (Tetra Tech) has prepared this remedial action plan (RAP) for soil at the panhandle portion of Tax Block D ("Block D panhandle") of the Lockheed Martin Middle River Complex (MRC) in Middle River, Maryland. The location of the Middle River Complex is shown in Figure 1-1. This remedial action plan was prepared in accordance with the requirements enforced by the Maryland Department of the Environment (MDE) Controlled Hazardous Substances (CHS) Enforcement Division (see Section 7-222 of the "Environment Article," and *Code of Maryland Regulations* [COMAR] 26.14). The panhandle portion of Tax Block D, along with other portions of the Middle River Complex, was accepted into the Maryland Voluntary Cleanup Program (VCP) in 2006. They were withdrawn from the program in 2013; environmental restoration of Middle River Complex soils, groundwater, and offshore sediments will be consolidated under an Administrative Consent Order into a single regulatory program. A copy of the withdrawal letter documenting this change is in Appendix A. The panhandle portion of Tax Block D may potentially be used by Baltimore County for recreational use in the future.

The purpose of the remedial action plan is to provide the background, supporting documentation, and framework (i.e., goals, performance evaluation criteria, and schedule) for remediation of soils at the panhandle portion of Tax Block D. The plan details the remedial action objective (RAO), screening of remedial technologies, development and evaluation of remedial alternatives, and selection of the proposed remedial action. The remedial actions and goals detailed herein are based on current and historical site data derived from the soil investigations described in Section 2, and on the current and anticipated future land use. This remedial action plan provides information necessary to support the decision to remove contaminated soil to achieve the following remedial action objective:

Soil remedial action objective—	*Reduce site-related organic chemicals of concern (COC) in Block D panhandle soils to a 1×10^{-5} human health cancer-risk level for recreational users exposed to chemicals of concern via ingestion, dermal contact, and inhalation; and reduce site-related inorganic COC to background-based levels.*

1.2 SCOPE

The scope of this evaluation is the panhandle portion of Tax Block D, consisting of 1.4 acres in the southeastern portion of the Middle River Complex. Most of the panhandle is an asphalt-paved extension of parking lot No. 6, surrounded by Dark Head Cove and a wood rail fence. Outside the fence, a small strip to the south and a narrow strip along Wilson Point Road are grassed areas.

The Maryland Department of the Environment regards sites with a cancer risk greater than 1×10^{-5} (i.e., a one-in-100,000 increased probability of cancer), or a hazard index greater than 1 under the proposed reuse exposure scenario, as sites requiring remedial action. It was determined in the *Human Health Risk Assessment (HHRA) for Blocks D, E, F, G, and H Soils* (Tetra Tech, 2012) that recreational exposure to COC in surface soil in Block D panhandle would result in an excess cancer risk greater than the MDE threshold, indicating that some type of remedial action is necessary to reduce health risk. This remedial action plan contains an evaluation of risk-based remedial actions based on recreational land use, and identifies the preferred remedial option that will achieve the remedial action objective(s) established for soils in the panhandle portion of Tax Block D. Remedial actions for Middle River Complex groundwater are described under the separate, approved groundwater response action plan. Remedial actions that will address impacts to creek sediments are described in a separate feasibility study for sediments.

1.3 ORGANIZATION

This Tax Block D panhandle soil remedial action plan is organized as follows:

Section 1—Introduction: Presents the purpose, scope, and organization of the remedial action plan.

Section 2—Middle River Complex Block D Panhandle Overview: Briefly describes the Middle River Complex and Tax Block D panhandle background, site history, environmental

investigations, and results, and presents the conceptual site model and a summary of the proposed soil remedial actions.

Section 3—Exposure Assessment: Presents the current and potential future land use and environmental media of concern, and describes possible exposure pathways.

Section 4—Preliminary Remedial Goals: Presents remedial action objectives, chemicals of concern, preliminary remedial goals, and protocols for attainment of cleanup goals.

Section 5—Remedial Action Alternative Evaluation and Selection: Presents the screening of remediation technologies and process options, the development and analysis of remedial alternatives, a comparative analysis of alternatives, and describes the alternative selected to clean up the soils in Tax Block D panhandle.

Section 6—Design Confirmation Sampling: Presents the investigation that is required to address minor data gaps surrounding areas identified for remediation, so that remedial action boundaries can be more accurately defined in a final design.

Section 7—Contingency Measures for the Selected Remedial Action: Presents the contingency measures to be employed in the event the selected alternative does not perform as expected.

Section 8—Proposed Remedial Action: Presents the plan for the work and controls necessary to perform the proposed remedial action.

Section 9—Permits and Notifications: Presents the permits and approvals required to implement the Maryland Department of the Environment-approved remedial action plan.

Section 10—Implementation Schedule: Presents the detailed schedule for the work necessary to implement the Maryland Department of the Environment-approved remedial action plan.

Section 11—References: Lists references and citations used in compiling this remedial action plan.

Appendices:

Appendix A—Voluntary Cleanup Program Withdrawal Letter

Appendix B—Exceedances of Risk-Based Screening Criteria Based on Recreational Exposure to Block D Panhandle Soils (table)

Appendix C—Soil Data from Previous Investigations (table)

Appendix D—Residual-Risk Analysis

Appendix E—BaPEq Calculation

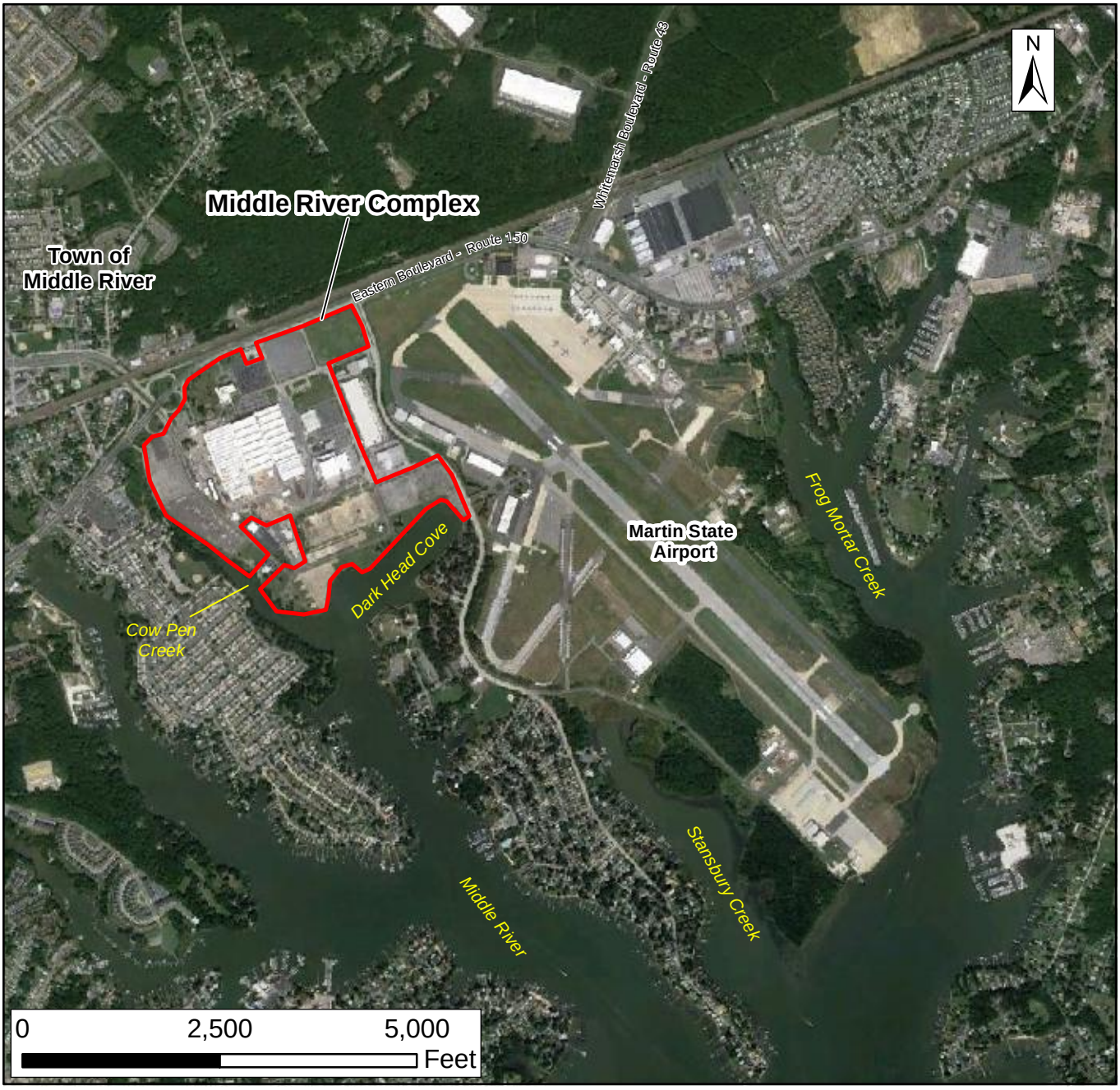
Appendix F—Block D Panhandle Depth-to-Water Contours

Appendix G—*SiteWise*™ Information

Appendix H—Total Cost Analysis

Appendix I—*Criterium*® *DecisionPlus*® Results

Appendix J—Permits



Source: Google Earth, 2013

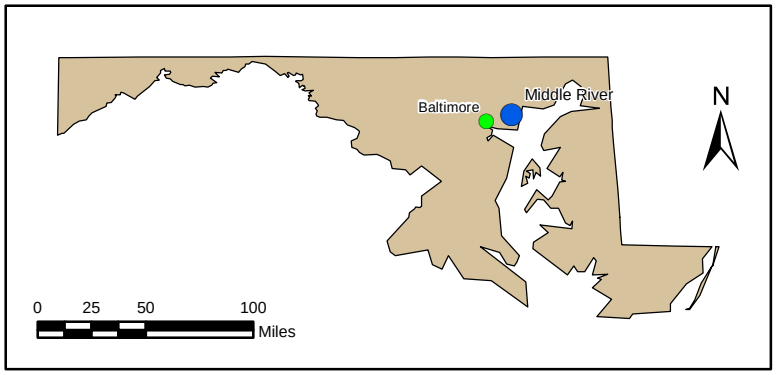


FIGURE 1-1

MIDDLE RIVER COMPLEX LOCATION MAP

Lockheed Martin Middle River Complex
Middle River, Maryland

DATE MODIFIED:	CREATED BY:
5/1/13	MP

TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\MiddleRiver_MRC_Location Map_Fig 1-1_revised050113.mxd) 5/1/2013 -- 11:18:55 AM

Section 2
Middle River Complex Block D Panhandle Overview

This section presents the site background and site-specific chemicals of concern (COC), and the findings of previous site investigations. Also summarized are the nature and extent of site contaminants, the persistence and migration of site COC in the environment, and applicable exposure pathways, collectively known as the conceptual site model (CSM).

2.1 MIDDLE RIVER COMPLEX BACKGROUND

In 1929, the Glenn L. Martin Company, a predecessor entity of Lockheed Martin Corporation (Lockheed Martin), acquired contiguous parcels of undeveloped land in Middle River, Maryland to manufacture aircraft for the United States government and commercial clients. In the early 1960s, Glenn L. Martin Company merged with American-Marietta Company to form Martin Marietta Corporation. In the mid-1990s, Martin Marietta Corporation merged with Lockheed Corporation to form Lockheed Martin, in turn focusing its on-site operations at the Middle River Complex (MRC) on equipment construction and testing for the United States government and commercial clients. Shortly after the merger, General Electric Company acquired most of Lockheed Martin's aeronautical business in Middle River, which began operations under General Electric Company subsidiary MRA Systems, Inc. (known as Middle River Aircraft Systems).

The Middle River Complex (MRC) is part of the Chesapeake Industrial Park located at 2323 Eastern Boulevard in Middle River, Maryland, approximately 11.5 miles northeast of downtown Baltimore. The MRC comprises several tax blocks and covers approximately 161 acres; it includes 12 main buildings, an active industrial area and yard, perimeter parking lots, an athletic field, vacant lots, and numerous grassy green spaces along its perimeter. The MRC is bounded by Eastern Boulevard (Route 150) to the north, Dark Head Cove to the south, Cow Pen Creek to the west, and Martin State Airport to the east. Figure 2-1 is a layout map of the MRC showing the active industrial facility (Block I) and the external Blocks A, B, D, E, F,

G, and H surrounding Block I. LMC Properties, Inc. (LMCPI) owns the MRC, and periodically leases space to other parties for storage and parking.

2.2 BLOCK D PANHANDLE BACKGROUND

The Block D panhandle is in the southeastern portion of the MRC and consists of a narrow strip of land at the southeast end of Block D. The panhandle is comprised of 1.4 acres of the total Tax Block D acreage (13.78 acres). The northern portion of the panhandle is an asphalt-paved extension of parking lot No. 6; the southern portion is an undeveloped grassed area. Remediation of the Block D panhandle (hereinafter referred to as the "panhandle") was separated from the remediation of the main parcel of Block D because its projected end use differs: future land use at Block D is expected to be industrial in nature, while the panhandle will be open to recreational use. This remedial action plan (RAP) addresses the panhandle area only; the remainder of Block D is being addressed in a separate soil RAP.

Block D consists primarily of an asphalt parking lot (designated parking lot No. 6) and a portion of the waterfront lot between parking lot No. 6 and Dark Head Cove. The panhandle is bounded to the north by Block D and parking lot No. 6, to the south by a multi-tenant residential property known as Stansbury Manor, to the east by Wilson Point Road and Martin State Airport, and to the west by Dark Head Cove and the Block D waterfront lot. Parking lot No. 6, which comprises a portion of the panhandle, is surrounded on all sides by a chain-link fence. Locked gates along Dark Head Cove Road and Chesapeake Park Plaza, and from the Block D portion of the waterfront lot, restrict access solely to authorized personnel. Parking lot No. 6 is currently unused.

Limited information in the Phase I environmental site assessment (ESA; see Section 2.3.1), MRC records, and historical aerial photographs indicate that the current shoreline of Dark Head Cove along Block D differs from the original shoreline (before the area was developed). These records suggest that a portion of parking lot No. 6 (in Block D) and the waterfront were backfilled between 1938–1949, raising the topography to current elevations and extending the MRC property to its current layout. During filling, a steel and concrete bulkhead was constructed along the Block D waterfront of Dark Head Cove and the western shoreline of the panhandle. A 100-foot-wide swath of the cove along the bulkhead was dredged to lower the bottom of the Dark Head Cove shoreline to eight feet below sea level.

After the shoreline was reconstructed, parking lot No. 6 and the panhandle were paved with asphalt. The parking lot, the panhandle, and the Block D waterfront area were not developed with any structures in the past, according to available records. Two Martin State Airport-owned storm-water drainage outfalls (outfall No. 8 [8OF001] and outfall No. 9 [9OF001]) are on the panhandle shoreline.

Outfall No. 9 (9OF001) receives flow from the surface water drainage ditches on the east side of Wilson Point Road; stormwater from these ditches flows westerly below Wilson Point Road, continuing below the paved panhandle area to the outfall at Dark Head Cove. Outfall No. 8 (8OF001) is south of outfall No. 9; it also receives storm water from the east side of Wilson Point Road. The outfall No. 9 conduit passes below the road and then below ground near the southern end of the panhandle area. A third drainage conduit begins on the east side of Wilson Point Road and passes north of the panhandle; flow from this conduit discharges at the corner of the bulkhead where the panhandle and the Block D waterfront lot meet. Available records indicate these storm drain conduits were constructed of two-foot-diameter corrugated metal pipe.

2.3 BLOCK D PANHANDLE PREVIOUS INVESTIGATIONS

Environmental investigations associated with Block D have been conducted since 2003 and include record reviews, discussions with MRC personnel, geophysical surveys, and soil and groundwater sampling. Block D and the panhandle area were studied collectively and addressed as one area in investigations conducted before 2010. Where possible, the following sections of this RAP focus on investigative results for the panhandle region only; the findings from the remainder of Block D are excluded. The primary findings of the panhandle area soil investigations, as they relate to this RAP, are in Sections 2.3.1 through 2.3.11.

Soil investigations of the panhandle area are summarized in Table 2-1; Figure 2-2 shows soil sampling locations. Appendix B compares soil sampling results from all previous investigations discussed in this section (non-detect results are not listed) to the site-specific risk-based preliminary remedial goals (PRGs). The PRGs developed for the panhandle are based on a human health risk assessment (HHRA) that evaluated all Block D data, as described in Section 2.3.11. A complete database of all existing panhandle soils data (including non-detect results) is in Appendix C.

During previous investigations, screening criteria used for data comparison have varied due to revisions in the applicable Maryland Department of Environment (MDE) soil standards. Residential screening-criteria have been used to screen data in the past, as well as MDE anticipated typical concentrations (ATCs) for some metals (regional background concentrations recognized by the MDE; [MDE, 2008]). Using recreational soil-screening criteria is more appropriate for the projected future use of the property.

For clarity in the discussion below, previous investigation results are presented in general terms, with qualitative comparison to the screening criteria used at the time of those previous investigations (referred to hereinafter as the "previously used" criteria). Chemicals detected in soils during previous investigations that exceeded the more conservative MDE residential screening-criteria were evaluated further in each subsequent series of investigations. Chemicals with exceedances of MDE residential and recreational criteria were collectively addressed as chemicals of potential concern (COPC) in the HHRA (see Section 2.3.11). COPC were further evaluated to produce a final list of chemicals of concern (COC), and PRGs were then developed (see Section 6 of the HHRA). The currently used screening criteria discussed in the following sections are MDE soil cleanup-levels, ATCs, and recreational PRGs (Table 2-2).

2.3.1 Phase I Environmental Site Assessment (2003)

A Phase I ESA was conducted at the MRC in February 2003 in accordance with ASTM International, Inc. (ASTM) standard E 1527. The primary goal of the Phase I ESA was to identify recognized environmental conditions (RECs) through a desktop study of historical documents and a cursory site inspection. The Phase I ESA consisted of a historical review of the facility (i.e., a review of available facility documents, aerial photographs, and city directories); a review of federal, state, and local agency databases; interviews with MRC personnel; and a site visit. The Phase I ESA identified 13 specific RECs associated with the MRC.

The Phase I ESA identified the uncharacterized fill material placed beneath parking lot No. 6 and the adjoining waterfront lot as a REC. Subsequent investigations determined that the main fill area was in the central portion of Block D, northwest of the panhandle. Information reviewed during the Phase I ESA did not indicate that any chemical handling, storage, or waste stream disposal had occurred in Block D or the panhandle. The Phase I ESA identified parking lot No. 6 and the waterfront lot as REC #6 because of the unknown quality of the fill material used in

these areas (Earth Tech, 2003). In addition to identifying RECs, the Phase I ESA also recommended further investigation of MRC historical activities to identify other possible environmental concerns.

2.3.2 Phase II Investigation (Autumn/Winter 2003)

A Phase II investigation consisting of soil and groundwater sampling and a geophysical survey was conducted on seven of the 13 Phase I ESA RECs (including REC #6) in autumn 2003 to determine and evaluate environmental baseline conditions for the entire MRC (Tetra Tech, 2004a). Geophysical surveys were conducted to find evidence of buried underground storage tanks, utilities, or metallic debris in the subsurface of the identified RECs.

Three soil borings (SB-31 through SB-33) were advanced during the Phase II investigation to depths of 20- and 24-feet below ground surface (bgs) in parking lot No. 6 (Block D) and the adjacent waterfront lot, respectively. One subsurface soil sample (5-feet bgs) and one Hydropunch® groundwater sample were collected from each boring and analyzed for volatile organic carbons (VOCs), semivolatile organic carbons (SVOCs), polychlorinated biphenyls (PCBs), total priority pollutant metals, and total petroleum hydrocarbon (TPH)-gasoline-range organics (GRO), and -diesel-range organics (DRO). Soil boring SB-33 was the only boring advanced in the panhandle area during the 2003 Phase II investigation. Results for borings SB-31 and SB-32 are discussed in the Block D soils RAP. The 2003 panhandle boring location is shown in Figure 2-2; Table 2-3 provides a summary of the samples and analyses for this investigation.

Three VOCs, 14 SVOCs, and seven metals were detected in the single panhandle soil sample (SB-33). Benzo(a)pyrene was the only organic compound detected at concentrations exceeding the previously used screening levels. Arsenic and mercury were also detected at concentrations exceeding previously used screening criteria. The 2003 soil sampling results exceeding currently developed (in 2013) risk-based cleanup goals for future recreational land use are in Figure 2-3 and Appendix B. An electromagnetic (EM) survey was conducted at Block D to characterize the land within the former shoreline that had been backfilled in the1940s to determine if metallic waste was buried there. The only EM anomaly identified was in parking lot No. 6, outside the panhandle area.

2.3.3 Historical Survey (2004)

The historical research investigation of the MRC was conducted in summer 2004 to review all available historical information identified in the Phase I ESA (Tetra Tech, 2004b). The historical survey included a review of MRC maps (e.g., as-builts, proposed construction plans, and plot maps), interviews with Lockheed Martin and tenant personnel, and documentation of site visits. This survey identified no data indicating that parking lot No. 6 had ever been used for anything other than parking and crate storage.

2.3.4 Site-Wide Phase II Investigation (2004)

The 2004 site-wide Phase II investigation further investigated environmental concerns at RECs identified during the 2003 Phase II investigation and in the historical research survey, and addressed possible data gaps associated with the 2003 investigation. All 31 RECs at the MRC were investigated during the site-wide Phase II investigation. The Phase II investigation included geophysical surveys of five areas and soil and groundwater sampling. Table 2-3 provides a summary of the samples and analyses for this investigation.

Investigation of Block D was expanded during the site-wide Phase II investigation. Although 11 additional soil samples were collected from newly advanced soil borings (SB-57 through SB-67) throughout Block D, only one of these borings was advanced within the panhandle (SB-65). One surface soil sample, four subsurface soil samples (5-, 10-, 15-, 20- feet bgs), and one Hydropunch® groundwater sample were collected from this boring (SB-65). All samples were analyzed for VOCs, SVOCs, metals, PCBs, TPH-GRO, and -DRO. The location of the 2004 panhandle boring is shown in Figure 2-2.

Chromium and TPH-DRO were the only constituents detected in SB-65 soil at concentrations exceeding previously used residential screening-criteria. Results of this investigation can be found in the *Final Data Report, Site Wide Phase II Investigation, Middle River Complex* (Tetra Tech, 2005). The 2004 soil sampling results are summarized in Appendices B and C.

2.3.5 Phase II Soil Investigation (Summer 2005)

Further characterization of Block D in the spring and summer of 2005 addressed concerns caused by elevated polycyclic aromatic hydrocarbon (PAH) concentrations detected in soil samples collected in REC #6 during the 2004 investigation. Three soil borings (SB-247 to SB-249) were

advanced in the panhandle to further delineate possible PCBs and mercury in soil near soil boring SB-33. Soil samples were collected from three depths (5-, 10- and 15-feet bgs) in each boring. All samples were analyzed for PCBs; the samples collected at five- and 10-feet bgs were also analyzed for metals. Sampling locations are shown in Figure 2-2. A summary of the samples and analyses from this investigation is in Table 2-3.

The 2005 soils data from borings around previous boring SB-33 indicated that the PCB and mercury contamination detected during the previous sampling event (in 2004) was limited in extent, as no new exceedances were found during the 2005 sampling event. Results of this investigation are in the *Site Characterization Report, Revision 1.0, Lockheed Martin Middle River Complex* (Tetra Tech, 2006). The 2005 soil sampling results are summarized in Appendices B and C.

2.3.6 Site Characterization Report (May 2006)

The 2006 site characterization report (Tetra Tech, 2006) (prepared from autumn 2005 through May 2006) provided a summary of data collected from all environmental media through 2005. Chemicals detected in soil were screened against site-specific background concentrations. These background-concentration samples were collected in Block B in an area of the MRC historically used only for recreation. This study also included an HHRA that identified potential adverse human health effects resulting from exposure to the detected chemicals under current and hypothetical future use scenarios. However, this 2006 risk assessment has been superseded by a more current human health risk assessment completed in 2012 (Tetra Tech, 2012b); therefore, the 2006 HHRA results are not discussed in detail in this RAP.

2.3.7 Additional Soil Characterization (Fall 2007)

The objective of the 2007 soil boring investigation was to obtain sufficient soil data to delineate areas of concern in Block D. A direct-push-technology soil characterization was performed to best define the boundaries of COC exceeding screening levels, as defined in the *Site Characterization Report* (Tetra Tech, 2006). Characterization was completed both laterally and vertically (as determined by the depth to groundwater).

Nine soil borings (SB-336 though SB-344) were advanced in the panhandle near soil boring (SB-33) in the northern portion of the panhandle where residential screening level exceedances

for mercury had been identified. Soil borings were advanced moving outward in four directions from SB-33; in addition, the original boring SB-33 was offset and resampled (SB-33RE) to confirm previous findings from that location. The 2007 panhandle boring locations are shown in Figure 2-2.

A lateral-sample spacing of 10 feet was used to distribute the borings in four directions around former boring SB-33. Samples were collected at two-foot vertical intervals (e.g., 2–3-, 5–6-, 8-9-feet bgs, to a total depth of 9-feet bgs in each boring) to obtain data below the water table (approximately 6-feet bgs). All samples were analyzed for benzo(a)pyrene (using United States Environmental Protection Agency (USEPA) SW-846 Method 8270) and mercury (using USEPA SW-846 Method 7471A). A summary of samples and analyses from this investigation is in Table 2-4.

Benzo(a)pyrene was detected in about 50% of the 2007 panhandle soil samples; most benzo(a)pyrene concentrations were less than 100 µg/kg. Only one sample (SB-337, at 5-6 feet bgs) contained a benzo(a)pyrene concentration (700 µg/kg) that exceeded the previously used residential screening level (150 µg/kg). This sample was collected within 20 feet of SB-33.

Mercury was detected at low concentrations (less than the previously used screening level of 1.0 milligram per kilogram [mg/kg]) in all 2007 panhandle soil samples. The maximum mercury concentration (0.84 mg/kg) was detected at 5–6 feet bgs in soil boring SB-342. Soil boring SB-342 is 25 feet from soil boring SB-33, where a mercury exceedance of previously used residential criteria was detected (this concentration is not an exceedance of currently used recreational screening level, see Table 2-2). The 2007 soil sampling results exceeding risk-based PRGs developed in this RAP for future recreational land use are shown in Figure 2-3 and Appendix B.

2.3.8 Final Soil Delineation (Blocks D, F, G, and H, Autumn 2009)

Some data gaps remained after the 2007 investigation, resulting in the 2009 delineation investigation (Tetra Tech, 2011a). In the 2009 study, samples were collected at one location in the panhandle to help define the vertical extent of soil impacts detected in a previous soil boring (SB-65). The vertical clean margin was defined by two clean intervals (e.g., concentrations less than residential screening levels) spaced at one-foot depth increments beneath impacted

intervals. The 2009 panhandle boring location is shown in Figure 2-2. Table 2-4 summarizes the analyses completed for the panhandle samples collected as part of the 2009 investigation.

During the delineation investigation, 15 soil samples were collected at one-foot intervals in the new boring (SB-65RE) and analyzed for PAHs by USEPA SW-846 Method 8270C. Samples were re-collected so that more precise benzo(a)pyrene equivalent concentrations (BaPEq) could be calculated for previous samples that had non-detect or less-than-detection-limit results. Prior to 2009, BaPEq concentrations had been calculated using the conservative assumption that any non-detect sample with a detection limit greater than the screening level was an exceedance of the screening level.

Soil near SB-65 was resampled and analyzed using a lower quantitation limit (target quantitation limit of 6.7 µg/kg). Recalculated BaPEq concentrations were compared to the previously used residential screening level for BaPEq. BaPEq was detected in only two of 15 SB-65RE soil samples, at concentrations (15 and 19 µg/kg) well below the previously used residential screening level (150 µg/kg). The 2009 soil sampling results are summarized in Appendices B and C.

2.3.9 Data Gap Investigation (Fall 2010)

The 2010 *Data Gap Investigation* was conducted to refine the broad horizontal and vertical boundaries of contamination in Block D and included grid-patterned sampling over the entire panhandle area (Tetra Tech, 2011b). Fifteen soil borings (D-SB-782 through D-SB-796) were advanced within the panhandle to a maximum depth of 15 feet, and eight grab samples (at 1-, 3-, 5-, 7-, 9-, 11-, 13-, and 15 feet bgs) were collected from each soil boring (see Figure 2-2). The 2010 soil samples were analyzed for the following:

- VOCs by SW846 Method 8260B
- SVOCs and 1,4-dioxane by SW846 Method 8270
- TPH-GRO and -DRO by SW 846 Method 8015
- total metals by SW846 Method 6010C (mercury by Method 7471A)
- hexavalent chromium by SW846 Method 7196A
- pesticides/PCBs by SW846 Method 8081

Table 2-5 summarizes the analyses completed for the panhandle samples collected as part of the 2010 data gap investigation. A summary of the 2010 data gap investigation results is provided below.

- SVOCs—21 exceedances appear widespread across the panhandle grid. Of these exceedances, three samples (D-SB-787-03, D-SB-790-05, and D-SB-794-SS) exceeded both residential and non-residential criteria for benzo(a)pyrene

- BaPEq—six exceedances of the site-specific screening criteria appeared in four soil-boring locations (D-SB-786, D-SB-787, D-SB-790, and D-SB-794)

- Metals
  - arsenic—one sample concentration (14.3 mg/kg at D-SB-786-07) exceeded both the MDE residential and non-residential soil screening criteria and the background screening level (12 mg/kg)

  - chromium—19 samples exceeded the MDE residential soil criterion and the MDE ATC, with the highest exceedance (56.1 mg/kg) at D-SB-791-15

  - iron—87 samples exceeded one or more screening criteria, but concentrations of iron observed in Block D soils reflect background concentrations

  - lead—one sample (D-SB-783-03) had a lead concentration (1,010 mg/kg) that exceeded both MDE residential and non-residential soil screening criteria

  - vanadium—two samples (D-SB-791-15 and D-SB-792-13) exceeded screening criteria and the background vanadium concentration (91 mg/kg), with concentrations of 102 mg/kg and 111 mg/kg, respectively

- TPH-DRO—one sample (D-SB-786-01) had a concentration (520 mg/kg) that exceeded the previously used MDE residential soil criterion

The 2010 data gap soil-sampling results exceeding the subsequently developed risk-based PRGs for future recreational land use are shown in Figure 2-3 and Appendix B.

2.3.10 Panhandle Investigation (Spring 2012)

In April 2012, 10 soil borings were advanced at the panhandle to further delineate PAHs and metals in areas where data had not previously been collected (Tetra Tech, 2012). The target sampling areas included the southern portion of the panhandle (south of the fenced parking area) and an area in the northern portion of the panhandle not previously sampled. Five soil borings were advanced to approximately eight-feet below grade in each of these areas during this investigation: D-SB-872 through D-SB-876 were advanced in the northern area, and D-SB-877

through D-SB-881 were advanced in the southern area. Table 2-6 summarizes the analyses completed for the panhandle samples collected in 2012; boring locations are shown in Figure 2-2.

Five samples (from depths of 0–1, 1–2, 2–4, 4–6, and 6–8 feet below grade) were collected from each soil boring for soil lithologic characterization and laboratory analysis. The samples were analyzed for the following:

- SVOCs (including acid/base/neutral extractable compounds, PAHs, and 1,4-dioxane) by SW846 Method 8270C
- VOCs by SW846 Method 8260B
- TPH-DRO and -GRO by SW 846 Method 8015B
- total metals by SW846 Method 6020 (and mercury by Method 7471A)
- hexavalent chromium by SW846 Method 7196A
- PCBs by SW846 Method 8082
- pesticides by SW846 Method 8081

Soil chemical results were then compared to residential and industrial screening criteria.

Benzo(a)pyrene concentrations in 21 of 50 samples exceeded the residential soil-screening criterion (22 µg/kg). The highest concentrations (ranging from 670 to 4,300 µg/kg) also exceeded the non-residential criterion (390 µg/kg) and were detected in samples collected from northwestern soil borings D-SB-872 and D-SB-874. BaPEq levels in seven samples from three soil borings (D-SB-872, D-SB-874, and D-SB-879) exceeded the site-specific screening criterion (150 µg/kg). Six of these exceedances were detected in samples from the two northwestern borings (D-SB-872 and D-SB-874); one was detected in a soil boring in the western portion of the grassy area just south of the fence (D-SB-879).

Eleven soil samples exceeded the MDE residential soil-screening criterion (230 mg/kg) for TPH-DRO, and six samples exceeded the non-residential screening criterion (620 mg/kg). The four samples with non-residential TPH-DRO exceedances were collected from northwestern soil borings D-SB-872 (one sample) and D-SB-874 (three samples). A petroleum odor was reported in soils during the advancement of boring D-SB-874. VOCs, hexavalent chromium, mercury,

pesticides, PCBs, and TPH-GRO were not detected at concentrations exceeding previously used screening criteria in any soil samples. Results from the 2010 data gap investigation that exceed the subsequently developed risk-based PRGs for future recreational land use are shown in Figure 2-3 and Appendix B.

2.3.11 Human Health Risk Assessment

The *Human Health Risk Assessment for Blocks D, E, F, G, and H Soils, Lockheed Martin Middle River Complex, Middle River, Maryland* (Tetra Tech, 2012b) was revised and finalized in 2012 with updated risk evaluations reflecting anticipated future property use. The collective MRC environmental characterization data set was used in the 2012 risk assessment; a significant volume of environmental data was collected between 2004 and 2010 that further characterized the nature and extent of soil impacts in the Block D panhandle. The HHRA evaluated all Block D soils collectively, including the main portion of the site combined with the panhandle, and identified COC in Block D soils that require remediation, assuming a typical recreational user is the receptor of concern. The HHRA consisted of the following six components:

- data evaluation
- exposure assessment
- toxicity assessment
- risk characterization
- uncertainty analysis
- development of preliminary remedial goal options

The HHRA used validated soil data from the previous Block D panhandle investigations to assess risks to potential human receptors. Site-contaminant concentrations were compared to conservative toxicity-screening values to compose a list of COPC. After the list of COPC was developed, an exposure assessment evaluated the type and magnitude of human exposure (as described in Section 4). Following the exposure assessment, a toxicity assessment of the identified COPC quantitatively estimated the relationship between the magnitude and type of exposures, and the severity or probability of human health effects. The quantitative toxicity values selected during the toxicity assessment were integrated with exposure assessment outputs to characterize the potential occurrence of adverse health effects for each receptor group.

Potential risks to human receptors were estimated based on the assumption that no actions would be taken to control contaminant releases. Primary guidance sources used to prepare the HHRA include the MDE *Cleanup Standards for Soil and Groundwater, Interim Final Guidance*

(MDE, 2008) and *Voluntary Cleanup Program Guidance* (MDE, 2006). Current guidance and reports published by USEPA and USEPA Region 3 were also used to prepare the risk assessment.

Historical land uses suggest that construction workers and industrial workers are the primary receptors that could potentially be exposed to contaminated soils at the MRC; however, the anticipated future land use at the Block D panhandle is recreational. Cancer and non-cancer risk estimates were calculated for these receptors using reasonable maximum-exposure assumptions, assuming that human exposure may occur via incidental ingestion, dermal contact, and inhalation exposure-routes. Cancer-risk estimates were presented in terms of incremental lifetime-cancer-risks (ILCR); non-cancer-risk estimates were presented in terms of hazard indices. Potential cancer effects were interpreted using the MDE cancer-risk benchmark (1×10^{-5}, or a one-in-100,000 probability of developing cancer) for cumulative risk, and the USEPA target cancer-risk range (1×10^{-4} to 1×10^{-6}, or a one-in-10,000 to a one-in-a-million probability, respectively, of developing cancer). Non-cancer risks were evaluated using a total hazard index (HI) value of 1 (adverse non-cancer health effects are not anticipated when the estimated HI is equal to or less than 1). BaPEq, hexavalent chromium, and arsenic were identified as COC for future recreational use in the HHRA for all Block D surface soils, including panhandle surface soils.

The Block D panhandle (and entire MRC) has been intensely developed in the past for industrial purposes, and much of the current land surface is paved or denuded of vegetation other than maintained grass areas. Thus, the currently available habitat for flora/fauna populations is limited, as is the potential for ecological receptor exposure and risk. In addition, as the planned future use of the panhandle is recreational, this area will likely consist of a similar type of maintained vegetative open space. Consequently, the amount and quality of the ecological habitat in the Block D panhandle will continue to be limited. For these reasons, an ecological risk assessment was not developed for the site, and remedial action and risk management decisions are based on the results of the HHRA.

2.4 CONCEPTUAL SITE MODEL

The action proposed in this RAP will address contaminated soils in the Block D panhandle. Block D is a relatively flat parcel of land consisting of parking lot No. 6, which has been historically used primarily as an employee parking lot. The parking lot is paved with asphalt, and grassy strips of land lie between the paved portions of the block and Dark Head Cove. The

parking lot No. 6 asphalt paving extends into the northern portion of the panhandle site, and the southern portion of the Block D panhandle is grassed. The following sections describe the sources of contamination at the Block D panhandle, as well as land use scenarios and exposure pathways.

2.4.1 Contaminant Sources and Soil Contaminants of Concern

Most PAH-impacted soils at the panhandle are likely related to fill material historically placed there for general fill and grading activities associated with development of the MRC in the 1930s and 1940s. The source(s) of historical fill at the panhandle are unknown. PAH contamination may also be associated with the asphalt paving or motor oil dripping from cars. Soil sampling results suggest that PAHs are randomly distributed in the panhandle soil matrix. PAHs, expressed as BaPEq, are the primary risk driver for recreational users at the site, and have been identified in surface and subsurface soils at concentrations exceeding risk-based criterion for BaPEq (195 µg/kg). Arsenic and hexavalent chromium are also addressed in this RAP; historical soil sampling results include arsenic concentrations above the site background (12 mg/kg) and hexavalent chromium concentrations above the background benchmark-concentration (1 mg/kg).

2.4.2 Land Use Scenario and Exposure Pathways

The current land use at the panhandle is considered “Tier 3: Industrial” according to the land use definition in the MDE Voluntary Cleanup Program (VCP) guidelines. However, the potential future land use of the Block D panhandle is recreational; under this scenario, recreational users are considered potential receptors. The 2012 HHRA also evaluated two other potential future use scenarios for the Block D panhandle (future industrial use and hypothetical future residential use) to determine if an institutional control such as a deed restriction might be required for the property. This deed restriction would not prohibit alternative (residential) development, but would indicate the need for additional remedial action before more conservative development (other than recreational use) occurs.

Possible exposure pathways for all potential receptors include dermal contact, inhalation, and incidental ingestion of site soils. Surface soils are inaccessible in areas covered by impervious pavement or grass, thus limiting potential exposure. However, receptors could directly contact contaminants if soil is exposed or disturbed. COC in surface soil could also migrate to air through wind erosion; however, this is unlikely, since most of Block D panhandle is covered either by asphalt or by well-maintained grass. Subsurface soil is not currently exposed, but if

future construction were to bring subsurface soil to the surface, contaminants in these soils could be transported into the air through wind erosion.

Surface water runoff generated in the grass-covered areas will generally infiltrate into the underlying soil or discharge to Dark Head Cove as overland sheet-flow. Therefore, overland runoff and erosion can only be potential migration pathways if contaminated soil is exposed during future construction, and if runoff is not contained and controlled as it is in its current state. PAHs generally adhere to soils; therefore, migration of these contaminants from soils to groundwater is not considered a complete migration pathway. This assumption is supported by years of groundwater monitoring results. As SVOCs, BaPEq and other chemical constituents in soil do not pose a threat for soil-vapor intrusion. This assumption is supported by years of sub-slab vapor monitoring results in Block I. Section 4 of this RAP provides details of the exposure pathways and receptors for Block D panhandle soils.

Table 2-1

Historical Soil Investigations
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Investigation	Year	General scope	Reference
Phase I Environmental Site Assessment	2003	13 Recognized Environmental Conditions (RECs) identified at the Middle River Complex. One REC overlaps with panhandle (REC #6: fill with unknown origin below parking lot No. 6 and the waterfront lot)	Earth Tech, 2003
Phase II Investigation	2003	Completed geophysical survey in parking lot No. 6. One soil boring advanced in the northern portion of the panhandle	Tetra Tech, 2004a
Historical survey	2004	18 additional RECs identified (none at Block D/panhandle)	Tetra Tech, 2004b
Phase II Soil Investigation	2005 and 2006	Three borings advanced at the panhandle, with soil sampling at three depths in each boring	Tetra Tech, 2006
Additional Soil Charcterization	2007	Soil sampling at multiple depths in 10 soil borings at the panhandle	Tetra Tech, 2011a
Final Delineation Investigation	2009	One boring resampled at one-foot depth increments to assess vertical extent of BaPEq	Tetra Tech, 2011a
Data Gap Investigation	2010	Soil sampling in 15 soil borings at the panhandle	Tetra Tech, 2011b
Panhandle Investigation	2012	Soil sampling in 10 soil borings within two target areas at the panhandle	Tetra Tech, 2012

BaPEq - benzo(a)pyrene equivalent concentrations
REC- recognized environmental condition

Table 2-2

Applicable Soil Screening Criteria
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Panhandle Applicable Soil Screening Criteria (µg/kg)				
Constituents Identified in Soils at Concentrations Exceeding Screening Levels	**Current Maryland Residential Cleanup Level[1]**	**Current Maryland Industrial Screening Level[1]**	**Maryland Anticipated Typical Concentration[2]**	**Recreational, Site-Specific Preliminary Remedial Goal**
BaPEq	22	390	NA	200
Arsenic	430	1,900	3,600	12,000[5]
Hexavalent chromium	23,000	310,000	NA	1,000[5]

BaPEq - benzo(a)pyrene equivalent [Maryland Cleanup Levels not available for BaPEq, so criteria for benzo(a)pyrene are shown.]
µg/kg - micrograms per kilogram, or parts per billion concentration in soil
NA - criteria not available or not applicable for corresponding contaminant

1. Cleanup levels for soils from *State of Maryland Department of the Environment Cleanup Stanbdards for Soil and Groundwater* (MDE, 2008)
2. Anticipated typical concentration (ATC) for select metals in the eastern region of Maryland as published in (1) above

3. Site-specific, risk-based cleanup goal determined as part of the human health risk assessment (discussed further in Section 2.3.12)

4. BaPEq, arsenic, and hexavalent chromium were the only soil constituents posing risk under the future recreational land use scenario according to th treuslts of the Human Heath Risk Assessment: therefore, risk-based (recrational) preliminary cleanup goals were developed for BaPEq, arsenic, and hexavalent chromium only.

5. Residential land use background benchmark values adopted by the states of New Jersey and Missouri.

Table 2-3

Summary of 2003 to 2005 Panhandle Soil Samples
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Location Identifier	Sample Identifier	Depth (feet)		Soil Analyses
		Top	Bottom	
Phase II Site Investigation Samples (Autumn/Winter 2003)				
SB-033	SB-33-05	5	5	VOCs, SVOCs, pesticides/PCBs, metals, and TPH-GRO and -DRO
Site-Wide Phase II Investigation Samples (2004)				
SB-031	SB-33A-SS	0	1	VOCs, SVOCs, pesticides/PCBs, metals, and TPH-GRO and -DRO
SB-065	SB-65-SS	0	1	VOCs, SVOCs, pesticides/PCBs, metals, and TPH-GRO and -DRO
SB-065	SB-65-05	5	5	VOCs, SVOCs, pesticides/PCBs, metals, and TPH-GRO and -DRO
SB-065	SB-65-10	10	10	VOCs, SVOCs, pesticides/PCBs, metals, and TPH-GRO and -DRO
SB-065	SB-65-15	15	15	VOCs, SVOCs, pesticides/PCBs, metals, and TPH-GRO and -DRO
SB-065	SB-65-20	20	20	VOCs, SVOCs, pesticides/PCBs, metals, and TPH-GRO and -DRO
Phase II Soil Investigation Samples (Summer 2005)				
SB-247	SB-247-05	5	5	Metals, SVOCs, and PCBs
SB-247	SB-247-10	10	10	Metals, SVOCs, and PCBs
SB-247	SB-247-15	15	15	Metals, SVOCs, and PCBs
SB-248	SB-248-05	5	5	Metals, SVOCs, and PCBs
SB-248	SB-248-10	10	10	Metals, SVOCs, and PCBs
SB-248	SB-248-15	15	15	Metals, SVOCs, and PCBs
SB-249	SB-249-05	5	5	Metals, SVOCs, and PCBs
SB-249	SB-249-10	10	10	Metals, SVOCs, and PCBs
SB-249	SB-249-15	15	15	Metals, SVOCs, and PCBs

DRO - diesel-range organics
GRO - gasoline-renage organics
PCBs - polychlorinated biphenyls
SVOCs - semivolatile organic compounds
TPH - total petroleum hydrocarbons
VOCs - volatile organic compounds

Table 2-4

Summary of 2007 - 2009 Soil Samples
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Sample Identification	Location	Depth Intervals (feet)	Analysis	Number of Samples Collected
Characterizatio				
SB-33RE	resampling of previous boring SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-336	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-337	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-338	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-339	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-340	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-341	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-342	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-343	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
SB-344	northern panhandle near SB-33	2- to 3-feet; 5- to 6-feet; and 8- to 9-feet	benzo(a)pyrene and mercury	3
(Autumn 2009)				
SB-65RE	resampling of previous boring SB-65	One-foot intervals from 1 to 15 feet.	polycyclic aromatic hydrocarbons (for benzo(a)pyrene equivalent concentrations)	15

Table 2-5

Summary of 2010 Data Gap Investigation Samples
Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Sample Identification	Depth Intervals (feet)	Analysis	Number of Samples Collected
D-SB-782	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-783	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-784	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-785	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-786	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-787	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-788	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-789	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-790	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-791	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-792	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-793	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-794	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8

Table 2-5

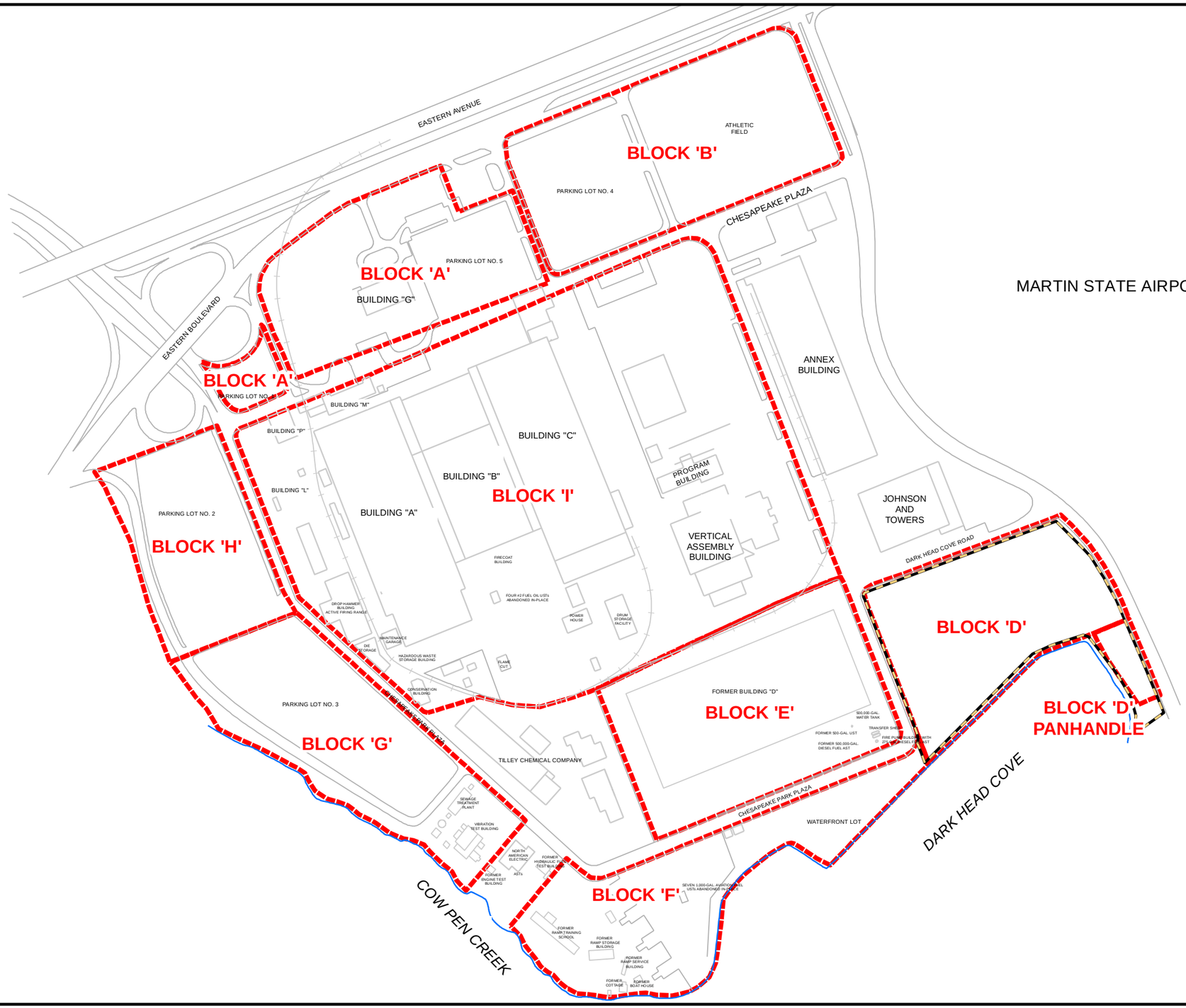
Summary of 2010 Data Gap Investigation Samples
Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Sample Identification	Depth Intervals (feet)	Analysis	Number of Samples Collected
D-SB-795	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8
D-SB-796	1-15 at two foot intervals (1, 3, 5, 7, 9, 11, 13, 15-ft.)	VOCs, SVOCs, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	8

Table 2-6

Summary of 2012 Panhandle Investigation Samples
Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Sample Identification	Depth Intervals (feet)	Analysis	Number of Samples Collected
D-SB-872	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-873	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-874	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-875	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-876	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-877	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-878	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-879	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-880	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5
D-SB-881	0-1, 1-2, 2-4, 4-6, 6-8	VOCs, SVOCs and dioxin, pesticides/PCBs, metals, mercury, hexavalent chromium, and TPH-GRO and -DRO	5



MARTIN STATE AIRPORT

FIGURE 2-1

MIDDLE RIVER COMPLEX
TAX BLOCKS

LEGEND

- TAX BLOCK
- REC LOCATION
- STRUCTURE
- RAILROAD TRACKS

Lockheed Martin Middle River Complex
Middle River, Maryland

0 200 400 Feet

N

DATE MODIFIED: 6/21/13

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\MRC Tax Blocks_062013.mxd)
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Map Document: (K:\GProject\middle_river\Maps\GPS SOIL BORING LOC\Final RAP figures\Final RAP_Comments\Block D Figure 2-2_062813.mxd)
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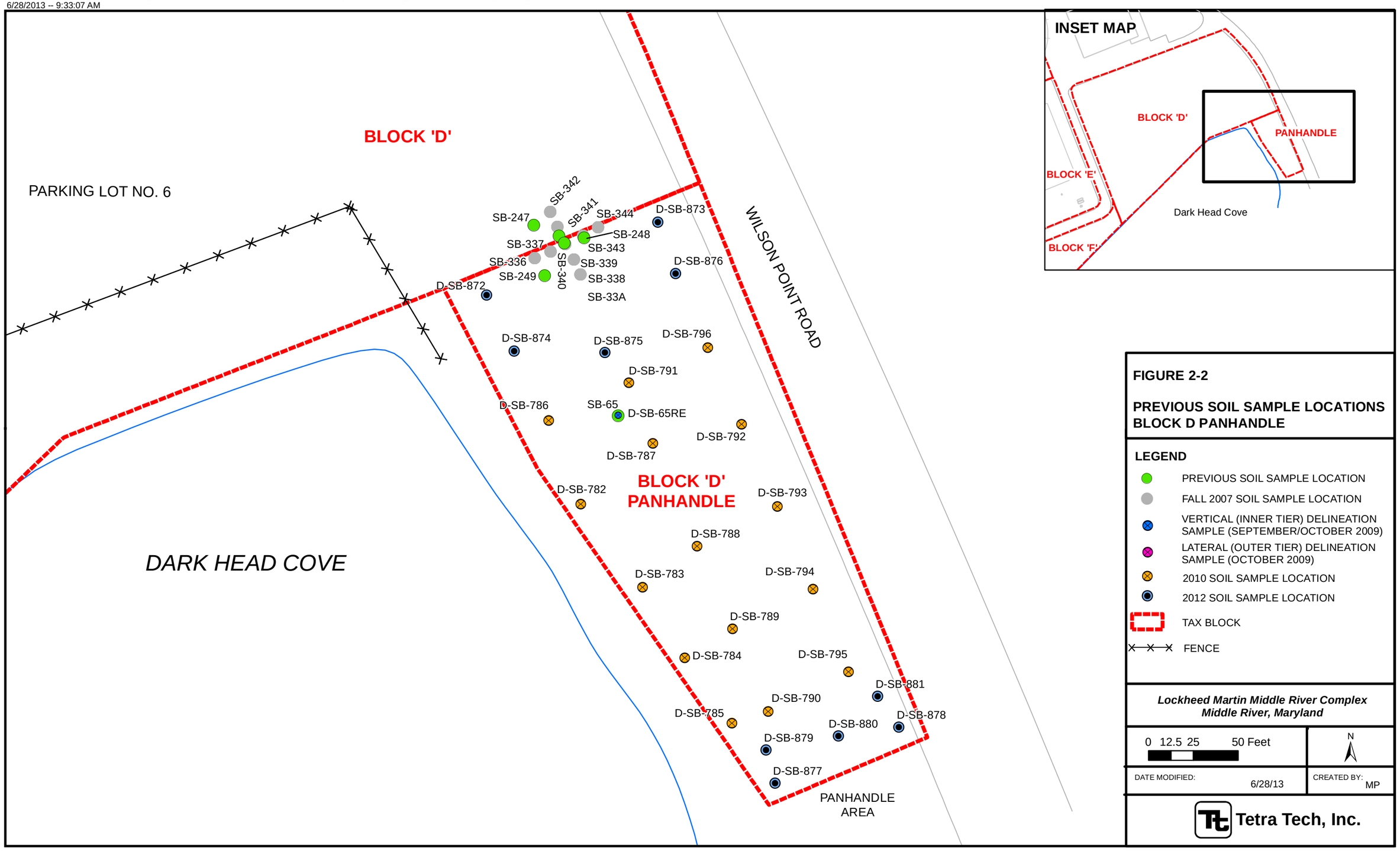

FIGURE 2-2

PREVIOUS SOIL SAMPLE LOCATIONS BLOCK D PANHANDLE

LEGEND

- PREVIOUS SOIL SAMPLE LOCATION
- FALL 2007 SOIL SAMPLE LOCATION
- VERTICAL (INNER TIER) DELINEATION SAMPLE (SEPTEMBER/OCTOBER 2009)
- LATERAL (OUTER TIER) DELINEATION SAMPLE (OCTOBER 2009)
- 2010 SOIL SAMPLE LOCATION
- 2012 SOIL SAMPLE LOCATION
- TAX BLOCK
- FENCE

Lockheed Martin Middle River Complex
Middle River, Maryland

0 12.5 25 50 Feet

N

DATE MODIFIED: 6/28/13

CREATED BY: MP

Tetra Tech, Inc.

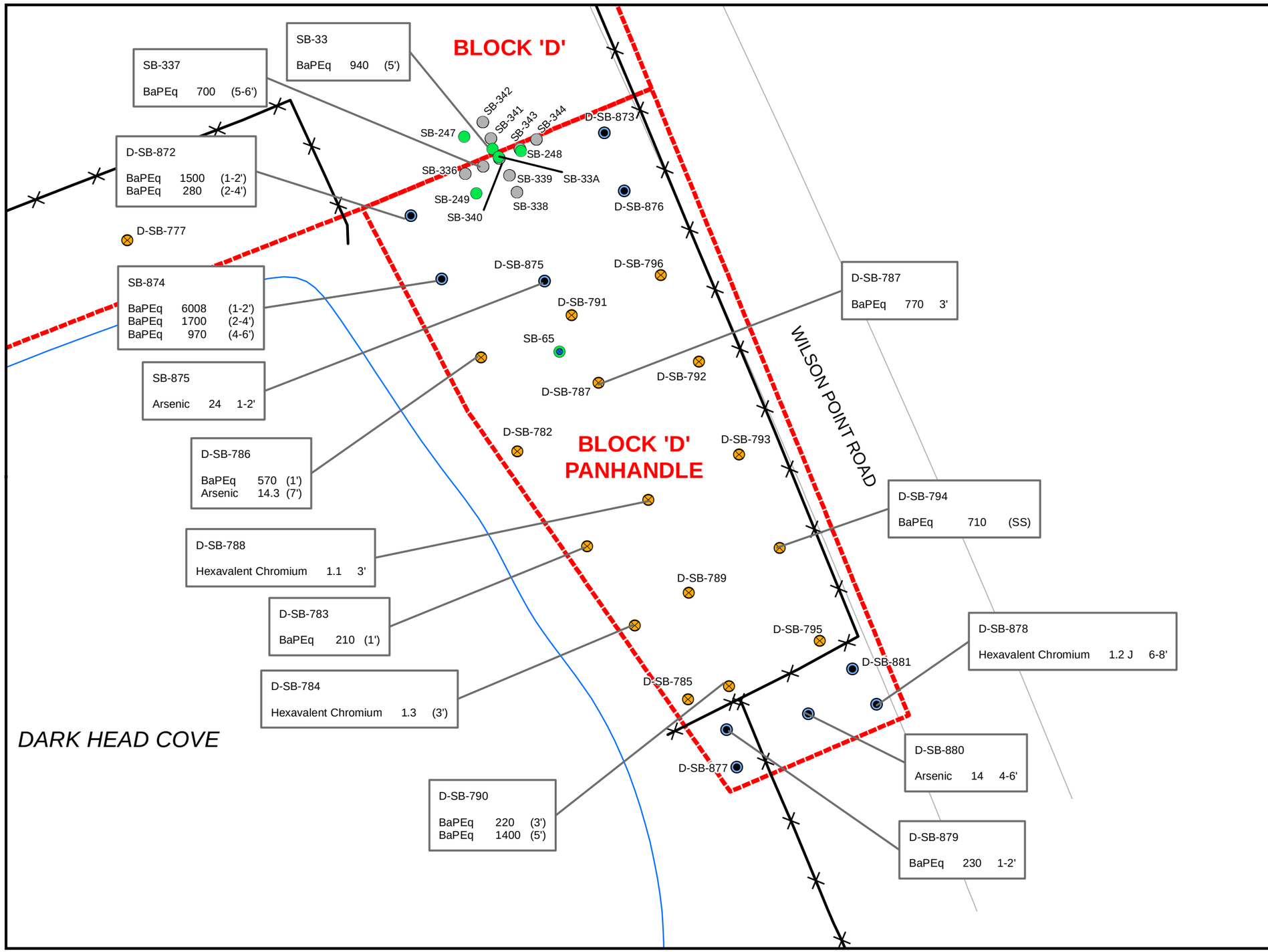

FIGURE 2-3

SUMMARY OF EXCEEDANCES OF RECREATIONAL LAND USE SCREENING VALUES IN SOILS BLOCK D PANHANDLE

LEGEND

- 2003-2005 SOIL SAMPLE LOCATION
- FALL 2007 SOIL SAMPLE LOCATION
- VERTICAL (INNER TIER) DELINEATION SAMPLE (SEPTEMBER/OCTOBER 2009)
- 2010 SOIL SAMPLE LOCATION
- 2012 SOIL SAMPLE LOCATION
- TAX BLOCK
- FENCE

Sample ID	Analyte	Concentration in Micrograms Per Kilogram (ug/kg)	Depth

BaPeq RESULTS ARE IN UNITS OF MICROGRAMS PER KILOGRAM (UG/KG)
SCREENING LEVEL FOR BENZO(A)PYRENE EQUIVALENTS (BaPEq) IS 195 ug/kg (RECREATIONAL PRG)
ARSENIC AND HEXAVALENT CHROMIUM RESULTS ARE IN UNITS OF MILLIGRAMS PER KILOGRAM (MG/KG)
SCREENING LEVEL FOR ARSENIC IS 12 mg/kg (SITE SPECIFIC BACKGROUND)
SCREENING LEVEL FOR HEXAVALENT CHROMIUM IS 1.0 mg/kg (RESIDENTIAL LANDUSE BENCHMARK)

PRG - Preliminary Remediation Goal
J- Estimated Value

Lockheed Martin Middle River Complex
Middle River, Maryland

0 15 30 60 Feet

N

DATE MODIFIED: 6/28/13

CREATED BY: MP

Tetra Tech, Inc.

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Section 3
Exposure Assessment

An exposure assessment for the Middle River Complex (MRC) was conducted to evaluate the potential exposure of human populations to chemicals of concern (COC) based on current and future land use. The exposure assessment provides the basis for developing the remedial action objective (RAO) that must be met to achieve recreational closure for soils in Block D panhandle.

3.1 CURRENT AND FUTURE LAND USE

Possible exposure pathways to COC in areas of the site with exceedances were identified to determine preliminary remedial goals for soil and appropriate remedial measures and land use controls. Possible complete exposure pathways include direct exposure (dermal contact, inhalation, and incidental ingestion) to site soils for future recreational users. The goal of the selected remedial action is to most effectively eliminate regulatorily unacceptable risk to the recreational user—the most likely receptor for the planned future use of the site. Institutional controls will be required to manage and, as necessary, mitigate risk associated with alternative future reuse plans, including residential development. The following sections detail the potential exposure pathways for COC in panhandle soils.

3.2 POTENTIAL CONTAMINANT-RELEASE MECHANISMS AND TRANSPORT PATHWAYS

COC in surface soil could migrate to air through wind erosion. Subsurface soil is not currently exposed; however, if future construction were to bring subsurface soil to the surface, contaminants could be transported into the air. Contaminants could migrate from both surface and subsurface soil to groundwater through leaching of chemicals in soil; however, leaching to groundwater is considered an incomplete exposure pathway for this site, given that the primary COC are polycyclic aromatic hydrocarbons (PAHs), which tend to bind to soil particles. If the asphalt paving were removed, overland runoff and erosion at the site could be a significant contaminant transport mechanism due to the site topography.

3.3 FATE AND TRANSPORT OF PRIMARY SITE CHEMICALS OF POTENTIAL CONCERN (COPC) IN SOIL

PAHs are relatively immobile chemicals composed of large molecules; they have low solubilities, low vapor pressures, and high partitioning coefficients. These physical characteristics mean that PAHs in soil are much more likely to bind to soil and be transported via mass-transport mechanisms (e.g., gravity flow of PAH-containing product, etc.), rather than through dissolution. Thus, PAHs found in surface soil generally do not migrate vertically to a great extent. Instead, they are more likely to adhere to soil particles and be removed from the site via surface water runoff and erosion, especially in the absence of pavement or stabilizing vegetation, or if erosion controls are absent or not functioning properly. PAHs are not typically found in groundwater if generally low PAH concentrations are present in soils. Groundwater monitoring completed at the MRC provides evidence that PAHs are not leaching to groundwater; therefore, PAHs are not a groundwater COC.

3.4 POTENTIAL CURRENT AND FUTURE RECEPTORS OF CONCERN AND EXPOSURE PATHWAYS

The northern portion of the site is currently asphalt paved, but future site redevelopment might be for recreational use. Recreational users are thus potential receptors of concern for Block D panhandle contaminants. A recreational user could be exposed to surface soils (0–2 feet below grade) through incidental ingestion, dermal contact, and inhalation of chemicals emitted from soil to the air. To aid future risk management decisions, risks to recreational users from subsurface soil (2–10 feet below grade) were also evaluated, because future construction could redistribute subsurface soil to the surface.

Section 4
Preliminary Remedial Goals

Section 4 provides a summary of the chemicals of concern (COC) in soils for which further remedial action is necessary to reduce human health risk to future users of Block D panhandle. This section also presents the preliminary remedial goals (PRGs) developed for panhandle soils and an overview of the residual-risk analysis (RRA) conducted to identify those soil locations that will require remediation to achieve the soil remedial action objective (RAO) established for the Block D panhandle. The complete RRA for all of the Middle River Complex (MRC), including the Block D panhandle, is in Appendix D.

4.1 REMEDIAL ACTION OBJECTIVES

RAOs were developed to mitigate potential complete exposure pathways identified in the conceptual site model (CSM) under current or foreseeable future land use scenarios. Development of RAOs must consider applicable or relevant and appropriate requirements (ARARs). The following RAO was developed for Block D panhandle soils.

RAO— *Reduce site-related organic COC in Block D panhandle soils to a 1×10^{-5} human health cancer-risk limit for recreational users exposed to COC via ingestion, dermal contact, and inhalation; and reduce site-related inorganic COC to background levels.*

4.2 CHEMICALS OF CONCERN

The human health risk assessment (HHRA) identified polycyclic aromatic hydrocarbons (PAHs), expressed as benzo(a)pyrene equivalents (BaPEq)[1], arsenic, and hexavalent chromium as the

[1]Per current United States Environmental Protection Agency (USEPA) guidance (USEPA, 1993b), concentrations of benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene can be combined in an adjusted risk-weighted concentration that is expressed in terms of benzo(a)pyrene toxicity. This calculated value, called a *benzo(a)pyrene equivalent concentration* (BaPEq), uses USEPA-recommended toxicity equivalency factors (TEFs) to estimate the potency of each of these polycyclic aromatic hydrocarbon (PAH) compounds relative to that of benzo(a)pyrene. The TEFs are then used to convert each individual PAH concentration into an equivalent concentration of benzo(a)pyrene; these values are summed to arrive at the calculated BaPEq concentration. Details outlining the BaPEq calculation can be found in Appendix E.

COC for Block D soil, including panhandle soil, assuming a typical recreational user is the receptor of concern. BaPEq were identified in the human health risk assessment (HHRA) as the principal contaminant posing regulatorily unacceptable carcinogenic (but not non-carcinogenic) risks to potential site receptors.

4.3 PRELIMINARY REMEDIAL GOAL

PRGs were developed for all three COC. The 1×10^{-5} risk-based PRG for BaPEq developed for the recreational user is 195 micrograms per kilogram (µg/kg). This PRG was calculated using the methodology presented in the HHRA and verified using the United States Environmental Protection Agency (USEPA) regional screening-level (RSL) calculator (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search). The associated check-calculation spreadsheets are in Appendix D ("Residual-Risk Analysis"), Attachment A.

In general, soil standards for metals are the highest value selected from a risk-based concentration, the laboratory practical quantitation-limit, or an MDE-approved reference value. The Block D panhandle PRGs selected for arsenic and hexavalent chromium are 12 mg/kg and 1 mg/kg, respectively. The arsenic PRG is a background concentration discussed and agreed upon (with MDE) during preparation of the Tax Block B RAP (Tetra Tech, 2009). The hexavalent chromium PRG is based on residential land-use benchmarks published by two state regulatory agencies (New Jersey and Missouri) (see the attachment to Appendix D). The benchmark considers both toxicity and background data. Reference or background values are considered in the derivation of MDE soil standards for inorganic compounds (MDE, 2008).

The risk-based PRG for BaPEq established for Block D panhandle soil satisfies the requirements of MDE Controlled Hazardous Substances regulations, and is consistent with the requirements of the *National Oil and Hazardous Substances Pollution Contingency Plan* (NCP) (40 *Code of Federal Regulations* [CFR] Part 400.430) promulgated under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). For the PAH constituents represented by BaPEq, the selection of a risk-based PRG representing the 1×10^{-5} cancer-risk level is consistent with the RAO and the approach presented in previous documents published for MRC tax block soils (e.g., *Final Soil Response Action Plan, Block B, Lockheed Martin Middle River Complex* [Tetra Tech, 2009]). A PRG based on an incremental lifetime-cancer-risk (ILCR)

of 1×10^{-5} (versus a remedial goal based on an ILCR of 1×10^{-6}, i.e., a one-in-a-million risk) is appropriate for the following reasons:

- BaPEq represents a *group* of chemicals (i.e., benzo(a)pyrene and related chemicals), not a single COC, and therefore risk analysis based on BaPEq accounts for cumulative risk
- non-site related anthropogenic sources (associated with "fill material") of benzo(a)pyrene (and other PAHs used to calculate BaPEq) have contributed to study area soil concentrations
- PRGs set at the 1×10^{-6} level for the BaPEq constituents are often significantly less than typical anthropogenic background levels (particularly in highly developed areas)

Appendix D includes histograms showing BaPEq-concentration distributions in the panhandle. The histograms demonstrate that risk estimates are strongly influenced by elevated concentrations detected at relatively few of the many sampling locations within the Block D panhandle.

4.4 RESIDUAL-RISK ANALYSIS

A residual-risk analysis (RRA) was conducted to identify those locations to be remediated to achieve "representative" soil concentrations that do not exceed the PRG established for the COC in the Block D panhandle soils. A "representative" soil concentration (also referred to as the exposure-point concentration [EPC]) is defined as the 95% upper confidence limit (UCL) on the arithmetic mean (95% UCL) for a receptor in an exposure unit (in this case, a recreational user within Block D panhandle). In overview, the RRA ranks locations from most contaminated to least contaminated, and then sequentially "removes" sampling results/locations from the calculation (i.e., targets sampling locations for remediation) until the 95% UCL concentration for a COC does not exceed the PRG in the study area.

The RRA was performed for Block D panhandle soils from zero to two feet below ground surface [bgs] (i.e., surface soils), and for soils from two feet bgs to the water table (subsurface soils). Soils below the water table are not targeted for potential remediation and will be addressed through land use controls (LUCs). Depth to groundwater at the panhandle is between two and 10 feet bgs, with an allowance of two feet for seasonal fluctuation (figures showing depth-to-groundwater contours are in Appendix F). The RRA was conducted as described in the following paragraphs:

Step 1: Identification of COC for the RRA—As discussed earlier, BaPEq, arsenic and hexavalent chromium were identified as the Block D panhandle COC.

Step 2: Identification of PRGs—Risk-based preliminary remedial goals for the recreational user were calculated for all COC and presented in the *HHRA for Tax Block Soils* (Tetra Tech, 2012). The remedial goal selected for evaluation of BaPEq constituents in the RRA (195 µg/kg) is the concentration representing the 1×10^{-5} cancer-risk level for the recreational user. Metals soil-standards are (a) the highest value selected from a risk-based concentration, (b) the laboratory practical quantitation-limit, or (c) an MDE-approved reference value (see Section 4.3).

Step 3: Ranking of locations—Samples in the Block D panhandle were ranked by BaPEq concentration and risk. Surface soil (i.e., soils from the ground surface to two feet in depth) locations were ranked separately from subsurface (vadose zone) soil (i.e., soil between two feet bgs and the typical depth to groundwater for the Block D panhandle). If more than one soil sample was available for a given depth-interval, the maximum concentration was used to rank that location.

Step 4: Iteratively remove samples and recalculate exposure-point concentrations—Ranked samples were reviewed to select an initial set of locations to undergo RRA. Locations with cancer risk estimates exceeding the 1×10^{-5} cancer risk level for the typical recreational user were selected as a starting point, because that level is the MDE cumulative cancer-risk benchmark. These locations contribute significantly to the risk estimates presented in the HHRA, and were considered a reasonable starting point for the analysis.

The selected data points (assuming removal via excavation) were replaced by an assumed (clean fill) concentration of 10 micrograms per kilogram (µg/kg); the 95% UCL for the BaPEq constituents was then recalculated using the substituted concentrations. The 10 µg/kg concentration was selected as the replacement soil value instead of non-detect, to be conservative. If the recalculated 95% UCL exceeded the PRG for the recreational user, additional locations were iteratively removed from the data set and replaced with the proxy for non-detect concentration (10 µg/kg), and the recalculation was repeated until the resultant 95% UCL was equal to or less than the PRG. BaPEq concentrations in the soil samples targeted for removal

range from 40 µg/kg to 6,000 µg/kg. Samples were also iteratively removed to reduce arsenic and hexavalent chromium 95% UCL concentrations below the selected PRGs.

Step 5: Address cumulative risk issue—The RRA focused on the reduction of the BaPEq EPC and, thus, reduction of the risk. Since BaPEq represents cumulative PAH compounds, excavation of soils such that the BaPEq EPC is less than the PRG (195 µg/kg) will also result in a cumulative risk estimate for the recreational user that is equal to or less than the 1×10^{-5} cancer risk level. The metals arsenic and hexavalent chromium were reduced to levels at or below the selected PRGs.

Step 6: Margin of safety—The locations targeted for potential remediation based on the preceding steps were reviewed to determine if any additional locations should be targeted, so that the results of the residual-risk analysis clearly include a margin of safety (i.e., the cumulative health risk is less than 1×10^{-5}). For example, if sampling location "*X*" was targeted for remediation and located near sampling location "*Y*," which was not targeted for remediation but had an elevated COC concentration, sampling location "*Y*" may have been added to the list of targeted locations. Professional judgment factors were used to select the "additional" sampling locations targeted for remediation. The most frequently considered factors were: (1) the concentrations at non-targeted locations near (horizontally or vertically) targeted locations, and (2) the spatial distribution of the data (e.g., the sample density, or lack thereof) in a particular area demonstrating exceedances.

Figure 4-1 represents the areas within Block D panhandle that need to be remediated to meet the PRG and RAO, as defined in the RRA.

4.5 ATTAINMENT OF PRELIMINARY REMEDIAL GOALS AND REMEDIAL ACTION OBJECTIVES

This RAP provides an evaluation of remedial alternatives needed to achieve the established RAO for soils at the Block D panhandle. Following implementation of the remedial action, post-remediation attainment-samples will be collected to ensure that the RAO is achieved and that soils requiring removal (per the RRA) have been addressed. Confirmation samples will be analyzed for PAHs, arsenic, and hexavalent chromium before backfilling to confirm that the residual risk 95% UCL for BaPEq is less than the PRG (195µg/kg) and the remaining arsenic and hexavalent chromium concentrations are less than their respective background PRGs.

Confirmatory sidewall samples from the excavation will be used to recalculate residual risk for BaPEq in soils at the panhandle, and sampling will be considered finished when the required locations have been removed and the requirements of the RAO have been achieved. Section 8 provides further details regarding the sampling that will be required to demonstrate attainment of the RAO. MDE will issue a “No Further Action” letter once the RAO has been met. Institutional controls for groundwater and any remaining impacted soil will be established as part of site closure.

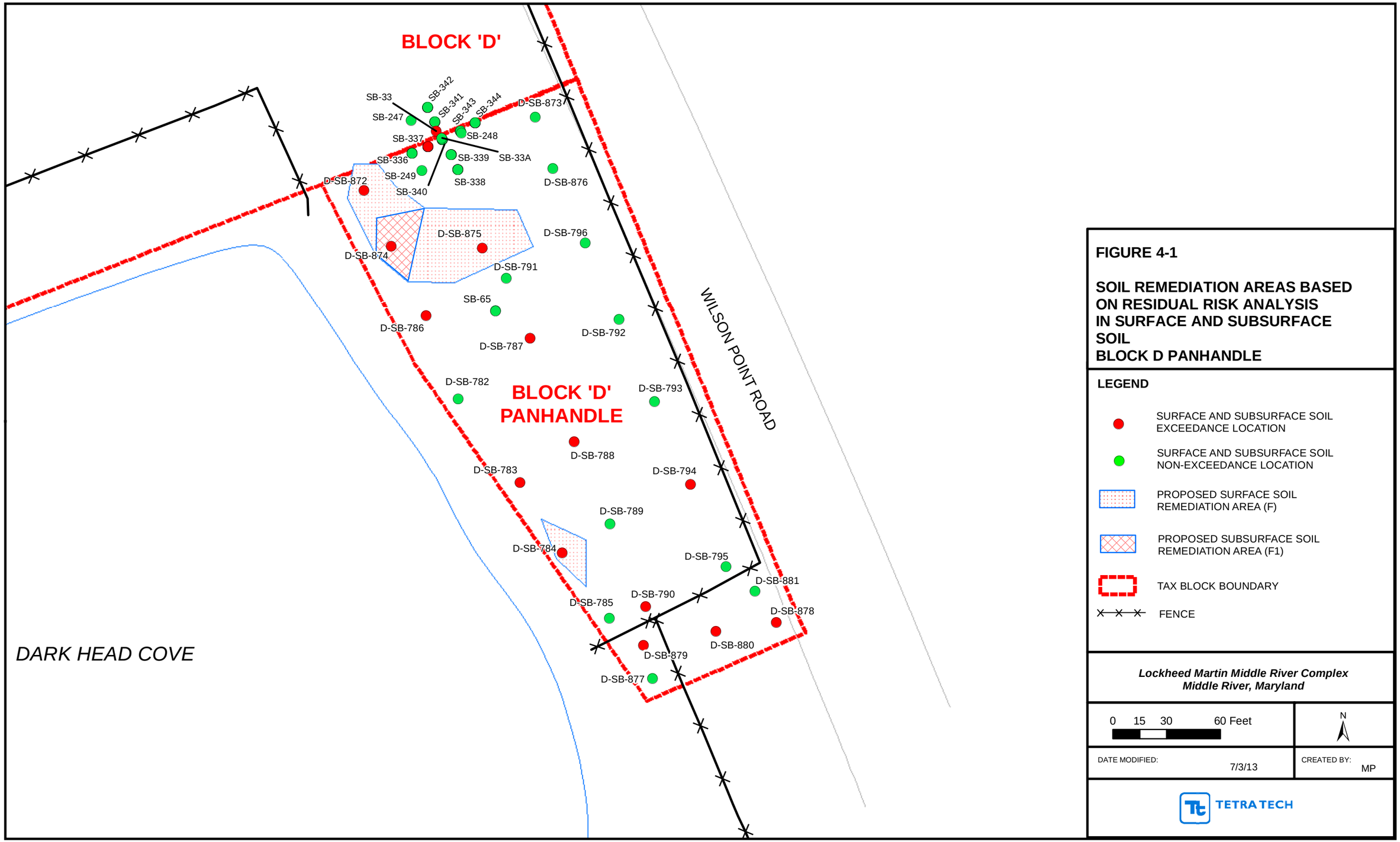

FIGURE 4-1

SOIL REMEDIATION AREAS BASED ON RESIDUAL RISK ANALYSIS IN SURFACE AND SUBSURFACE SOIL BLOCK D PANHANDLE

LEGEND

- SURFACE AND SUBSURFACE SOIL EXCEEDANCE LOCATION
- SURFACE AND SUBSURFACE SOIL NON-EXCEEDANCE LOCATION
- PROPOSED SURFACE SOIL REMEDIATION AREA (F)
- PROPOSED SUBSURFACE SOIL REMEDIATION AREA (F1)
- TAX BLOCK BOUNDARY
- FENCE

Lockheed Martin Middle River Complex
Middle River, Maryland

0 15 30 60 Feet

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Section 5
Remedial Action Alternative Evaluation and Selection

Selected technologies and institutional controls (ICs) for the proposed soil remedial action are presented in this section, as required by the Maryland Department of the Environment (MDE) Controlled Hazardous Substances (CHS) Enforcement Division. The *National Oil and Hazardous Substances Pollution Contingency Plan* (NCP) (40 *Code of Federal Regulations* [CFR] Part 400.430), promulgated under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), guides the selection of remedial technologies. This section describes the identification, screening, and evaluation of potential technologies and process options, their preliminary screening and detailed evaluation, selection of representative process options, development and detailed analysis of alternatives, comparative analysis of alternatives, and identification of the proposed alternative.

Technology identification and screening is based on the following steps:

- identification of chemicals of concern (COC) (see Section 4)
- development of preliminary remedial goals (PRGs) (Section 4)
- development of the remedial action objective (RAO) (Section 4)
- identification of applicable or relevant and appropriate requirements (ARARs) (this section)
- identification of general response actions (GRAs) (this section)

5.1 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS AND GENERAL RESPONSE ACTIONS

The ARARs in this remedial action plan (RAP) are state or federal statutes or regulations pertaining to protection of human health and the environment in addressing specific conditions or use of a particular cleanup technology at a site.

Other criteria that are non-promulgated, non-enforceable guidelines or criteria that may be useful in developing a remedial action or may be necessary to determine what protects human health and/or the environment will be considered. Examples include United States Environmental Protection Agency (USEPA) recreational exposure risk-based concentrations and similar MDE standards.

One of the primary concerns in developing remedial action alternatives for contaminated sites is the degree of human health and environmental protection offered by a remedy. CERCLA Section 121 requires that primary consideration be given to remedial alternatives that attain or exceed ARARs. The purpose of this requirement is to make CERCLA remedial actions consistent with other pertinent federal and state environmental requirements. The NCP identifies the following three categories of ARARs [40 CFR Section 300.400 (g)]:

- *Chemical-specific*—Health-risk-based numerical values or methodologies that establish concentration or discharge limits for particular contaminants. Table 5-1 presents a list of federal and State of Maryland chemical-specific ARARs and to-be-considered (TBC) criteria. These ARARs and TBC criteria provide some medium-specific guidance on "acceptable" by regulation or "permissible" concentrations of contaminants.

- *Location-specific*—ARARs that restrict actions or contaminant concentrations in certain environmentally sensitive areas. Examples of areas regulated under various federal laws include floodplains, wetlands, and locations where endangered species or historically significant cultural resources are present. Table 5-2 presents a list of federal and Maryland location-specific ARARs and TBC criteria. These ARARs and TBC criteria place restrictions on contaminant concentrations or the conduct of activities solely based on the site's particular characteristics or location.

- *Action-specific*—Technology- or activity-based requirements, limitations on actions, or conditions involving special substances that control or restrict the remedial action. Examples of action-specific ARARs include wastewater discharge standards and performance or design standards, controls, or restrictions on particular types of activities. Table 5-3 lists federal and Maryland action-specific ARARs and TBCs.

GRAs are broadly defined response approaches that may attain RAOs. GRAs describe categories of actions that could be implemented to satisfy or address a component of the RAOs for the site. GRAs corresponding to the panhandle RAO are in Table 5-4. Remedial action alternatives will be developed using the following GRAs individually or in combination to meet the RAO for contaminated soil in the Block D panhandle:

- no action
- soil removal
- limited action: institutional controls
- containment
- *in situ* treatment

5.2 SCREENING OF TECHNOLOGIES AND PROCESS OPTIONS

This section includes identification, screening, and evaluation of potential technologies and process options that may be applicable to remediating impacted panhandle soil. The primary objective of this phase is to develop an appropriate range of remediation technologies and process options that will meet the RAO. The remediation technologies and process options are identified based on experience with similar projects. In addition, publicly available information from the Federal Remediation Technologies Roundtable (FRTR) technologies screening-matrix tool (FRTR, 2012) and the Interstate Technology and Regulatory Council (ITRC) screening tool (ITRC, 2012) were used.

The identified technologies and process options were screened in accordance with USEPA guidance (USEPA, 1988) and Lockheed Martin Corporation (Lockheed Martin)-specific considerations for environmental impacts and total cost analysis. Table 5-5 presents the results of the screening with respect to effectiveness, implementability, and relative cost. The following evaluation criteria were used in the screening:

- *Effectiveness:* This criterion screens out technologies as follows:
  - Technologies and process options that were not effective in eliminating potential exposure pathways (in particular, for current industrial workers), or were not effective in meeting the RAO, were screened out.
  - Unreliable technologies and process options were screened out.
- *Implementability*: Technologies that cannot be implemented in the area were screened out.
- *Relative cost*: Technologies with costs significantly higher than others that achieve similar performance or goals were screened out. Relative costs such as high, medium, and low are provided, based on experience with similar projects and publicly available information from the FRTR and ITRC screening tools (FRTR, 2012 and ITRC, 2012).

The technologies and process options that passed the initial screening and detailed evaluation (provided in Table 5-6) were then selected for the next step in remedial alternative selection—the development of soil remedial alternatives.

5.3 DEVELOPMENT AND DETAILED ANALYSES OF ALTERNATIVES

This section discusses the development of the soil remedial action alternatives from the retained process options, and describes the conceptual design for the selected short list of alternatives. Impacted soil, as defined in the following discussion, is soil that the RRA identified for remediation. A two-step process for identifying and evaluate alternatives was used for this RAP. First, an initial list of eight potential remedial action alternatives was developed from the process options retained during the preliminary screening of technologies. Advantages and disadvantages of each were identified, and the alternatives' capital and operating costs were estimated. After the initial list of eight alternatives was screened during a qualitative analysis, seven remedial alternatives were retained for further evaluation.

5.3.1 Development of Alternatives

Eight alternatives were developed from the technologies and process options retained in Section 5.2. The process of developing these alternatives is outlined in Table 5-7.The following paragraphs describe each alternative in detail:

Alternative 1: No action
This alternative will not meet the RAO, and is presented only for comparison purposes.

Alternative 2: Institutional controls
This alternative will not mitigate impacted soils; institutional controls will be the sole means of managing and minimizing risks. This alternative involves no active remedy, but lowers risk when compared to the no-action alternative. This alternative, when used without other remedial technologies, will not meet the RAOs, because COC in site soils will remain above the 1×10^{-5} human health cancer-risk limit. This alternative is only reliable to the extent that institutional controls are effective.

Alternative 3: Excavation and off-site disposal of impacted soils to a depth of two feet and institutional controls
This alternative incorporates excavation and disposal of the top two feet of impacted soils. Following excavation, clean soil will be placed and compacted. Institutional

controls will still be required for soils that remain onsite and for soils below the groundwater table. The excavated areas will be restored using stabilizing vegetation. This alternative includes post-excavation attainment sampling and sampling for disposal purposes. This alternative will meet the RAO.

Alternative 4: Excavation and off-site disposal of impacted soils to the groundwater table and institutional controls.

This alternative incorporates the excavation and disposal of all impacted soils above the groundwater table; clean soil will be placed and compacted post-removal. Soils below the groundwater table will remain in place. Institutional controls will still be required for soils that remain on-site and for soils below the groundwater table. Excavated areas will be restored using stabilizing vegetation. This alternative includes post-excavation attainment sampling and sampling for disposal purposes. This alternative will meet the RAO.

Alternative 5: Limited excavation or asphalt pavement removal, soil cover over areas with impacted soils, and institutional controls.

This alternative incorporates removal of the top six inches of soil or asphalt pavement in remediation areas, with subsequent placement of a two-foot-thick soil cover over the impacted soil footprint. The soil cover will consist of six inches of topsoil and 1.5 feet of clean subgrade fill. The subgrade soils will be compacted to the required degree. The soil cover will raise surface grade by 1.5 feet within the 100-year floodplain, which is nine feet above mean sea level (msl). Institutional controls will still be required for soils that remain on-site and for soils below the groundwater table. This alternative will not require any attainment sampling. This alternative will meet the RAO.

Alternative 6: Enhanced bioremediation of impacted surface soils and institutional controls.

This alternative will involve enhanced bioremediation of the top two feet of impacted soils, followed by institutional controls. Impacted soils 2–4 feet bgs will not be treated. The *in situ* bioremediation method proposed will use a soil tilling technique to apply proprietary soil amendments and water to stimulate native organisms to biodegrade organic COC (e.g., polycyclic aromatic hydrocarbons [PAHs]). This alternative includes post-remedial-action attainment sampling. Remediated areas will be restored using

stabilizing vegetation. Bench-scale testing will be required to establish the viability of this technology, and to determine if the RAO will be achieved.

Alternative 7: *In situ* stabilization of impacted soils to the groundwater table and institutional controls.

This alternative consists of *in situ* stabilization of soils using an auger and cement-like material, resulting in COC becoming less mobile and less bioavailable. Stabilization techniques can be applied *in situ* or *ex situ*. The *in situ* techniques are more cost-effective because the soil matrix is disturbed to a lesser degree. Therefore, only *in situ* techniques were considered. This alternative will require institutional controls for soils that remain on-site and soils below the water table. Since stabilized materials may degrade over time, this alternative may still not meet the risk-based RAO. This alternative will also require bench-scale and pilot testing to ascertain its effectiveness in meeting the RAO and to finalize mix ratios.

Alternative 8: Phytoremediation in the impacted areas and institutional controls

This alternative consists of planting mulberry trees at a density of 1,000 trees per acre in impacted areas to enhance the biodegradation of COC. This alternative will require annual sampling to monitor the decrease in soil COC concentrations. This alternative will also require bench-scale and pilot testing to ascertain its effectiveness in meeting the RAO. This alternative will require institutional controls for soils that remain on-site and soils below the groundwater table. Phytoremediation is only effective when the rooting system is uniformly distributed throughout the soil matrix being treated; should this distribution not be uniform, impacted soils could remain untreated. In addition, COC uptake by plants must be monitored in order to prevent inadvertent human exposure (such as through the consumption of fruit). The presence of trees could also limit the potential recreational future use of this site. Therefore, this alternative may not meet the RAO.

Common aspects of institutional controls (Alternatives 2–8)—Institutional controls include, but are not limited to, cover maintenance requirements (if Alternative 5 is implemented), excavation notification, soil reuse restrictions, and limitations regarding future property use. MDE requires that these institutional controls be included on property deeds. Any excavations must meet the requirements of a site-specific health and safety plan to ensure that worker protection measures are met.

MDE will document institutional controls and related environmental covenants applicable to the Block D panhandle property in the applicable "No Further Action" letter, which will be issued upon successful completion of soil remediation achieving the RAO in the Block D panhandle. The "No Further Action" letter will be filed in the local land use records and will be passed to subsequent property owners as part of the deed documentation (i.e., the covenant "travels with the land"). MDE regards all institutional controls as existing in perpetuity unless the related environmental covenants are eliminated or modified by mutual consent of the stakeholders. MDE will present certain environmental covenants as part of the "No Further Action" letter documentation, and these covenants will provide stakeholders with legal standing for their enforcement. MDE will determine final disposition of any institutional controls.

Common aspects of Alternatives 3–5—Impacted soils are defined as soils identified in the RRA as having COC concentrations associated with an incremental lifetime-cancer-risk (ILCR) greater than one in 100,000 (1×10^{-5}), or soils with arsenic and hexavalent chromium concentrations above background values. To estimate cost, we have assumed that soil will be shipped to the licensed and approved Waste Management GROWS North landfill facility in Morrisville, Pennsylvania. This facility is currently on Lockheed Martin's approved facility list. Following excavation of impacted soils, clean backfill will be placed in six-inch lifts and compacted to 95% of their dry density.

Each alternative was ranked based on a preliminary analysis of remedial goals, advantages, disadvantages, and costs. Alternatives 1 through 7 were retained. Alternative 8 (phytoremediation in the impacted areas and institutional controls), was eliminated because its implementation may not meet the RAO. Alternative 8 is also estimated to take approximately 15 years to achieve the RAO, because it depends on growing mulberry trees with an associated root structure that will enhance COC degradation. This time period, coupled with the uncertainty in the alternative's effectiveness, does not provide for immediate use of the site. Table 5-8 provides a ranking of the alternatives following the preliminary screening.

5.3.2 Evaluation Criteria

The seven alternatives that passed the preliminary screening were evaluated in more detail using the nine evaluation criteria presented in the NCP. The NCP evaluation criteria are intended to provide a framework for assessing the risks, costs, and benefits of each remedial alternative. The

first two criteria, or *threshold criteria*, include overall protection of human health and the environment and compliance with ARARs. All alternatives (excluding Alternative 1: No Action) meet these criteria, although several will require bench-scale testing to determine if the RAO will be achieved. The next five criteria described in the NCP are primary *balancing criteria*. This RAP also adds a sixth balancing criterion: the environmental impacts of each alternative. Thus, the six primary *balancing criteria* considered are as follows:

- long-term effectiveness and permanence
- reduction in toxicity, mobility, and volume through treatment
- short-term effectiveness
- implementability
- environmental impacts
- cost

Long-term effectiveness and permanence—Alternatives must be assessed for their long-term effectiveness and permanence, along with the degree of certainty that the alternative will succeed. Other considerations include (as appropriate) the magnitude of residual risk (e.g., risks posed by untreated waste or treatment residuals) and the adequacy and reliability of controls (e.g., controls needed to manage untreated waste or treatment residuals).

Reduction of toxicity, mobility, or volume through treatment—Alternatives must be assessed for the degree to which they employ recycling or treatment that reduces the toxicity, mobility, or volume of the waste being assessed, including how the treatment and associated reductions addresses principal site risks.

Short-term effectiveness—The short-term effects of the alternative must be assessed considering the following:

- short-term risks that might be posed to the community during implementation
- potential effects on workers during the remedial action and the effectiveness and reliability of protective measures
- potential environmental effects of the remedial action, and the effectiveness and reliability of mitigation measures during implementation
- time until protection is achieved

Implementability—The ease or difficulty of implementing the alternatives must be assessed by considering technical feasibility, administrative feasibility, and availability of services and materials.

Environmental impacts—The environmental impacts of the remedial alternatives were assessed using the *SiteWise*™ software tool (Appendix G). *SiteWise*™ is a spreadsheet-based tool developed by the United States Navy, United States Army Corps of Engineers, and Battelle Memorial Institute (United States Navy, 2011). It provides a model for assessing the environmental footprint of remedial alternatives in terms of a consistent set of metrics, including greenhouse gas emissions, particulate emissions, and energy usage. The components of Alternatives 3–7 were divided into four modules (representing the remedial phases of most remedial actions) and their environmental footprint was then calculated. These results were then combined to determine the total footprint of each alternative and enable comparison among the set of alternatives. *SiteWise*™ can also be used to determine the primary footprint-contributors of each alternative.

Costs—Total cost analysis (TCA) considers the costs associated with implementing a program, including direct costs associated with implementation, environmental and health costs, risks and liabilities, and costs borne by others. Five cost categories considered in the TCA for Block D panhandle soil remediation alternatives are as follows:

- **I—Direct costs** (recurring and non-recurring), including:
  - remediation design
  - remediation construction, including capital, labor, material, and waste disposal
  - operations, maintenance, and monitoring for a 50-year time period
  - decommissioning and disposal upon remedy completion
  - worker safety measures
- **II—Indirect costs** (recurring and non-recurring) expended by Lockheed Martin to manage and support the remediation program
- **III—Future and contingent liability costs**, including:
  - fines and penalties
  - natural resource damage assessments under CERCLA
  - property damage
  - disposal or recycling facility failures

- future development under institutional controls
- currently unknown issues, such as:
  - unknown contamination in the remediation area or under the operating manufacturing facilities
  - future releases to groundwater
  - effect that future modification or demolition of manufacturing facilities may have, including changes in groundwater flow and contaminant release
  - emerging contaminants of concern

- **IV—Internal intangible costs**, including:
  - community relations
  - regulatory relations
  - corporate and brand impacts
  - customer loyalty
  - worker wellness and morale
- **V—External costs** (borne by society), including:
  - environmental deterioration
  - resource depletion
  - protection of future residents and workers

The TCA, as applied in this soil RAP, includes quantitative estimates of Category I and II costs and qualitative assessments of Category III, IV, and V costs. Qualitative assessments are generally included in the other CERCLA evaluation criteria. Total cost analysis results are in Appendix H.

The NCP also includes two *modifying criteria*, state and local acceptance, for consideration. Lockheed Martin has proactively interacted with both MDE and the local community to present potential alternatives and discuss the potential ramifications of each alternative. MDE approval of this RAP will constitute state acceptance, and Lockheed Martin is committed through its community outreach and public engagement program to provide the public an opportunity to provide comments on the RAP before its final approval and implementation. The two modifying criteria will not be scored at this time during the evaluation of the remedial actions, but will be incorporated after MDE has reviewed the document and community input on this RAP has been received.

5.3.3 Detailed Analyses of Alternatives

The following sections describe the seven alternatives retained based on the preliminary screening using the evaluation criteria presented in Section 5.3.2.

5.3.3.1 Alternative 1: No Action

This alternative will leave the Block D panhandle in its current condition. This alternative is required to establish a basis for comparison with other alternatives.

Long-term effectiveness and permanence—Alternative 1 will not be effective in the long term in meeting the RAO because site BaPEq will remain above the 1×10^{-5} human health cancer-risk limit and inorganic COC will remain greater than background levels. Concentrations of soil COC might gradually decrease to acceptable levels in accord with regulations over a long period because of natural processes; however, it will take many years to reach the RAO if no action is performed.

Reduction of toxicity, mobility, and volume through treatment—Alternative 1 will not employ any treatment; therefore, no reduction of toxicity, mobility, or volume of COC would be achieved.

Short-term effectiveness—This alternative has no unmitigatable short-term adverse effects because no action will be implemented.

Implementability—Alternative 1 has no implementability concerns because no action will be implemented.

Environmental impacts—No change in air emissions or impacts to water resources will be caused by this alternative, because no action will be implemented.

Cost—No costs will be associated with Alternative 1.

5.3.3.2 Alternative 2: Institutional Controls

This alternative will leave contaminated soils at Block D in their current condition but will institute LUCs for soil at the site.

Long-term effectiveness and permanence—Alternative 2 will not be compatible with the desired current and future land use of the site. Alternative 2 will not be effective in the long term at meeting the RAO because BaPEq in soils will remain above the 1×10^{-5} human health cancer-risk limit, and because arsenic and hexavalent chromium concentrations greater than background levels will remain. This alternative will not alter risk should institutional controls fail, but is reliable to the extent that institutional controls are effective. Concentrations of soil COC might gradually decrease to acceptable levels in accord with regulations over a long period because of natural processes; however, it will take many years to reach the RAO.

Reduction of toxicity, mobility, and volume through treatment—Alternative 2 will not employ any treatment; therefore, the toxicity, mobility, and volume of COC will not be reduced.

Short-term effectiveness—This alternative has no unmitigatable short-term adverse effects because no treatment action will be implemented.

Implementability—Alternative 2 will be easily constructible; however, monitoring will likely need to be incorporated with institutional controls.

Environmental impacts—Alternative 2 would cause no air emissions or impacts to water resources, because no treatment will be implemented.

Cost—The following costs for Alternative 2 were estimated via the TCA process:

- implementation: $139,155
- operations, maintenance, and monitoring: $168,750
- total cost: $307,905
- net present value cost: $188,993

5.3.3.3 Alternative 3: Excavation and Off-Site Disposal of Impacted Soils to a Depth of Two Feet and Institutional Controls

Alternative 3 consists of three major components: (1) soil excavation to allow recreational site use at acceptable health risk levels in accord with regulations, (2) off-site disposal of soil, and (3) implementation of institutional controls. Figure 4-1 illustrates the areas to be excavated under Alternative 3.

Components 1: soil excavation—Figure 4-1 shows the areas of the Block D panhandle that will be excavated to meet the recreational risk-based PRG (195 µg/kg). Site preparation will include construction of a material-handling pad, decontamination zones, and haul routes to allow equipment access; these areas will be investigated for the presence of underground utilities and structures, if required. Following confirmation of the excavation boundaries by design characterization sampling (see Section 6 and Figure 6-1), the top two feet of soils will be excavated using a bulldozer, front-end loader, or similar equipment.

Post-removal confirmation samples in excavation areas A and B (see Figure 6-1) will be collected from the sidewalls of the excavations and analyzed for benzo(a)pyrene equivalent (BaPEq) PAHs, arsenic, and hexavalent chromium. Excavation-base samples will also be collected, but only for informational purposes. Following excavation, and after the overall site-wide exposure-point concentration for BaPEq is less than 195 µg/kg (including sampling results from sidewall excavation areas A and B) and the metals COC have been reduced to background levels, the excavated areas will be backfilled with certified-clean material, graded to original contours, and restored to pre-response-action conditions.

Component 2: off-site soil disposal—The expected actions for excavated soils are as follows:

- Excavated material characterized as Resource Conservation and Recovery Act (RCRA) nonhazardous waste will be transported to a permitted RCRA Subtitle D facility for direct landfilling or to a permitted, Lockheed Martin-approved recycling facility.

- Excavated soil that fails toxicity characteristic leaching procedure (TCLP) testing will be characterized as RCRA hazardous waste and will be transported to a permitted RCRA Subtitle C treatment, storage, and disposal facility (TSDF) for treatment to meet TCLP limits, followed by direct landfilling.

The volumes estimated for disposal will need to be verified based on sampling and analysis of stockpiled soil, followed by profiling (as necessary) for each facility. Estimated disposal volumes are in the TCA (Appendix H).

Component 3: institutional controls—Institutional controls would include documentation of residual soil contamination, enforcement of the MRC soil management plan

(e.g., excavation notification and soil reuse restrictions), and limitations on future property use.

Long-term effectiveness and permanence—Alternative 3 would be effective in eliminating long-term risk if impacted surface soils are removed.

Reduction of toxicity, mobility, and volume through treatment—No reduction of toxicity, mobility, or volume through treatment would be achieved under Alternative 3 because no treatment would be implemented.

Short-term effectiveness—Alternative 3 would generate environmental impacts to the surrounding community and on-site workers during construction. Some construction impacts associated with this alternative can be mitigated with dust control, air monitoring, sidewall protection, and possibly dewatering to reduce risk. Alternative 3 will take approximately one year to reach the RAO.

Implementability—Personnel and equipment to design and implement the proposed actions are readily available, and time to coordinate with stakeholders and obtain the necessary permits can be built into the schedule. Identification and field location of utilities and other features that may interfere with construction would be required during the design process and before intrusive construction work begins. With these considerations, Alternative 3 would be implementable.

Environmental impacts—The following environmental effects were estimated using *SiteWise*™ (Appendix G):

- greenhouse gas emissions—50.7 metric tons
- water impacts—374 gallons
- nitrogen oxides (NO_x) emissions—0.063 metric tons
- sulfur oxides (SO_x) emissions—0.017 metric tons
- particulate matter (PM_{10}) emissions—0.008 metric tons
- total energy used—2,014 million British thermal units (MMBTUs)

Cost—The following costs for Alternative 3 were estimated via the TCA process:

- implementation: $927,449

- operations, maintenance, and monitoring: $168,750
- closure cost: $88,039
- total cost: $1,184,239
- net present value cost: $1,059,567

5.3.3.4 Alternative 4: Excavation and Off-Site Disposal of Impacted Soils to the Groundwater Table and Institutional Controls

Alternative 4 would consist of three major components: (1) soil excavation to allow recreational site use at acceptable health risk levels in accord with regulations, (2) off-site disposal of soil, and (3) implementation of institutional controls. Figure 4-1 illustrates the areas that would be excavated under Alternative 4.

Component 1: soil excavation—Figure 4-1 shows the surface and subsurface areas of Block D panhandle that would be excavated to meet the recreational risk-based PRG for BaPEq and the background-based arsenic and hexavalent chromium PRGs. As part of site preparation, a material handling pad, decontamination zones, and haul routes would be constructed to allow equipment access; these areas will be investigated for underground utilities and structures, if required. Following confirmation of the excavation boundaries by design characterization sampling (Figure 6-1), soil above the groundwater table would be excavated using a bulldozer, front-end loader, or similar equipment.

Post-removal confirmation samples in excavation areas would be collected from the sidewalls of the excavations and analyzed for benzo(a)pyrene equivalent (BaPEq) PAHs, arsenic, and hexavalent chromium. (Samples would also be collected from the base of the excavations, but only for informational purposes.) Following excavation, and after post-removal confirmation-sampling results confirm that the overall site-wide exposure-point concentration for BaPEq is less than 195 µg/kg and the metals COC have been reduced to background levels, the excavated areas would be backfilled with certified-clean material, graded to original contours, and restored using stabilized vegetation.

Component 2: off-site soil disposal—The expected actions for excavated soils would be as follows:

- Excavated material characterized as RCRA nonhazardous waste would be transported to a permitted RCRA Subtitle D facility for direct landfilling, or to a permitted Lockheed Martin-approved recycling facility.

- Excavated soil that fails TCLP testing would be characterized as RCRA hazardous waste and be transported to a permitted RCRA Subtitle C TSDF for treatment to meet TCLP limits, followed by direct landfilling.

Estimated disposal volumes would need to be verified based on sampling and analysis of stockpiled soil, followed by profiling (as necessary) for each facility. Estimated disposal volumes are in the TCA (Appendix H).

Component 3: institutional controls—Institutional controls include documentation of residual soil contamination, enforcement of the MRC soil-management plan (e.g., excavation notification and soil reuse restrictions), and limitations on future use of property.

Long-term effectiveness and permanence—Alternative 4 will be effective in eliminating long-term risk because impacted soils down to the groundwater table would be removed in the areas identified in the RRA.

Reduction of toxicity, mobility, and volume through treatment—No reduction of toxicity, mobility, or volume through treatment will be achieved under Alternative 4 because no treatment will be implemented.

Short-term effectiveness—Alternative 4 will generate environmental impacts to the surrounding community and on-site workers during construction. Some construction impacts associated with this alternative can be mitigated with dust control, air monitoring, sidewall protection, and possibly dewatering to reduce risk. Alternative 4 will take approximately two years to reach the RAO.

Implementability—Personnel and equipment to design and implement the proposed actions are readily available, and time to coordinate with stakeholders and obtain the necessary permits can be built into the schedule. Identification and field location of utilities and other features that may

interfere with construction also be required during the design process and before intrusive construction work begins. With these considerations, Alternative 4 is implementable.

Environmental impacts—The following environmental effects were estimated using *SiteWise*™ (Appendix G):

- greenhouse gas emissions—57.6 metric tons
- water impacts—374 gallons
- nitrogen oxides (NO_x) emissions—0.071 metric tons
- sulfur oxides (SO_x) emissions—0.020 metric tons
- particulate matter (PM_{10}) emissions—0.010 metric tons
- total energy used—2,295 MMBTUs

Cost—The following costs for Alternative 4 were estimated via the TCA process:

- implementation: $967,755
- operations, maintenance, and monitoring: $168,750
- closure cost: $91,865
- total cost: $1,228,370
- net present value cost: $1,103,448

5.3.3.5 Alternative 5: Limited Excavation or Asphalt Pavement Removal, Soil Cover over Impacted Areas, and Institutional Controls

Alternative 5 consists of the following four major components: (1) excavation of the top six inches of soil or asphalt pavement in impacted areas, (2) off-site disposal of soil and asphalt, (3) placement of soil cover, and (4) implementation of institutional controls. Figure 4-1 illustrates the areas to be remediated under Alternative 5.

Components 1 and 2: soil excavation and placement of soil cover—Figure 4-1 shows the areas of the Block D panhandle that will be excavated to six inches bgs. Portions of area A in Figure 4-1 are paved with six inches of degraded asphalt; the asphalt will be removed in these areas (instead of excavating soil). A material-handling pad, decontamination zones, and haul routes will be constructed to allow equipment to access the areas to be excavated; these areas will be investigated for the presence of

underground utilities and structures, if required. Soil will be excavated using a bulldozer, front-end loader, or similar equipment.

Soil cover in the excavated areas will consist of six inches of topsoil over 1.5 feet of subgrade clean fill. Subgrade soils will be compacted to the required degree. The soil cover will raise the grade by 1.5 feet within the 100-year floodplain. The Block D panhandle is located within the Chesapeake Bay floodplain "Critical Area;" therefore, the site elevation must stay within the 100-year floodplain elevation. The 100-year floodplain elevation is nine feet above msl, and most of the Block D panhandle is currently within the 100-year floodplain elevation. If this alternative is implemented, the elevation in some areas of Block D Panhandle will be above the 100-year floodplain elevation.

Component 3: off-site soil and asphalt disposal—The expected actions for the excavated material follow:

- Excavated material characterized as RCRA nonhazardous waste will be transported to a permitted RCRA Subtitle D facility for direct landfilling, or to a permitted, Lockheed Martin-approved recycling facility.
- Excavated material that fails TCLP testing will be characterized as RCRA hazardous waste and will be transported to a permitted RCRA Subtitle C TSDF for treatment to meet TCLP limits, followed by direct landfilling.

The volumes estimated for disposal will need to be verified based on sampling and analysis of stockpiled material, followed by profiling (as necessary) for each facility. Estimated disposal volumes are presented in the TCA (Appendix H).

Component 4: institutional controls—Institutional controls include documentation of residual soil contamination, enforcement of the MRC soil-management plan (e.g., excavation notification and soil reuse restrictions), cover maintenance requirements, and limitations on future use of property.

Long-term effectiveness and permanence—Alternative 5 will lower risk to potential receptors provided that the soil cover is maintained during future site use.

Reduction of toxicity, mobility, and volume through treatment—No reduction of toxicity, mobility, or volume through treatment will be achieved under Alternative 5 because no treatment will be implemented.

Short-term effectiveness—Alternative 5 will generate environmental impacts to the surrounding community and on-site workers for the duration of construction. Construction impacts associated with this alternative can be mitigated by dust control and careful grading and application of runoff controls during construction to reduce risk. Alternative 5 will take approximately one year to reach the RAO.

Implementability—Personnel and equipment to design and implement the proposed actions are readily available, and time to coordinate with stakeholders and to obtain the necessary permits can be built into the schedule. This alternative will require placing cover soils over disjointed, irregularly shaped areas, which will cause localized changes in elevation, making Alternative 5 undesirable for reasons including property use, storm-water management, and long-term maintenance. Identification and field location of utilities and other features that may interfere with construction will also be required during the design process and before intrusive construction work begins. With these considerations, Alternative 5 is implementable.

Environmental impacts—The following environmental effects were estimated using *SiteWise*™:

- greenhouse gas emissions—135 metric tons
- water impacts—374 gallons
- NO_x emissions—0.066 metric tons
- SO_x emissions—0.018 metric tons
- PM_{10} emissions—0.009 metric tons
- total energy used—9,270 MMBTUs

Cost—The following costs for Alternative 5 were estimated via the TCA process:

- implementation: $831,345
- operations, maintenance, and monitoring: $270,000
- closure cost: $78,917
- total cost: $1,180,262

- net present value cost: $984,840

5.3.3.6 Alternative 6: Enhanced Bioremediation of Impacted Soils to a Depth of Two Feet and Institutional Controls

The bioremediation technique proposed involves the *in situ* application of soil amendments (e.g., DARAMEND® organic amendment) and water to stimulate native organisms to biodegrade organic material. Alternative 6 consists of three major components: (1) bench-scale testing, (2) enhanced bioremediation, and (3) implementation of institutional controls. Figure 4-1 illustrates the areas to be remediated under Alternative 6.

Component 1: bench-scale testing—To determine the appropriate dosage of soil amendment that will adequately treat the contaminated soil, a bench-scale test will be performed. Soil amendment will be added at a ratio of 2.5% to 100 tons of soil. The soil will be tilled using a specialized tiller, and water will be added to increase the soil moisture to 60% of the water holding capacity, thus promoting COC degradation. After treatment, soil will be sampled for COC and analyzed by an off-site laboratory. A second application of 0.5% may subsequently be required, depending on laboratory results. Results of the bench-scale test will be used to modify the design requirements/dosing for the full-scale enhanced bioremediation.

Component 2: enhanced bioremediation—Soil amendments at the appropriate specific weight-percentage determined during bench-scale testing will be added to soil in all treatment areas. Soil will be tilled using a specialized tiller, and water added to increase the soil moisture to 60% of the water holding capacity. The soil will be mixed twice weekly for the first three months, and once weekly thereafter to introduce oxygen into the soil to enhance the microbial process. Sampling will be conducted every 30 days to assess treatment progress and monitor pH. An estimated seven months will be required to treat soil in all treatment areas. Adding an organic amendment will increase the total volume of soils treated by an estimated 3%. Some redistribution of treated soils will be necessary over areas larger than the original excavation areas.

Component 3: institutional controls—Institutional controls include documentation of residual soil contamination, enforcement of the MRC soil-management plan

(e.g., excavation notification and soil reuse restrictions), and limitations on future use of property.

Long-term effectiveness and permanence—Alternative 6 will be effective, provided the pilot testing verifies the viability of this method and identifies the appropriate dosage of additive needed to lower COC concentrations to the required concentrations. Significant uncertainty exists regarding the success of this alternative.

Reduction of toxicity, mobility, and volume through treatment—Treatment implemented under Alternative 6 will reduce the mobility, toxicity, and volume of contaminants by reducing COC concentrations through degradation; a soil sampling program will have to be implemented to monitor COC degradation. The volume of contaminated soil will be reduced in the areas addressed by bioremediation, even though the overall volume of material requiring handling will be increased by the addition of the organic treatment material. Treatment is not expected to affect the mobility of compounds remaining in soil.

Short-Term Effectiveness—Alternative 6 will require dust control and grading during construction to reduce the risk of exposure to the surrounding community and on-site workers. The time to achieve the risk-based soil RAO cannot be estimated until the bench-scale test is conducted.

Implementability—Personnel and equipment to design and implement the proposed actions are readily available and time to coordinate with stakeholders and to obtain the necessary permits can be built into the schedule. Technology viability of technology will have to be confirmed by a pilot study to identify the proper dosage of a soil amendment. Identification and field location of utilities and other features that may interfere with construction will also be required during the design process and before intrusive construction work begins. A soil-sampling program will have to be implemented to monitor COC degradation. With these considerations, Alternative 6 is implementable.

Environmental impacts—The following environmental effects were estimated using *SiteWise*™:

- greenhouse gas emissions—30 metric tons
- water impacts—69,082 gallons

- NO_x emissions—0.085 metric tons
- SO_x emissions—0.014 metric tons
- PM_{10} emissions—0.009 metric tons
- total energy used—1,047 MMBTUs

***Cost*—**The following costs for Alternative 6 were estimated via the TCA process:

- implementation: $932,360
- operations, maintenance, and monitoring: $224,552
- closure cost: $88,506
- total cost: $1,245,418
- net present value cost: $1,118,890

5.3.3.7 Alternative 7: *In situ* Stabilization of Impacted Soils to the Groundwater Table and Institutional Controls

Alternative 7 consists of three major components: (1) bench-scale test, (2) *in situ* soil stabilization, and (3) implementation of institutional controls. Figure 4-1 illustrates the areas that will be remedied under Alternative 7.

Component 1: bench-scale testing— A bench-scale test would be performed to determine the appropriate dosage of lime, cement or fly ash that will adequately stabilize the contaminated soil. Cement or fly ash will be mixed with soils at a soil-to-cement ratio of 1:7. Water will be added to the soil at 10% by weight. After stabilization, treated soil will be sampled and analyzed for COC by an off-site laboratory. Results of the bench-scale test will be used to modify the design requirements/dosing for the full-scale soil stabilization.

Component 2: in situ soil stabilization—Lime, cement, or fly ash will be added at the appropriate soil-to-additives weight ratio determined during the bench-scale test. Soil will be mixed using augers, resulting in a mass that will reduce the leachability and mobility of soil contaminants. Stabilized soils will be left in place. However, adding lime, cement, or fly ash will increase the total volume of treated soils by an estimated 13%. Therefore, redistribution of treated soils over areas larger than the original treatment areas or an

increase in elevation in the panhandle will be necessary. Pending MDE approval, some of the stabilized soils could be used as backfill.

Component 4: institutional controls—Institutional controls include documentation of residual soil contamination, enforcement of the MRC soil-management plan (e.g., excavation notification and soil reuse restrictions), and limitations on future use of property.

Long-term effectiveness and permanence—Alternative 7 binds COC in cement-like material and make them less mobile and less bioavailable, but COC concentrations will not be decreased. The stabilized material could eventually degrade over time, and COC could then be remobilized in soil.

Reduction of toxicity, mobility, and volume through treatment—Alternative 7 will reduce the mobility of contaminants by binding COC in cement-like material. The stabilized material could eventually degrade over time, enabling COC remobilization to some degree. The overall volume of material requiring handling will be increased by adding lime, cement or fly ash stabilizers.

Short-term effectiveness—Implementation of Alternative 7 will take two years to achieve the risk-based soil RAO because of the large amount of soil that requires stabilization. Significant construction operations will be required for implementation, but negative effects can be mitigated with engineering controls.

Implementability—Personnel and equipment to design and implement the proposed actions are readily available, and time to coordinate with stakeholders and obtain the necessary permits can be built into the schedule. The viability of technology will have to be ascertained by a bench-scale study to identify the proper dosage of soil amendment. Identification and field location of utilities and other features that may interfere with construction will also be required during the design process and before intrusive construction work begins. Soil sampling will be necessary to establish the level of soil stabilization. With these considerations, Alternative 7 is implementable.

Environmental impacts—The following environmental effects were estimated using *SiteWise*™:

- greenhouse gas emissions—118 metric tons

- water impacts—23,354 gallons
- NOx emissions—0.035 metric tons
- SOx emissions—0.013 metric tons
- PM10 emissions—0.008 metric tons
- total energy used—2,969 MMBTUs

Cost—The following costs for Alternative 7 were estimated via the TCA process:

- implementation: $1,129,320
- operations, maintenance, and monitoring: $168,750
- closure cost: $134,003
- total cost: $1,432,073
- net present value cost: $1,304,395

5.4 COMPARATIVE ANALYSIS OF ALTERNATIVES AND PROPOSED ALTERNATIVE

The seven soil remedial-action alternatives to remedy soils in Block D panhandle were compared qualitatively and quantitatively. Both types of analysis use the same evaluation criteria described in previous sections. This evaluation does not directly consider state acceptance or community acceptance criteria; these will be evaluated through input from the community and MDE following submittal of this RAP.

A multi-criteria comparative decision-analysis tool was used to quantitatively screen the potential alternatives. This method is useful because criteria such as environmental benefits, impacts, risk, economics, and stakeholder participation cannot be easily condensed into simple evaluation matrices. Other benefits associated with using a multi-parameter analysis tool include having the decision criteria for remedy selection, the importance/weighting of each criterion considered, and having a clear final score that can be applied to each remedial alternative. In addition, sensitivity analysis to explore the robustness of the alternative rankings and the criteria that are most important in the ranking determination is easily accomplished.

In this RAP, the multi-parameter analysis tool *Criterium*® *DecisionPlus*® (CDP) was used to evaluate and rank the remedial alternatives for the Block D panhandle. CDP is a decision-analysis tool that uses decision-making techniques such as the analytical hierarchy process, the Multi-Attribute Utility Theory, and the simple multi-attribute rating technique that is

incorporated into the tool (InfoHarvest, 2001). To build the decision hierarchy and incorporate all the decision factors, each NCP evaluation criterion is represented by one or more individual metrics. To account for these metrics, up to three levels of evaluation criteria were established:

- *Level 1* criteria are the major balancing and modifying criteria
- *Level 2* criteria have factors considered in the evaluation of Level 1 criteria
- *Level 3* has further subcomponents with which to evaluate the Level 2 criteria

The results of the CDP screening are in Appendix I; Table 5-9 summarizes the quantitative CDP analysis. Table 5-10 summarizes the weightings, rankings, and results of the CDP analysis. Higher scores indicate that the alternative is more favorably ranked in that category.

All seven alternatives evaluated meet the threshold criteria equally well; therefore, the six balancing criteria were used to differentiate between alternatives and determine the preferred alternative:

- *Long-term effectiveness and permanence*—Alternative 4 ranks highest in this category because it has the lowest long-term residual potential-risk as compared to the other six alternatives. This alternative is very effective at eliminating risk because it removes all soil needing remediation to achieve a site-wide residual risk of 1×10^{-5}. Alternative 3 ranks second highest in this category.

- *Short-term effectiveness*—Alternative 7 ranks highest in this category, followed by Alternatives 5 and 6. Compared to the other alternatives, Alternative 7 has the least unmitigatable adverse impacts during construction and operation, maintenance, and monitoring.

- *Reduction of toxicity, mobility, or volume by treatment*—Alternative 6 ranks highest in this category, because it is the only alternative that will both treat and degrade COC.

- *Implementability*—Alternative 3 ranks highest in this category, followed by Alternatives 1 and 2. Alternative 3 will not require shoring and will not require as much dewatering as Alternative 4. Alternative 3 ranks higher than Alternatives 6 and 7 because its technology and experts are more readily available. Compared to the other alternatives, Alternative 3 is easily adaptable, easy to construct, and no monitoring will be needed.

- *Environmental impacts*—Alternatives with no remedial action (Alternatives 1 and 2) rank highest in this category because no remedial action will be taken; therefore, no impacts to the environment will occur.

- *Cost*—Alternatives with no remedial action (Alternatives 1 and 2) rank highest (i.e., had the lowest cost) in this category. Alternatives 5 and 6 rank lowest and are associated with the most cost.

The overall CDP scoring of the various alternatives resulted in Alternative 3 achieving the highest ranking. The CDP scoring is as follows (higher scores indicate that the alternative is more favorably ranked):

- Alternative 1—0.415
- Alternative 2—0.502
- Alternative 3—0.611
- Alternative 4—0.619
- Alternative 5—0.537
- Alternative 6—0.547
- Alternative 7—0.572

In the quantitative analysis, Alternative 4 ranks highest. Most importantly, it ranks highest in long-term effectiveness at reducing risk to human health. In the final comparison of the top three alternatives (Alternatives 4, 3, and 7), Alternative 4 poses the least residual potential risk of all alternatives because it removes all soils identified for remediation in the RRA, thus achieving a site-wide cumulative residual risk of 1×10^{-5} for the hypothetical recreational user and reducing arsenic and hexavalent chromium to background levels. Alternative 4 is easily constructible, and the technology and experts needed are readily available. Unlike Alternatives 2, 5, 6, and 7, Alternative 4 will not require any monitoring once the remedial action has been completed. Alternative 4 was selected as the proposed soil remedial action at Block D based on both the qualitative and quantitative analyses.

Table 5-1
Chemical-Specific Applicable or Relevant and Appropriate Requirements and To Be Considered Guidance
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
State				
Cleanup Standards for Soil and Groundwater	Maryland Annotated Code 7-508	To be considered	This guidance document presents the approach and supporting documentation used to develop numeric cleanup standards for hazardous substances in soil and groundwater in the State of Maryland.	These non-promulgated standards may be considered for use in determining cleanup goals for soil in the absence of site-specific risk-based criteria.

Table 5-2

Location-Specific Applicable and Relevant and Appropriate Requirements and To Be Considered Criteria
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Federal				
Endangered Species Act Regulations	50 CFR Parts 81, 225, and 402	Potentially Applicable	This act requires federal agencies to take action to avoid jeopardizing the continued existence of federally listed endangered or threatened species.	If a site investigation or remediation could potentially affect an endangered species or their habitat, these regulations would apply (There have been no endangered species or their habitat identified at the MRC.)
Historic Sites Act Regulations	36 CFR Part 62	Potentially Applicable	Requires federal agencies to consider to existence and location of landmarks on the National Registry of Natural Landmarks to avoid undesirable impacts on such landmarks	The existence of national landmarks will be identified prior to remedial activities on site including remedial investigations (No national landmarks have been identified at the MRC.)
State				
Nongame and Endangered Species Conservation Act	Annotated Code of Maryland 10-2A-01; COMAR 08.03.08 and 08.02.12.	Potentially Applicable	Requires state agencies to use their authority to maintain and enhance nongame wildlife and endangered species populations	If a site investigation or remediation could potentially affect an endangered species or their habitat, these regulations would apply (No endangered species or habitats have been identified at the MRC.)
Division of Historical and Cultural Programs	Annotated Code of Maryland 5A	Potentially Applicable	The Maryland Historic Trust formed in 1961 to preserve, protect, and enhance districts, sites, buildings, structures, and objects significant in the prehistory, history, upland and underwater archeology, architecture, engineering, and culture of the state.	The existence of Maryland historic sites would be identified prior to remedial activities on site including remedial investigations (No historic sites have been identified at the MRC.)

CFR- Code of Federal Regulations COMAR- Code of Maryland Regulations MRC- Middle River Complex

Table 5-3

Action-Specific Applicable or Relevant and Appropriate Requirements and To Be Considered Criteria
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Federal				
RCRA Regulations, Identification and Listing of Hazardous Wastes	40 CFR Part 261	Potentially applicable	Defines the listed and characteristic hazardous wastes subject to RCRA. Appendix II contains the TCLP.	These regulations would apply when determining whether or not a solid waste is hazardous, either by being listed or by exhibiting a hazardous characteristic, as described in the regulations.
CAA Regulations, NAAQSs	40 CFR Part 50	Potentially applicable	Establishes primary (health-based) and secondary (welfare-based) air quality standards for carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur oxides emitted from a major source of air emissions. The NAAQSs form the basis for all regulations promulgated under the CAA. However, the NAAQSs themselves are non-enforceable and are not ARARs themselves.	Site remediation activities must comply with NAAQSs. The principal application of these standards is during response action activities resulting in exposures through dust and vapors. In general, emissions from CERCLA activities are not expected to qualify as a major source and are therefore not expected to be applicable requirements. However, the requirements may be determined to be relevant and appropriate for non-major sources with significantly similar emissions.
RCRA Regulations, LDRs	40 CFR Part 268	Potentially applicable	This regulation prohibits the land disposal of untreated hazardous wastes and provides criteria for the treatment of hazardous waste prior to land disposal.	Response actions that involve excavating, treating, and redepositing hazardous soil would comply with LDRs. However, consolidation of contaminated soil within Block F for the purposes of reducing the size of the contaminated area may not constitute land disposal.
OSHA Regulations, General Industry Standards	29 CFR Part 1910	Applicable	Requires establishment of programs to assure worker health and safety at hazardous waste sites, including employee training requirements.	These regulations would apply to all response activities.
OSHA Regulations, Occupational Health and Safety Regulations	29 CFR Part 1910, Subpart Z	Potentially applicable	Establishes permissible exposure limits for workplace exposure to a specific listing of chemicals.	Standards are applicable for worker exposure to OSHA hazardous chemicals during response action activities.

Table 5-3

Action-Specific Applicable or Relevant and Appropriate Requirements and To Be Considered Criteria
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland
Page 2 of 3

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Federal (continued)				
OSHA Regulations, Recordkeeping, Reporting, and Related Regulations	29 CFR Part 1904	Applicable	Provides recordkeeping and reporting requirements applicable to response action activities.	These requirements apply to all site contractors and subcontractors and must be followed during all site work.
OSHA Regulations, Health and Safety Standards	29 CFR Part 1926	Applicable	Specifies the type of safety training, equipment, and procedures to be used during the site investigation and response action.	All phases of the response action would be executed in compliance with this regulation.
RCRA Regulations, Contingency Plan and Emergency Procedures	40 CFR 264, Subpart D	Potentially relevant and appropriate	Outlines requirements for emergency procedures to be followed in case of an emergency.	The administrative requirements established in this rule would be met for response actions involving the management of hazardous waste.
RCRA Regulations, Preparedness and Prevention	40 CFR Part 264, Subpart C	Potentially relevant and appropriate	Outlines requirements for safety equipment and spill control for hazardous waste facilities. Facilities must be designed, maintained, constructed, and operated to minimize the possibility of an unplanned release that could threaten human health or the environment.	Safety and communication equipment would be incorporated into all aspects of the response action process, and local authorities would be familiarized with site operations.
RCRA Regulations, Standards for Owners and Operators of Hazardous Waste TSDFs.	40 CFR Part 264	Potentially relevant and appropriate	Establishes minimum national standards defining the acceptable management of hazardous wastes for owners and operators of facilities that treat, store, or dispose of hazardous wastes.	If response actions involving management of RCRA wastes at an off-site TSDF, or if RCRA wastes are managed on-site, the requirements of this rule would be followed.
RCRA Regulations, Use and Management of Containers	40 CFR Part 264, Subpart I	Potentially relevant and appropriate	Sets standards for the storage of containers of hazardous waste.	This requirement would apply if a response action alternative involves the storage of a hazardous waste (i.e., contaminated soil) in containers prior to treatment or disposal.
Migratory Bird Treaty Act	16 USC 703-711	Potentially applicable	Protects migratory birds and their nests.	Proposed response action will not kill migratory birds or destroy their nests and eggs.

Table 5-3

Action-Specific Applicable or Relevant and Appropriate Requirements and To Be Considered Criteria
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
State				
Maryland Hazardous Waste Management System	COMAR Title 26, Subtitle 13	Potentially applicable	Requires hazardous waste generators to ship their hazardous waste to a facility permitted to accept it or, with the appropriate permits, treat it themselves. Requires use of a certified hauler to ship hazardous waste off site, and shipment must be accompanied by a manifest. Requires compliance with regulations for the storage of the waste, and specifies procedures to prevent the occurrence of circumstances that would threaten human health or the environment.	These regulations would apply if waste on site was deemed hazardous and needed to be stored, transported, or disposed of properly.
Maryland Regulation of Water Supply, Sewage Disposal, and Solid Waste	COMAR Title 26, Subtitle 4	Potentially applicable	Sets the requirements for construction and operation for solid waste disposal facilities.	These requirements would apply if on-site waste was deemed non-hazardous solid waste and needed to be stored, transported, or disposed of properly.
Maryland General Permit for Construction Activity	COMAR Title 26, Subtitle 17 B15	Relevant and appropriate	Establishes requirements for stormwater management and erosion and sediment control at construction sites.	Response actions involving excavation would require submittal of an erosion and sediment control plan and a stormwater management plan.

ARARs – applicable or relevant and appropriate requirements
CAA – Clean Air Act
CERCLA – Comprehensive Environmental Response Compensation, and Liability Act
CFR – Code of Federal Regulations
COMAR – Code of Maryland Regulations
LDRs – land disposal restrictions
MDE – Maryland Department of the Environment
NAAQS – National Ambient Air Quality Standards
OSHA – Occupational Safety and Health Act
RCRA – Resource Conservation and Recovery Act
TCLP – toxicity characteristic leaching procedure
TSDF – treatment, storage, and disposal facility
USC – United States Code

Table 5-4

Remedial Action Objectives and General Response Actions
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Remedial Action Objective	General Response Actions				
	No Action	Institutional Controls	Containment	Treatment – *In situ* or *Ex situ*	Removal and Disposal (off-site)
Reduce site-related chemicals of concern in Block D soils to 1×10^{-5} human health cancer risk limits for recreational users exposed to chemicals of concern through incidental ingestion, dermal contact, and inhalation.			X	X	X

Table 5-5

Results of Preliminary Technology Screening
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin, Middle River Complex
Middle River, Maryland

General response action	Response action technology	Process option	Description	Quantitative Screening Based on Criteria Below					Results		
				Effectiveness (primary)			Implementability	Relative cost	Screening comment	Retain	Eliminate
				Effectiveness in eliminating potential exposure pathways	Impacts during implementation	Reliability					
No Action	None	Not applicable	No activities conducted in the block to address contamination	Not applicable	Not applicable	Not reliable	Easy to implement	Low cost	Required by the *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);* retained for baseline comparison to other technologies.	✓	
Limited Action	Land use controls	Site use restrictions	Administrative action using excavation permits and other land use prohibitions to restrict future site activities.	Effective	No impacts during implementation	Technology is reliable provided land use restrictions and, excavation restrictions are well documented and implemented.	Easy to implement	Low cost	Retained; technology would leave soil contaminants in place but will lower risk, and will meet response action objectives (RAOs) provided it is used with another treatment technology.	✓	
Containment	Cover/Barrier	Soil cover/cap that meets Maryland Department of the Environment (MDE) regulations (Code of Maryland Regulations [COMAR] 26.04.07.21)	Uses low permeability barriers to minimize direct exposure to contaminants and prevent sediment runoff	Effective in containing and covering impacted soils.	Soil have to be transported the block.	Reliable	Technology is easily implemented; however, for this site, implementation will cause permitting issues and inhibit future use of the property.	Moderate cost	Retained; cover/cap can be placed over the impacted soils.	✓	

Table 5-5

Results of Preliminary Technology Screening
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin, Middle River Complex
Middle River, Maryland

General response action	Response action technology	Process option	Description	Quantitative Screening Based on Criteria Below					Results		
				Effectiveness (primary)			Implementability	Relative cost	Screening comment	Retain	Eliminate
				Effectiveness in eliminating potential exposure pathways	Impacts during implementation	Reliability					
Removal	Excavation	Traditional excavation (with backhoe)	Removal of contaminated soils by backhoe, bulldozer, loader, etc.	Very effective in eliminating future risk and eliminating future exposure pathway	Impacted soils have to be transported to the disposal facility and brought to the site for backfill.	Reliable	Easily implemented with traditional equipment. Depending on depth of excavation, may require dewatering of excavation and associated treatment of groundwater.	High cost; potential for large escalations in cost if area is not thoroughly characterized to ascertain impacted soil volumes.	Retained for removal of contaminated soil	✓	
In situ Treatment	Physical/ Chemical	Stabilization/ Solidification	Mixing of chemical agents in the soil to chemically bind, solidify, and reduce contaminant mobility	Well understood technology, can be utilized in areas with target inorganic concentrations and polycyclic aromatic hydrocarbons (PAHs).	Soils has to be processed. Large quantity of stabilizing agent such as cement may have to be transported to the site.	Reliable; will require bench-scale and possibly pilot testing to ascertain mix	Implementable with traditional equipment	Moderate cost	Retained.	✓	
		Soil mixing with zero valent iron (ZVI) or emulsified nano ZVI	Permeable reactive barrier (PRB) used to treat halogenated compounds and heavy metals. Nano-scale ZVI was developed to further enhance its effectiveness and the clean-up time. This technology involves mixing soil with nano-scale ZVI and an environmentally benign (food grade) carbon source such as vegetable oil.	This technology is potentially applicable to volatile organic compounds (VOCs) such as trichloroethene (TCE). Applicability to PAHs unknown.	Soils has to be processed. Large quantity of ZVI may have to be transported to the site.	Remediation with ZVI is an emerging technology	Requires a bench-scale and/or a pilot-scale testing prior to implementation	High cost	Eliinated; has never been used to treat PAHs		✓

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Results of Preliminary Technology Screening
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin, Middle River Complex
Middle River, Maryland

General response action	Response action technology	Process option	Description	Quantitative Screening Based on Criteria Below					Results		
				Effectiveness (primary)			Implementability	Relative cost	Screening comment	Retain	Eliminate
				Effectiveness in eliminating potential exposure pathways	Impacts during implementation	Reliability					
In situ Treatment (continued)	Physical/ Chemical (continued)	Soil flushing	*In situ* flushing is accomplished by passing the extraction fluid (e.g., surfactants) through in-place soils using an injection or infiltration process. Extraction fluids must be recovered, treated, and possibly recycled.	This technology can be used to extract inorganics in soils and possibly organics such as PAHs.	soils have to be processed. A large quantity of surfactant may have to be transported to the site, and large volumes of extraction fluid have to be recovered.	There has been little commercial success with this technology. Not reliable since it mobilizes contaminants of and the extraction fluid has to be recovered to recover contaminants of concern (COC).	Requires a bench-scale and/or a pilot-scale testing prior to implementation. In addition, groundwater at the site is shallow which could cause mobilized COC to impact the groundwater at the site. Will require precise control of the flushing to recover all the surfactant and mobilized COC.	High cost	Eliminated; technology has had little commercial success; technology is not reliable because it mobilizes contaminants and the extraction fluid has to be recovered to recover COC.		✓
		Soil vapor extraction (SVE)	Vacuum is applied through vapor extraction wells to create a pressure gradient that induces gas-phase volatiles to diffuse through soil to extraction wells. The process must include a system for handling off-gases.	This technology is typically applicable to VOCs and not PAHs since PAHs are not volatile.	No major impacts will require installation of SVE wells.	Not effective for PAHs and metals	Easily implemented	Moderate cost	Eliminated; not effective for PAHs		✓
	Biological	Enhanced bioremediation/ Landfarming	Nutrients and amendments are added to the soil to promote biodegradation of organic compounds.	Should land farming or similar technology be used, it will be effective in only the top 2 to 3 feet.	Bioremediation will take a long time to implement.	Commercial success has been shown with this technology; however, it is uncertain if it will work at this site. A pilot test will need to be conducted to determine reliability.	Easily implemented with standard construction techniques	Low to moderate cost	Retained	✓	

Table 5-5

Results of Preliminary Technology Screening
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin, Middle River Complex
Middle River, Maryland

General response action	Response action technology	Process option	Description	Quantitative Screening Based on Criteria Below					Results		
				Effectiveness (primary)			Implementability	Relative cost	Screening comment	Retain	Eliminate
				Effectiveness in eliminating potential exposure pathways	Impacts during implementation	Reliability					
In situ Treatment (continued)	Biological (continued)	Bioventing	Oxygen is delivered to contaminated unsaturated soils by forced aeration (either extraction or injection of air) to increase oxygen concentrations and stimulate biodegradation. In contrast to soil vapor extraction, bioventing uses low air flow so as to provide only enough oxygen to sustain microbial activity.	Bioventing is an *in situ* technology that degrades compounds in soil by providing oxygen to existing soil microorganisms. Soil grain size and moisture content significantly affect its performance. Site geology indicates presence of some clayey soils, which reduce bioventing performance significantly.	Bioremediation will take a long time to implement.	May not be effective due to site geology.	Easily implemented with standard construction techniques	Low to moderate cost	Eliminated; site geology indicates the presence of some fine grain soils which would reduce bioventing performance.		✓
		Phytoremediation	Use of selected plants cultivated in contaminated soil for uptake of metallic contaminants or enhancement of biodegradation of organic contaminants by indigenous microorganisms in the root zone.	Is effective only on soils that are in the root zone of plants that are used for phytoremediation.	Phytoremediation will take a long time to implement.	Will require plant screening studies to assess effectiveness	Moderately implementable; use of the block may have to be discontinued in the areas requiring treatment	Low to moderate cost	Retained	✓	

Table 5-5

Results of Preliminary Technology Screening
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin, Middle River Complex
Middle River, Maryland

General response action	Response action technology	Process option	Description	Quantitative Screening Based on Criteria Below					Results		
				Effectiveness (primary)			Implementability	Relative cost	Screening comment	Retain	Eliminate
				Effectiveness in eliminating potential exposure pathways	Impacts during implementation	Reliability					
Ex situ Treatment	Physical/ Chemical	Chemical fixation/ Stabilization/Solidification	Mixing of chemical agents to bind, solidify, and reduce contaminant mobility.	Well understood technology; can be utilized in areas with target inorganics, polycyclic aromatic hydrocarbons	Soils have to be processed which would require moving soil.	Reliable	Easily implemented with traditional construction techniques	Moderate to high cost	Eliminated; *ex situ* option is more expensive than *in situ* option.		✓
Ex situ treatment (continued)	Biological	Biopiles	Excavated soils are mixed with soil amendments and placed on a lined treatment area that includes leachate collection and aeration. This technology is used to treat organic contaminants in excavated soils through biodegradation. Moisture, heat, nutrient, oxygen, and pH need to be controlled. The designated treatment area will be covered or contained with an impermeable liner to minimize runoff and leaching contaminants into groundwater or other uncontaminated areas. Soil piles can be up to 20 feet high with an air distribution system buried under the soil piles.	Biopile technology has been used for treatment of halogenated and non-halogenated VOCs, semivolatile organic compounds (SVOCs), and pesticides. However, its performance varies significantly at sites. A bench-scale and a pilot-scale test should be conducted to determine the biodegradability of chemicals of concern (COC) at the site.	Substantial space will be required. Bioremediation will take a long time to implement.	Reliability has to be assessed through bench-scale testing. PAHs are comparatively slow to biodegrade.	Can be implemented using standard construction techniques.	Moderate Cost	Eliminated; this process option would takeman years to reach remedial action objectives. This technology will however require a large area to implement. Impacted areas that are excavated have to remain open and have to be managed until backfilled with treated soils.		✓

Table 5-5

Results of Preliminary Technology Screening
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin, Middle River Complex
Middle River, Maryland

General response action	Response action technology	Process option	Description	Quantitative Screening Based on Criteria Below					Results		
				Effectiveness (primary)			Implementability	Relative cost	Screening comment	Retain	Eliminate
				Effectiveness in eliminating potential exposure pathways	Impacts during implementation	Reliability					
Ex situ treatment (continued)	Biological (continued)	Composting	Composting is a biological process to convert organic contaminants to innocuous end products. Typically, thermophilic conditions (i.e., 54 to 65 ^{C}elsius) must be maintained. Soils are excavated and mixed with bulking agents such as wood chips and mixed to promote biodegradation.	Composting results in a volumetric increase because of the addition of amendment materials. Composting has been demonstrated to degrade many organic contaminants in soils, including PAHs. All materials and equipment used for composting are readily available.	Similar to biopiles, windrow composting requires substantial space. Bioremediation will take a long time to implement.	Reliability has to be assessed through bench-scale testing. PAHs are comparatively slow to biodegrade.	Easily implemented with standard construction techniques	Moderate cost	Eliminated; would take a many years to reach the RAO. This technology will require a large area to implement. Impacted areas that are excavated have to remain open and have to be managed until backfilled with treated soils.		✓
Disposal	Off-site	Hazardous waste landfilling/ Non-hazardous waste landfilling/Recycling	Disposal of excavated wastes and treatment residuals in a permitted Resource Conservation and Recovery Act (RCRA) Subtitle C or D facility or at a permitted recycling facility	Very effective in eliminating future risk and eliminating future exposure pathways, provided all areas with impacted soils have been identified	Soil will have to be transported via large trucks.	Reliable	Easily implemented with traditional technology; has to be used in conjunction with excavation and removal	High cost	Retained landfilling or recycling, to be used in conjunction with other response action technologies	✓	

Table 5-5

Results of Preliminary Technology Screening
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin, Middle River Complex
Middle River, Maryland

General response action	Response action technology	Process option	Description	Quantitative Screening Based on Criteria Below					Results		
				Effectiveness (primary)			Implementability	Relative cost	Screening comment	Retain	Eliminate
				Effectiveness in eliminating potential exposure pathways	Impacts during implementation	Reliability					
Disposal	Onsite	Consolidation	Excavation and relocation of contaminated soil to minimize space and closure requirements	Effective in eliminating future risk and eliminating future exposure pathways if soil is consolidated in another area, provided all areas with impacted soils have been identified	No area within Middle River Complex has been identified for relocation of impacted soils.	Reliable	Technology can be implemented provided it is used in conjunction with *ex situ* stabilization and placement of a cover/cap over the impacted soils.	High cost	Eliminated; no area at Middle River Complex has been identified for consolidation.		✓

Table 5-6

Technologies and Process Options for Soil Remedial Action
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

General Response Action	Remedial Action Technology	Process Option
No action	None	Not applicable
Limited action	Land use controls	Site use restrictions
		Excavation restrictions
Containment	Cover/barrier	Soil cover/cap that meets Maryland Department of the Environment regulations (Code of Maryland Regulations 26.04.07.21)
Removal	Excavation	Traditional excavation (with backhoe)
In situ treatment	Physical/chemical	Stabilization/solidification
In situ treatment	Biological	Enhanced bioremediation/landfarming
In situ treatment	Biological	Phytoremediation
Disposal	Off-site	Hazardous waste landfilling/non-hazardous waste landfilling /recycling

Table 5-7
Development of Remedial Alternatives
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation, Middle River Complex
Middle River, Maryland

Remedial Action Objective/ Risk Pathways		Alternatives							
		1	2	3	4	5	6	7	8
Remedial Action Objective	Risk Pathway	No Action	Institutional Controls	Excavation and off-site disposal of impacted soils to a depth of two feet and institutional controls	Excavation and off-site disposal of impacted soils to the groundwater table and institutional controls	Limited excavation and soil cover over areas with impacted soils and institutional controls	Enhanced bioremediation of impacted surface soils and institutional controls	*In situ* stabilization of impacted soils to the groundwater table and institutional controls	Phytoremediaiton in impacted areas and institutional controls
Reduce site related chemicals of control in Block D panhandle soils to 1×10^{-5} human health cancer risk limits for recreational users exposed to chemicals of concern via ingestion, dermal contact and inhalation.	Ingestion, inhalation, and dermal contact	Not Applicable	Risk pathway is mitigated via land use restrictions and access controls.	Risk pathway is mitigated via excavation and disposal of soils in the top two feet. Institutional controls will mitigate risk associated with soils at depths > two feet.	Risk pathway is eliminated via excavation and disposal of soils to the water table. Institutional controls will mitigate risk associated with saturated soils.	Risk pathway is mitigated via placement of a cover/cap. Institution controls are required for maintenance of cover/cap.	Risk pathway is mitigated via treatment of surface soils. Institutional controls will mitigate risk associated with soils at depths > two feet.	Risk pathway is mitigated via stabilization of soils down to the water table. Institutional controls will mitigate risk associated with saturated soils.	While the phytoremediation technology may be promising, inconsistances in the rooting system can not guarantee the RAO will be met in the impacted areas; therefore, it is uncertain that the risk pathway will be mitigated in the implementation of this alternative.

Table 5-8

Ranking of Alternatives Based on Preliminary Screening
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Ranking	Alternative	Retained?
1	Alternative 3: Excavation and off-site disposal of impacted soils* to a depth of two feet and institutional controls	yes
2	Alternative 2: Institutional controls	yes
3	Alternative 4: Excavation and off-site disposal of impacted soils* to the groundwater table and institutional controls	yes
4	Alternative 7: *In situ* stabilization of impacted soils* to the groundwater table and institutional controls	yes
5	Alternative 6: Enhanced bioremediation of impacted surface soils* and institutional controls	yes
6	Alternative 5: Limited excavation and soil cover over areas with impacted soil* and institutional controls	yes
7	Alternative 8: Phytoremediaiton in impacted areas and institutional controls	no
8	Alternative 1: No Action	Retained for Comparison

* Impacted soils or areas are soils/areas that the residual risk analysis identified for remediation.

Table 5-9

Comparative Analysis of Alternatives
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Evaluation Criteria	Evaluation Sub-Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
Long-term effectiveness and permanence	Residual potential long-term effectiveness and risk (assuming remedy failure)	Does not alter risk	Does not alter risk should institutional controls fail.	Lowers risk considerably provided subsurface soils are not brought to the surface during future construction	Very effective in eliminating risk	Lowers risk provided cover is maintained during future site use	Alternative is effective (for top two-feet/surface soils) provided landfarming lower concentrations of chemicals of concern to the required degree.	Alternative does not lower concentrations. Stabilized material will eventually degrade.
	Technology reliability	Very unreliable	Reliable to the extent institutional controls are effective	Reliable technology.	Reliable technology.	Reliable technology provided soil cover is maintained.	Reliability of technology to be ascertained by pilot testing.	Reliable technology. Stabilized material could degrade over time.
Reduction of toxicity, mobility, and volume through treatment	Destruction of hazardous constituents	No destruction	No destruction	No destruction, only removal and relocation to off-site landfill.	No destruction, only removal and relocation to off-site landfill.	No Destruction	Some destruction of constituents is possible through degradation	No destruction, only stabilization
	Irreversibility of treatment	No treatment	No treatment	Impacted surface soils are removed.	Treatment is completely irreversible since impacted soils are removed.	Treatment can be reversed due to erosion or loss of soil cover.	Requires pilot testing	Stabilized soils could eventually degrade.

Table 5-9

Comparative Analysis of Alternatives
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Evaluation Criteria	Evaluation Sub-Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
Short-term effectiveness	Time to achieve RAOs	Very long timeframe	Very long timeframe	Will require longer than Alternative 4 since all surface soils are dealt with. (1 year)	Will require a long duration since large volumes of soil are to be removed. (2 years)	Will require long duration for the installation of soil covers. (1 year)	To be ascertained with a pilot test. (4 or 5 years expected)	Will likely take 2 years to implement
	Un-mitigable adverse impacts during construction and OM&M	None	None	Will require dust control and air monitoring	Will require dust control, air monitoring, sidewall protection, and possibly dewatering.	Grading and dust control will be required.	Will require dust control	Possible degradation of stabilized material over time
Implementability	Obtaining other approvals	It is likely this alternative will not get the required approvals.	Easy to obtain approvals and permits	Will require: critical area permits SEC permits air monitoring during implementation. Treatment & disposal facility requirements.	Will require: critical area permits SEC permits Air monitoring during implementation. Groundwater disposal permits. Treatment & disposal facility requirements.	Will require: critical area permits SEC permits air monitoring during implementation.	Will require: critical area permits SEC permits air monitoring during implementation.	Will require: critical area permits SEC permits air monitoring during implementation.

Table 5-9

Comparative Analysis of Alternatives
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland
Page 3 of 5

Evaluation Criteria	Evaluation Sub-Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
Implementability (continued)	Constructability	Easily constructed	Easily constructed	Easily constructed, but more involved than Alternative 5. Can be implemented using standard construction techniques.	Very involved, requires shoring, dewatering and treatment and disposal of large volumes of soil; can be implemented using standard construction techniques.	Difficult to implement over large areas that are not contiguous	Can be constructed with standard equipment and machinery for tilling and application of amendments	Can be constructed with standard equipment and techniques
	Availability of experts and technology	Does not require any expertise	Expertise is available.	Expertise and technology is readily available.	Expertise and technology is readily available.	Expertise and technology is readily available.	Expertise and technology is available. Viability of technology to be ascertained by pilot testing.	Expertise and technology are readily available; will require bench-scale testing to ascertain mix
	Adaptability to modify/ update as necessary	Alternative can be modified as required.	Alternative can be modified as required.	Alternative can be modified as required. Additional excavations can be carried out.	Alternative can be modified as required. Additional excavations can be carried out.	Alternative can be modified as required.	Cannot be modified, since the limits of degradation of chemicals of concern will dictate the final concentration.	Alternative can be modified as required.

Table 5-9

Comparative Analysis of Alternatives
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Evaluation Criteria	Evaluation Sub-Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
Implementability (continued)	Effectiveness of monitoring	No Monitoring, very ineffective.	Monitoring has to be incorporated with institutional controls	Removal of impacted soils can be ascertained by sampling.	Removal of impacted soils can be ascertained by sampling.	Monitoring of soil cover will ascertain removal of exposure pathway.	Degradation of chemicals of concern in impacted soils can be ascertained by sampling.	Sampling will ascertain level of stabilization of soils. However degradation of material over time cannot be ascertained unless monitored at a later stage.
Environmental	Energy use	No energy usage	No energy usage	Less energy usage than Alternative 4	Maximum energy utilization	Less energy usage than Alternative 4	Less energy usage than Alternative 3	Less energy usage than Alternative 4
	Air emissions	No Emissions	No emissions	Less emissions than Alternative 4	Large quantities of emissions during excavation and transportation of impacted soils to disposal facilities and transportation of clean fill to the site	Less emissions than Alternative 3	Emissions more than Alternative 2 but less than Alternative 4	High emissions during cement production and subsequent transportation of cement to the site
	Impacts on water resources	No impacts	No impacts	Requires water for dust control	Requires water for dust control	Requires water for dust control	Requires water for dust control	Requires water for mixing soils and stabilizing agents

Table 5-9

Comparative Analysis of Alternatives
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Evaluation Criteria	Evaluation Sub-Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
Costs	Capital	$0	$139,155	$1,015,488	$1,059,620	$910,262	$1,025,866	$1,263,323
	O&M	$0	$168,750	$168,750	$168,750	$270,000	$224,552	$168,750

COC - chemicals of concern
ICs - institutional controls
O&M - operation and maintenance
OM&M- operation, maintenance, and monitoring
RAOs - remedial action objectives
SEC - sediment and erosion control

Alternative 1: No action
Alternative 2: Institutional controls
Alternative 3: Excavation and off-site disposal of impacted soils to a depth of two feet and institutional controls
Alternative 4: Excavation and off-site disposal of impacted soils to the water table and institutional controls
Alternative 5: Limited excavation and soil cover over areas with impacted soils and institutional controls
Alternative 6: Enhanced bioremediation of impacted surface soils and institutional controls
Alternative 7: *In situ* stabilization of impacted soils to the groundwater table and institutional controls

Table 5-10

Criteria Weighting and Ranking
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Weighting						Ranking							
Weight	*Criteria*	*Weight*	*Sub-Criteria 1*	*Weight*	*Sub-Criteria 2*	*Criteria/ Sub-Criteria*	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
100	Long-term effectiveness and permanence	50	Residual potential risk			Residual potential risk	0.00	3.00	7.00	9.00	5.00	6.00	6.00
		100	Technology reliability			Technology reliability	0.00	7.00	9.00	10.00	9.00	6.00	6.00
50	Reduction of toxicity, mobility and volume through treatment	50	Destruction of hazardous constituents			Destruction of hazardous constituents	0.00	0.00	0.00	0.00	0.00	7.00	7.00
		50	Irreversibility of treatment			Irreversibility of treatment	0.00	0.00	8.00	9.00	5.00	8.00	5.00
50	Short-term effectiveness	50	Time to achieve RAO			Time to achieve RAO	0.00	10.00	9.00	8.00	9.00	4.00	8.00
		75	Un-mitigable adverse impacts	100	Protect community	Protect community	10.00	10.00	5.00	3.00	7.00	7.00	8.00
				75	Protect construction workers	Protect construction workers	10.00	10.00	3.00	1.00	5.00	7.00	7.00
				50	Minimize environmental impacts	Minimize environmental impacts	10.00	10.00	3.00	1.00	5.00	7.00	7.00

Table 5-10

Criteria Weighting and Ranking
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Weighting						Ranking							
Weight	*Criteria*	*Weight*	*Sub-Criteria 1*	*Weight*	*Sub-Criteria 2*	*Criteria/ Sub-Criteria*	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
100	Implementability	75	Obtaining other approvals			Obtaining other approvals	10.00	8.00	6.00	6.00	3.00	6.00	7.00
		50	Constructability			Constructability	10.00	10.00	8.00	5.00	3.00	7.00	7.00
100	Implementability (continued)	50	Availability of experts and technology			Availability of experts and technology	10.00	10.00	10.00	9.00	10.00	5.00	5.00
		25	Adaptability to modify/update			Adaptability to modify/update	10.00	10.00	8.00	8.00	4.00	7.00	7.00
		75	Effectiveness of monitoring			Effectiveness of monitoring	0.00	2.00	6.00	8.00	4.00	6.00	6.00
50	Environmental	75	Energy use			Energy use	10.00	9.00	0.00	1.10	6.10	5.10	5.20
		50	Air emissions	50	GHG emissions	GHG emissions	10.00	9.00	6.20	5.70	0.00	7.80	1.20
				25	NO_x emissions	NO_x emissions	10.00	10.00	2.60	1.60	2.20	0.00	5.90
				75	SO_x emissions	SO_x emissions	10.00	10.00	1.50	0.00	1.00	3.00	3.50
				50	PM_{10} emissions	PM_{10} emissions	10.00	9.00	2.00	0.00	1.00	1.00	2.00
		25	Impacts on water resources			Impacts on water resources	10.00	10.00	9.90	9.90	9.90	0.00	6.60

Table 5-10

Criteria Weighting and Ranking
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Corporation Middle River Complex
Middle River, Maryland

Weighting						Ranking							
Weight	*Criteria*	*Weight*	*Sub-Criteria 1*	*Weight*	*Sub-Criteria 2*	*Criteria/ Sub-Criteria*	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
75	Costs	50	Capital			Capital	10.00	6.30	1.90	1.60	2.80	1.90	0.00
		50	O&M			O&M	10.00	8.40	5.20	5.20	2.30	0.00	5.20
						TOTAL SCORE	**0.415**	**0.537**	**0.594**	**0.615**	**0.534**	**0.567**	**0.572**

Notes:

GHG - greenhouse gases
NO_x - nitrogen oxides
SO_x - sulfur oxides
PM_{10} - respirable particulate matter
O&M - operation and maintenance
RAOs - remedial action objectives

Alternative 1:No action
Alternative 2: Institutional controls
Alternative 3: Excavation and off-site disposal of impacted soils* to a depth of two feet and institutional controls
Alternative 4: Excavation and off-site disposal of impacted soils* to the water table and institutional controls
Alternative 5: Concrete slab remvoal and soil cover over impacted areas* and institutional controls
Alternative 6: Enhanced bioremediation of impacted surface soils* and institutional controls
Alternative 7: *In situ* stabilization of impacted soils* to the groundwater table and institutional controls

*Impacted soil is defined as soil that the residual risk analysis identified for remediation

Section 6
Design Characterization Sampling

The residual-risk analysis (RRA) performed on Block D panhandle soils (see Section 4) identified areas that must be remediated to achieve "representative" soil concentrations that do not exceed the preliminary remediation goal (PRG) established for benzo(a)pyrene equivalent (BaPEq), the primary chemical of concern (COC) in panhandle soils. The RRA was conducted using sample location data from all previous investigations described in Section 2.3. The RRA process consists of ranking sample locations from most contaminated to least contaminated and then sequentially "removing" sample results/locations from the upper confidence level (UCL) calculation until the 95% UCL concentration for the COC does not exceed the recreational risk-based PRG (195 µg/kg) associated with the remedial action objective (RAO) target residual-cancer-risk of 1×10^{-5}. A detailed description of the RRA process can be found in Section 4.

The remedial areas are comprised of sampling locations identified for elimination during the RRA "removal" process. Some additional elevated soil-sampling results (e.g., samples exceeding site background concentrations for arsenic or exceeding a background benchmark-concentration for hexavalent chromium) that did not require removal (by calculation) were also included in the remedial action area to provide a margin of safety in attaining the target residual-risk. The limits of remediation are shown in Figure 4-1. The limits of the remediation areas were established along the midpoint between a given location where an impacted soil sample had been collected and the nearest sampling location slated to remain in place.

Characterization sampling will be conducted around selected areas during design to better define the areas designated for remediation. Samples will be collected from three soil borings around the excavation area shown in Figure 6-1. Soil samples will be collected in one-foot increments to four feet below ground surface (bgs) or until groundwater is reached, whichever occurs first. Soils will be chemically analyzed for BaPEq, arsenic, and hexavalent chromium.

Figure 6-1 shows the proposed sampling locations for design characterization sampling. A complete sampling and analysis plan will be prepared during the design phase of the remedial action. Sampling will be completed before remediation begins. Sampling results will be used to recalculate residual risk. That analysis will be used to determine if the currently proposed excavation areas require adjustment. Any adjustments will be incorporated into the final remedial design documents.

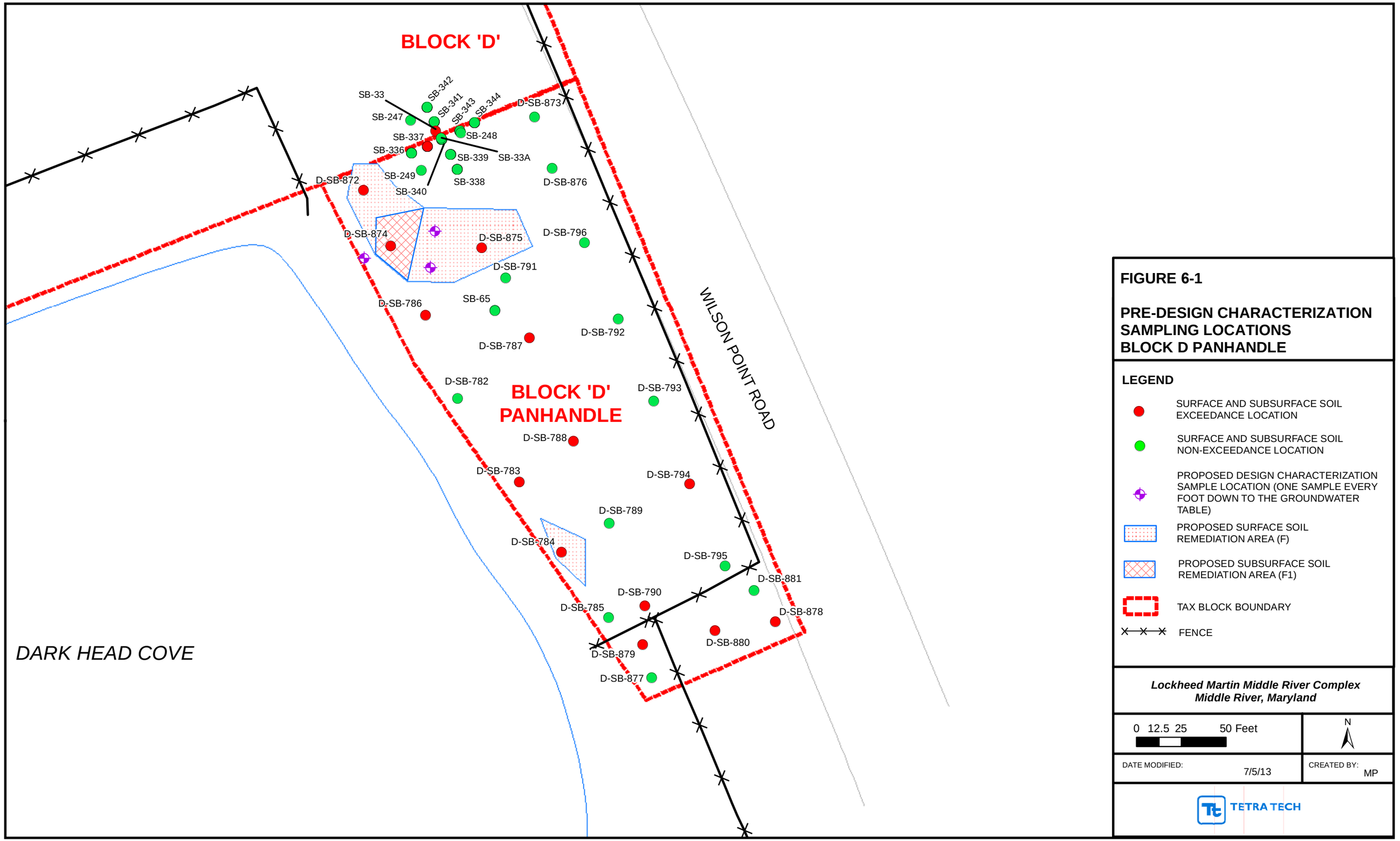

FIGURE 6-1

PRE-DESIGN CHARACTERIZATION SAMPLING LOCATIONS BLOCK D PANHANDLE

LEGEND

- SURFACE AND SUBSURFACE SOIL EXCEEDANCE LOCATION
- SURFACE AND SUBSURFACE SOIL NON-EXCEEDANCE LOCATION
- PROPOSED DESIGN CHARACTERIZATION SAMPLE LOCATION (ONE SAMPLE EVERY FOOT DOWN TO THE GROUNDWATER TABLE)
- PROPOSED SURFACE SOIL REMEDIATION AREA (F)
- PROPOSED SUBSURFACE SOIL REMEDIATION AREA (F1)
- TAX BLOCK BOUNDARY
- FENCE

Lockheed Martin Middle River Complex
Middle River, Maryland

0 12.5 25 50 Feet

N

DATE MODIFIED: 7/5/13

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\GPS SOIL BORING LOC\Final RAP figures\Final RAP_ Comments\Block D Figure 5-1_070513.mxd) 7/5/2013 -- 9:30:40 AM

Section 7

Contingency Measures for the Selected Remedial Action

The selected proposed remedial alternative for the Block D panhandle (Alternative 4) will remove and dispose of soil with chemicals of concern (COC) concentrations that result in a cumulative residual human-health risk greater than the 1×10^{-5} risk level for benzo(a)pyrene equivalent (BaPEq) for panhandle area recreational users. Alternative 4 will also reduce the metals arsenic and hexavalent chromium to background levels. Institutional controls will be implemented after soil removal. Following soil removal, base and sidewall samples of soil in the removal areas will be collected and analyzed for polycyclic aromatic hydrocarbons (PAHs), arsenic, and hexavalent chromium. Sidewall sampling results will be used to recalculate residual risk (see Section 8) to confirm that remaining (post-remediation) COC concentrations in soil satisfy the remedial action objective (RAO). Residual risk is calculated using a 95% upper confidence limit (UCL) of residual COC concentrations. Verification-sampling data will be used to update the panhandle residual-risk calculation. If the 95% UCL calculated using verification samples exceeds the RAO, then an additional two feet (laterally) of soil will be removed, and verification sampling will be repeated until regulatorily acceptable results for the residual-risk calculation have been obtained.

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Section 8
Proposed Remedial Actions

This section presents the conceptual design for the proposed soil remedial action at the Block D panhandle. The selected remedial alternative, Alternative 4, involves excavation and disposal of impacted soils to the groundwater table, and implementation of institutional controls. A site plan presenting the layout of the preliminary remedial design is in Figure 4-1. This proposed conceptual design may be altered during design characterization sampling (see Section 6) or during the detailed full design and permitting process that that precedes implementation.

A final soil remedial action design will be developed following approval of this remedial action plan (RAP). It will provide the final design-basis for the remedial action, describe the areas and volumes of soil to be excavated, and describe the volume and type of fill material to be used. The soil remedial-action design will be submitted as a RAP addendum. The remedial action implementation schedule is in Section 10.

8.1 SUMMARY OF MAJOR COMPONENTS

Major components of the remedial action necessary to achieve a "No Further Action" site closure from the Maryland Department of the Environment (MDE) include:

- *Removing soil with chemical of concern (COC) concentrations greater than the preliminary remedial goals (PRGs) for* benzo(a)pyrene equivalent (BaPEq) *(195 micrograms per kilogram [µg/kg]), arsenic (12 milligrams per kilogram [mg/kg]), and hexavalent chromium (12 mg/kg) in designated excavation areas to satisfy the remedial action objective (RAO)*—This will involve removal of the top two feet of soils in areas A and B in Figure 4-1 and removal of soils to a minimum depth of four feet in a portion of area A in Figure 4-1. These are the designated depths to achieve regulatorily acceptable residual risk based on known soil concentrations of BaPEq and reduce concentrations of arsenic and hexavalent chromium to below background concentrations. Approximately 597 cubic yards of soil will be removed. Soil-boring sampling and removal limits are indicated in Figure 4-1. Depth-to-groundwater data for the panhandle area (Appendix F) indicates that the groundwater table is likely encountered at a depth between two and four feet; thus, groundwater may be encountered during excavation. Soil removal actions, as determined by the residual-risk analysis (RRA) and associated margin of safety, are as follows:

- *Area A*—remove soil associated with soil borings SB-872, SB-874, and SB-875. Soil removal at these locations is recommended per the RRA to achieve a site-wide 95% upper confidence limit (UCL) less than the recreational PRG for BaPEq (195 µg/kg).

- *Area B*—remove soil associated with soil boring SB-784. Soil removal at this location was recommended per the RRA to achieve a site-wide 95% upper confidence limit (UCL) less than the recreational PRG for BaPEq.

- *Post-removal confirmation sampling and analysis*—To meet the RAO, sampling and analysis of the exposed soil on the sidewalls of the removal areas will be performed to confirm that the residual risk 95% UCL for remaining soil-COC concentrations is less than the PRGs for BaPEq, arsenic, and hexavalent chromium. Post-removal sampling and analysis of the exposed soil at the base of the removal areas will also be performed to obtain data solely for informational purposes.

- *Characterization, transport, and off-site disposal of removed materials*—Excavated soil will be direct-loaded into trucks to be disposed of off-site, when feasible. Soil stockpiling will be avoided or minimized as much as possible. It is anticipated that all soil removed from Block D panhandle will be nonhazardous and can be disposed of at a Lockheed Martin Corporation (Lockheed Martin)-approved nonhazardous-waste disposal facility. Characterization sampling will be conducted to verify this assumption. Removed concrete, steel, and other construction/demolition materials will also be characterized, as appropriate. A disposal quantity of approximately 896 tons is estimated, based on the removal limits in Figure 4-1.

- *Backfilling and regrading*—Removal areas will be backfilled and the final surface will be restored using stabilized vegetation. Fill material will be certified-clean material obtained from an off-site borrow source and will be similar in grain size to the removed soils.

- *Restoration*—Disturbed areas will be stabilized by vegetation. All areas disturbed by the remedial action will be permanently stabilized.

- *Implementation of institutional controls*—Institutional controls will include cover maintenance requirements, excavation notification, soil reuse restrictions, and limitations on future property use.

8.1.1 Excavation

Before excavation can start, the erosion and sedimentation controls specified in the grading plan approved by Baltimore County Soil Conservation District must be installed and inspected by the County. If the County approves the installation, they will issue a "Grading Permit." Excavation can then proceed after all other permits associated with the project have been issued.

Panhandle soil in the areas designated for excavation (see Figure 4-1) will be removed to the proposed depth. The removal limits in this RAP are based on review of the existing soil-boring

sampling results. The design and final limits of removal will be determined after data from pre-design characterization sampling and post-removal confirmation sampling have been acquired. Removal limits will in some cases will extend to the water table. Sediments with COC concentrations greater than cleanup goals that accumulate in erosion and sediment control devices during remedial activities will be disposed of off-site, along with the removed soils. Erosion and sediment control devices will be described in the separate remedial action design document that will be prepared prior to implementation.

8.1.2 Dewatering

Dewatering of removal areas may be required to facilitate excavation and backfilling. Water from excavation dewatering will be characterized and managed in one of the following ways:

- contained, characterized as required, and disposed of at an off-site permitted treatment, storage, and disposal facility (TSDF)
- filtered using a sediment-removal device, treated as necessary, and discharged to surface water through the Middle River Complex permitted storm-drain and outfall system, which is regulated by MDE and the United States Environmental Protection Agency (USEPA)
- filtered using a sediment-removal device, treated as necessary, and discharged to the local sanitary sewer system, which is regulated by Baltimore County

Solids trapped in the filter will be analyzed and, depending on the results, transported to an off-site nonhazardous waste disposal facility or, if necessary, to an off-site hazardous waste TSDF. Permits required for the proposed remedial action are described in Section 9.2.

8.1.3 Confirmation Soil Sampling

To satisfy the RAO, post-removal confirmation samples will be collected from the excavation sidewalls of removal areas A and B and will be analyzed for PAHs, arsenic, and hexavalent chromium before backfilling, to confirm that the residual risk 95% UCL for BaPEq is less than the PRG (195 µg/kg) and the remaining soil concentrations for arsenic and hexavalent chromium are less than their respective background PRGs. The sidewall samples will be collected as a composite sample; one composite sample will be collected and analyzed for every 100-foot segment of sidewall. A minimum of 15 soil samples of equal volume, collected at distances of

approximately six feet per 100 feet of sidewall, will be composited manually in a stainless steel bowl, and the single composite sample will then be submitted for laboratory analysis.

The composite-sample results for each segment of sidewall will be used in a recalculation to determine if the RAO has been achieved. If not, additional soil will be removed until the RAO has been met. For either full-depth removal or removal areas where the proposed removal depth cannot be achieved due to shallow groundwater, post-removal samples will also be collected from the exposed soil at the base of the removal areas, at a frequency of one sample per 625 square feet of excavated soil. These data will be obtained for informational purposes only and may be used when considering final land use controls (LUCs).

8.1.4 Waste Characterization and Disposal

Soil in the proposed excavation areas will be sampled and analyzed for waste disposal characterization before remedial activities. Soil will be sampled at a minimum frequency of one sample per 500 cubic yards. Sampling frequency may be increased depending on the volume of the removed soil and waste disposal facility requirements. Samples will be analyzed for toxicity characteristic leaching procedure (TCLP) and any other parameters required by the waste disposal facility. For all required analyses except volatile organic compounds (VOCs), composite samples consisting of three grab samples will be collected from each excavation area. Samples for VOC analysis will be collected as discrete samples from each excavation area before compositing.

Excavated soil will be transported off-site for disposal after waste characterization has been completed and the waste disposal or recycling facility has approved acceptance of the waste. It is anticipated that the removed soil will be disposed of at the GROWS North Landfill in Morrisville, Pennsylvania. Approximately 896 tons of soil is expected to be excavated, direct-loaded at a rate of approximately 15 tons per truck, and transported to the GROWS North Landfill during this remedial action. Approximately 60 truckloads (truck trips) will be required to remove contaminated soils during this remedial action. The number of trucks may vary depending on availability; approximately two to three trucks per hour may be filled using direct load techniques. Trucks will access and leave the panhandle directly from Eastern Boulevard through the Middle River Complex and Chesapeake Park Plaza. Details concerning the truck route will be finalized during the remedial design.

8.1.5 Backfilling

Removal areas will be backfilled following post-removal confirmation sampling and excavation dewatering. Backfill soil will be certified-clean soil from an off-site borrow source and will be similar in grain size to the soils removed, if appropriate. Backfill material acceptance-criteria are in Table 8-1. The off-site borrow-source material will be evaluated according to procedures in the MDE document *Facts About (Voluntary Cleanup Program) VCP—Clean Imported Fill Material* (MDE, undated). The off-site borrow source will be identified, and environmental site assessment documentation will be obtained, if available. This documentation will be reviewed by an environmental professional to determine its suitability. If the borrow source is judged acceptable, soil samples will be obtained and analyzed for compounds of concern using the methods listed in Table 8-1.

The minimum sampling frequency will be as recommended in the MDE clean-fill document and will be based on the size (i.e., area and volume) of the borrow source. Constituents detected in these samples will be compared to MDE cleanup levels, to anticipated typical concentrations for eastern Maryland (MDE, 2008), or to other MDE-approved risk-based concentrations. The off-site borrow source must be approved by the MDE before backfill material is transported to the site. Backfill material will be compacted to at least 90% of the maximum dry density, as determined by the standard proctor test using the ASTM International Inc. method D698-12 and/or American Association of State Highway and Transportation Officials (AASHTO) specification T-99.

8.1.6 Restoration

The top four inches of backfill in areas to be restored using vegetation will be comprised of medium-textured loam suitable for establishing vegetation (i.e., topsoil). Backfilled and regraded areas, along with other areas disturbed during implementation of the remedial action, will be restored/stabilized using permanent stabilization practices. Vegetative restoration will consist of surface preparation, fertilizing, seeding, and mulching. Vegetative restoration procedures will be detailed in the panhandle remedial design documents that will be prepared under separate cover.

8.2 INSTITUTIONAL CONTROLS

The MDE Controlled Hazardous Substances Enforcement Division will document institutional controls applicable to panhandle soils in the "No Further Action" letter, which will be issued once the RAO has been met. The "No Further Action" letter will be filed in local land use records and passed to subsequent property owners as part of the deed documentation. MDE regards all institutional controls as existing in perpetuity unless the related environmental covenants are eliminated or modified by mutual consent of the stakeholders. As part of the "No Further Action" letter and supporting documentation, MDE will present certain environmental covenants that will give stakeholders legal standing to enforce covenants. MDE will determine final disposition of any institutional controls. Examples of institutional controls include the following:

- Documentation of the nature and extent of soil contamination remaining in the Block
- Implementation of the MRC soil-management plan in conducting any intrusive repair or development work
- Prohibiting use of groundwater beneath the property for any purpose.
- Requiring implementation of sub-slab soil-vapor mitigation technology beneath all buildings where the potential for soil-vapor intrusion into indoor air exists. For new-footprint buildings, a vapor-mitigation system might, for example, consist of slotted polyvinyl chloride tubing arranged in such fashion as to passively exhaust soil vapors from beneath the building slab to the atmosphere. Any passive vent system will have to be readily convertible to an active remedial system, if necessary. Other regulatorily acceptable remedial alternatives exist. Regardless of remedial choice, indoor air will need to be tested before occupancy, and concentrations of any detected contaminant must not exceed the applicable indoor air standards.
- Restrictions on the future use of the property other than recreational use.

Table 8-1

Backfill Material Acceptance Criteria[1]
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Middle River Complex, Middle River, Maryland
Page 1 of 2

Parameter	Criteria	Test method
Volatile organic compounds	MDE residential cleanup standards or ATCs[2] or associated approved risk-based concentrations	USEPA SW-846 8260B
Semivolatile organic compounds	MDE residential cleanup standards or ATCs[2] or associated approved risk-based concentrations	USEPA SW-846 8270C[3]
Polychlorinated biphenyls	MDE residential cleanup standards or ATCs[2] or associated approved risk-based concentrations	USEPA SW-846 8082
Metals	MDE residential cleanup standards or ATCs[2] or associated approved risk-based concentrations	USEPA SW-846 6020
Pesticides (organochlorine)	MDE residential cleanup standards or ATCs[2] or associated approved risk-based concentrations	USEPA SW-846 8081A or 8080A
Pesticides (organophosphorus)	MDE residential cleanup standards or ATCs[2] or associated approved risk-based concentrations	USEPA SW-846 8141A
Chlorinated herbicides	MDE residential cleanup standards or ATCs[2] or associated approved risk-based concentrations	USEPA SW-846 8151A
Total petroleum hydrocarbons	MDE residential cleanup standards or ATCs[2] or associated approved risk-based concentrations	USEPA SW-846 8015

Table 8-1

Backfill Material Acceptance Criteria[1]
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Middle River Complex, Middle River, Maryland
Page 2 of 2

Parameter	Criteria	Test method
Unified Soil Classification System classification	GW, GP, GM, SW, SP, and SM	ASTM D 2487
Atterberg Limits	—	ASTM D 4318
—Liquid limit	35 maximum	
—Plasticity index	12 maximum	
Amount finer than the No. 200 United States standard sieve	25% maximum	ASTM D 1140
Maximum particle size	1 inch maximum	ASTM D 422

[1]The off-site borrow source must be approved by the MDE Voluntary Cleanup Program before transporting any backfill material onto the site
[2]Residential cleanup standards and ATCs provided in *Cleanup Standards for Soil and Groundwater* (MDE, June 2008).
[3]PAHs using USEPA SW-846 8270C or D with SIM.

ASTM ASTM International
ATC anticipated typical concentration
GM silty gravel
GP poorly graded gravel
GW well-graded gravel
MDE Maryland Department of the Environment
PAHs polycyclic aromatic hydrocarbons
RBC risk-based concentration
SIM selected-ion monitoring
SM silty sand
SP poorly graded sand
SW well-graded sand
USEPA United States Environmental Protection Agency

Section 9
Permits and Notifications

This section describes the permits that will be required for the proposed remedial action and the required notifications and contingencies if unexpected conditions are encountered during implementation of this remedial action plan (RAP).

9.1 PERMITS

Lockheed Martin Corporation (Lockheed Martin) will meet federal, state, and local permitting requirements for the proposed soil remedial action described in Section 8. Permitting requirements for the proposed remedial action relating to soil excavation and off-site disposal will be subject to Maryland Department of the Environment (MDE) and Baltimore County Department of Environmental Protection and Natural Resources soil management requirements. A list of permit requirements (with contact information and review periods) is in Appendix J. Permits that may be required for the remedial action include the following:

- A Baltimore County grading permit for any land disturbance and grading that disturbs greater than 5,000 square feet, or uses more than 100 cubic yards of fill material, will be required. Grading plans will be submitted to Baltimore County for review and approval.

- As a condition of receiving a grading permit, a storm-water-management plan will be submitted to Baltimore County Stormwater Engineering for review and approval. The storm-water-management plan will be prepared in accordance with the *Maryland Storm-Water Design Manual, Volumes I and II* (MDE, 2000), including the 2009 revisions and subsequent supplements. Since post-construction contours will match pre-construction conditions, a storm-water-management variance might be granted by Baltimore County under Section 33-4-113 (a)(2) of Title 4 of the Baltimore County Code.

- An erosion and sediment-control plan will be submitted to the Baltimore County Soil Conservation District. It will be prepared in accordance with the *1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control* (MDE, 1994), the *Maryland Standards and Specifications for Soil Erosion and Sediment Control* (MDE, 2011), and the *1999 Policy and Guidelines for Erosion and Sediment-Control, Storm-Water-Management, Sediment-Basin, and Small-Pond Review Manual* (Baltimore County Soil Conservation District, 1999). The Soil Conservation District review of erosion and sediment-control plans will be coordinated with and incorporated into the Baltimore County review of the storm-water-management and grading plans.

- Baltimore County Environmental Impact Review will be consulted to determine if any conservation or mitigation measures will be required for work within the critical area, including compliance with the 10% rule for storm water, and to address impacts to the tidal buffer. The 10% rule for Baltimore County specifies that storm-water-management practices must be capable of reducing storm-water-pollutant loads from a construction site to a level at least 10% below the load generated by the same site before development.

- A United States Army Corps of Engineers and MDE "Joint Permit Application" will be required if any of the final ground-disturbing activities occur within the boundaries of delineated tidal wetlands, or below the mean high-water line of Dark Head Cove or Cow Pen Creek. Current plans and the size and nature of delineated wetlands within Block D suggest that expected impacts are relatively minor, and will meet criteria for coverage under the Maryland Programmatic General Permit (MDSPGP-4).

- If the final total ground disturbance exceeds one acre, an application for a "Notice of Intent for a Permit for Stormwater Associated with Construction Activity" will be submitted, along with the erosion and sediment control plan, for approval from MDE and the Baltimore County Soil Conservation District.

- The federal/state MDSPGP-4 "Joint Permit" application will include a Section 106 project review by the Maryland Heritage Trust. As part of the federal/state MDSPGP-4 joint-permit application, the Maryland Department of Natural Resources, the United States Fish and Wildlife Services, and the National Oceanic and Atmospheric Administration will review the project for potential impacts to listed species and critical/essential fish habitat.

- LMC Properties, Inc. (LMCPI) will be kept informed of work progress and schedule. Potable water must be obtained at locations, volumes, and rates approved by LMCPI.

9.2 NOTIFICATIONS

Lockheed Martin will follow appropriate MDE and United States Environmental Protection Agency (USEPA) notification requirements regarding previously undiscovered contamination, changes in the RAP schedule, citations from regulators related to health and safety practices associated with implementation of the proposed remedial action, and discharges to the environment.

Section 10
Implementation Schedule

The projected sequence of events for this project, including the expected completion schedule of various milestones, appears below. All dates below are estimated and subject to change:

1. Submit draft remedial action plan (RAP) to the Maryland Department of the Environment (MDE)—November 2013
2. Submit final remedial action plan—September 2014
3. Obtain required permits—April 2015
4. Begin implementation of remedial action—April 2015
5. Complete implementation of the remedial action and meet the remedial action objectives (RAO)—July 2015
6. Request a ”No Further Action” letter from MDE—November 2015

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Section 11
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20. United States Environmental Protection Agency (USEPA), 1988. *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, Interim Final EPA/540/G-89/004*. Office of Emergency and Remedial Response, Washington, D.C. October.

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APPENDIX A—VOLUNTARY CLEANUP PROGRAM WITHDRAWAL LETTER

Lockheed Martin Corporation
6801 Rockledge Drive MP: CCT-246
Bethesda, MD 20817
Telephone 301-548-2212

LOCKHEED MARTIN

August 29, 2013

VIA E-MAIL AND PRIVATE CARRIER

VIA E-mail: James.carroll@maryland.gov
Mr. James Carroll
Program Administrator
Land Restoration Program
Maryland Department of the Environment
1800 Washington Boulevard, Suite 625
Baltimore, Maryland 21230

Subject: Withdrawal of VCP Applications for Tax Parcel Blocks D, E, E (Lot 3), F, G (Lot 1), H and I
Chesapeake Park Plaza (Middle River Complex)
2323 Eastern Boulevard, Middle River, Baltimore County, Maryland

Dear Mr. Carroll:

The purpose of this letter is to notify the Maryland Department of the Environment ("MDE" or "Department") that Lockheed Martin Corporation is withdrawing the below referenced tax parcels and block numbers, generally referred to as the Chesapeake Park Plaza, from the Voluntary Cleanup Program ("VCP") pursuant to Md. Code Ann. Envir. § 7-512 (2007 Repl. Vol.).

The subject Chesapeake Park Plaza tax parcels were previously accepted into MDE's VCP. This notice of withdrawal will affect the following identified tax parcels:

	Tax Parcel Number	**Acreage**
1	Map 90 Grid 18 Parcel 964 Block D	12.775
2	Map 90 Grid 18 Parcel 964 Block E	15.433
	Map 90 Grid 18 Parcel 964 Block E Lot 3	0.533
3	Map 90 Grid 18 Parcel 964 Block F	11.941
4	Map 90 Grid 18 Parcel 964 Block G Lot 1	13.461
5	Map 90 Grid 18 Parcel 964 Block H	7.877
6	Map 90 Grid 18 Parcel 964 Block I	66.104

We understand this notice will take effect upon ten (10) days of MDE's receipt. Please be advised that the tax parcels subject to this notice are currently stable and secure, and that Lockheed Martin has agreed in principle to negotiate an administrative consent order with the Department to address environmental conditions at Tax Parcels D, E, F, G, and H, and I. Please acknowledge receipt of this notice in writing.

Please let me know if you have any questions. My office phone is (301) 548-2212.

Sincerely,

Carol B. Cala
Vice President, Energy, Environment, Safety & Health
Lockheed Martin Corporation

cc:
Brad Owens, Lockheed Martin
Christine Kline, Lockheed Martin
Glenda Smith, Lockheed Martin
Norm Varney, Lockheed Martin
Michael Martin, Tetra Tech
Cannon Silver, CDM Smith

APPENDIX B—EXCEEDANCES OF RISK-BASED SCREENING CRITERIA BASED ON RECREATIONAL EXPOSURE TO BLOCK D PANHANDLE SOILS (table)

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	--	2.1 J	18.6	0.69	0.13 K	9.7 J	6.6 J	12.2 J	9290 J
D-SB-782-05	SB-782	5	5	20100902	--	2.5 J	30.3	1.6	0.017 J	12.7 J	4 J	13.9 J	11300 J
D-SB-782-07	SB-782	7	7	20100902	0.3 J	7.5 J	14.5	4	0.025 J	30.7 J	8.1 J	20.3 J	37500 J
D-SB-782-09	SB-782	9	9	20100902	0.25 B	5 J	13.9	3.2	0.019 B	24.3 J	6.5 J	15.9 J	30600 J
D-SB-782-11	SB-782	11	11	20100902	0.22 B	3.9 J	11.2	3.4	0.077 J	20 J	10.9 J	17.9 J	31000 J
D-SB-782-13	SB-782	13	13	20100902	0.19 B	4.6 J	20.7	2.8	0.054 J	17.8 J	5.9 J	18.8 J	19200 J
D-SB-782-15	SB-782	15	15	20100902	0.072 B	2.6 J	19.2	2.7	0.096 J	13.4 J	8.2 J	6.4 J	5110 J
D-SB-783-03	SB-783	3	3	20100902	0.35 J	5 J	48.1	0.9	0.55 K	14.6 J	11.8 J	17.3 J	19100 J
D-SB-783-05	SB-783	5	5	20100902	0.15 B	6.1 J	8.1	1.2	--	23.2 J	4.3 J	36.3 J	34500 J
D-SB-783-07	SB-783	7	7	20100902	0.31 J	9.2 J	7.8	2.4	--	29.5 J	5.1 J	37.6 J	45200 J

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	0.059 B	1.8 J	8.4	0.66	--	8.7 J	2 J	5.7 J	4670 J
D-SB-783-11	SB-783	11	11	20100902	0.11 B	2.1 J	12.6	1.1	0.011 B	10.1 J	4.3 J	8.6 J	8650 J
D-SB-783-13	SB-783	13	13	20100902	0.084 B	2.4 J	14.2	1.1	0.012 B	11.4 J	3 J	23.1 J	6580 J
D-SB-783-15	SB-783	15	15	20100902	0.36 J	4.3 J	18	3	0.019 B	21.6 J	8.1 J	21.9 J	32800 J
D-SB-784-03	SB-784	3	3	20100902	0.19 B	3 J	14.8	1.5	0.024 B	14.7 J	7.7 J	15.7 J	17600 J
D-SB-784-05	SB-784	5	5	20100902	0.34 J	8 J	13.4	2.2	0.023 B	23.9 J	6.5 J	36.2 J	45800 J
D-SB-784-07	SB-784	7	7	20100902	0.31 J	5.8 J	16.4	2.8	0.036 J	21.9 J	5.6 J	110 J	35400 J
D-SB-784-09	SB-784	9	9	20100902	--	2.6 J	7.5	0.77	--	6.8 J	3.1 J	9.7 J	2570 J
D-SB-784-11	SB-784	11	11	20100902	0.12 B	1.3 J	7	1.8	0.012 B	14.4 J	7.2 J	39 J	23200 J
D-SB-784-13	SB-784	13	13	20100902	0.18 B	2.5 J	13.1	2.7	0.014 B	25.7 J	9.2 J	16.6 J	31400 J
D-SB-784-15	SB-784	15	15	20100902	0.39 J	7.2 J	20.6	5	0.023 B	32.5 J	14.3 J	37 J	60600 J
D-SB-785-03	SB-785	3	3	20100903	0.21 J	4.6	24.8 J	2.2	0.037 J	17	9.8	25.8 J	20600 J
D-SB-785-05	SB-785	5	5	20100903	0.32 J	5.8	24.8 J	2.7	0.26 L	22.4	20	31.5 J	29600 J
D-SB-785-07	SB-785	7	7	20100903	0.065 J	3.2	6.1 J	1.2	0.022 J	15	4.7	8.9 J	15500 J
D-SB-785-09	SB-785	9	9	20100908	0.13 J	3.6 L	10.7 J	4.8 J	0.01 B	14.9 J	15.6	89.7	36600 J
D-SB-785-11	SB-785	11	11	20100908	0.28 J	3.2 L	12.7 J	6.4 J	--	28.8 J	8	23.5	38700 J
D-SB-785-13	SB-785	13	13	20100908	0.12 J	3.1 L	15.1 J	4.6 J	0.12 K	23.2 J	13.7	56.2	34200 J
D-SB-785-15	SB-785	15	15	20100908	0.28 J	3.8 L	10.9 J	4.5 J	0.013 B	28.7 J	8.6	14.6	37900 J
D-SB-786-03	SB-786	3	3	20100903	0.16 J	3.9	20.2 J	2.4	0.091 J	18.5	13.2	20.3 J	19000 J
D-SB-786-05	SB-786	5	5	20100903	0.32 J	7.7	27.7 J	4	0.091 J	24.3	14.9	30 J	36400 J
D-SB-786-07	SB-786	7	7	20100903	0.17 J	14.3	12 J	1.2	0.038 J	18.4	7.9	16.1 J	19400 J
D-SB-786-09	SB-786	9	9	20100903	0.2 J	3.6	5.2 J	1.1	0.025 J	26.8	11.3	13.6 J	31300 J
D-SB-786-11	SB-786	11	11	20100903	--	2.5	6.8 J	0.31	0.023 J	3.8	1.5	3.1 J	1830 J
D-SB-786-13	SB-786	13	13	20100903	0.075 J	1.3	14.4 J	0.98	0.041 J	18.9	8.5	4.9 J	13500 J
D-SB-786-15	SB-786	15	15	20100908	0.064 J	0.88 L	4.4 J	0.3 J	0.034 J	2.1 J	1.9	5	462 J
D-SB-787-03	SB-787	3	3	20100908	0.18 J	4.6 L	25.8 J	1.6 J	0.15 K	17.7 J	23.6	20.3	24200 J

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ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON	N
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA	
D-SB-787-05	SB-787	5	5	20100908	0.33 J	5.3 L	19.2 J	3.9 J	0.041 J	26.4 J	6.2	23.3	40500 J	
D-SB-787-07	SB-787	7	7	20100903	0.35 J	6.6	19.8 J	4.5	0.025 J	38.8	8.2	21.9 J	51100 J	
D-SB-787-09	SB-787	9	9	20100908	0.34 J	6.8 L	11 J	4.5 J	0.067 J	34.2 J	12.4	20.3	72900 J	
D-SB-787-11	SB-787	11	11	20100908	0.33 J	5 L	10.8 J	2.8 J	0.078 J	28.9 J	7.5	10.5	33800 J	
D-SB-787-13	SB-787	13	13	20100908	0.22 J	5.4 L	15.7 J	3.7 J	0.091 J	27.8 J	11.7	15.4	21700 J	
D-SB-787-15	SB-787	15	15	20100908	--	1.7 L	10.7 J	1.7 J	0.077 J	4.7 J	4.8	5	1020 J	
D-SB-788-03	SB-788	3	3	20100908	--	1.9	25.4	0.73	1.1	8.8	6.1	17.2 L	5730	
D-SB-788-05	SB-788	5	5	20100908	0.16 J	5	9.1	1.7	0.016 B	24.4	4	19.1 L	28800	
D-SB-788-07	SB-788	7	7	20100908	0.11 J	2.8	21.2	2.2	0.018 B	13.8	4.1	19.4 L	8690	
D-SB-788-09	SB-788	9	9	20100908	0.15 J	4.8	13.9	2.4	0.052 J	19.8	4.2	20.2 L	20800	
D-SB-788-11	SB-788	11	11	20100908	0.43 J	5.6	25.2	--	0.034 J	34	12.3	22.5 L	49900	
D-SB-788-13	SB-788	13	13	20100908	0.31 J	7.5	10.8	--	0.021 B	30.2	5.1	24 L	42200	
D-SB-788-15	SB-788	15	15	20100908	0.39 J	5.2	23	5.5	0.031 B	30.9	11.2	20.5 L	43700	
D-SB-788-SS	SB-788	0	1	20100908	0.034 J	0.95	6.8	0.087 J	--	12.4	1.5	4.2 L	5460	
D-SB-789-03	SB-789	3	3	20100908	0.069 J	3.1	21.5	0.28	0.026 B	11.3	3.4	7.9 L	7830	
D-SB-789-05	SB-789	5	5	20100908	0.18 J	5.5	13.2	1.2	0.024 B	22.1	6.8	22.3 L	28200	
D-SB-789-07	SB-789	7	7	20100908	0.24 J	8.8	18.8	3.1	0.023 B	32.6	5.4	55.6 L	38300	
D-SB-789-09	SB-789	9	9	20100908	0.21 J	4	11.2	1.9	0.013 B	18.5	6.2	18.8 L	23200	
D-SB-789-11	SB-789	11	11	20100908	0.14 J	2.8	11.3	1.8	0.013 B	13.7	5.7	14.5 L	18400	
D-SB-789-13	SB-789	13	13	20100908	0.47 J	6.8	23.6	10.5	0.041 J	33.3	21.3	48.6 L	85000	
D-SB-789-15	SB-789	15	15	20100908	0.32 J	4.5	16.7	7.2	0.034 J	27.8	18.1	23.5 L	43700	
D-SB-789-SS	SB-789	0	1	20100908	0.056 J	1.7	17.3	0.2	0.024 B	11.3	1.8	9.6 L	4680	
D-SB-790-03	SB-790	3	3	20100908	0.2 B	4.5	33.8	2.2	0.12	19.5	13.7	23.2	21900	
D-SB-790-05	SB-790	5	5	20100908	0.2 B	4.9	31	2	0.4	18.3	14.3	22.3	20200	
D-SB-790-07	SB-790	7	7	20100908	0.22 J	6.3	27.8	2.6	0.12 L	18.9	24.5	23.4	22200	
D-SB-790-09	SB-790	9	9	20100908	0.23 J	4.1	19.8	2.5	0.044 J	23.7	4.6	30.1 L	33200	

APPENDIX B
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ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	0.051 J	2.1	16.1	1.6	--	9.4	2.6	12.8 L	6230
D-SB-790-13	SB-790	13	13	20100908	0.41 J	5	14	4.2	0.025 B	22.1	8.8	20.1 L	36600
D-SB-790-15	SB-790	15	15	20100908	0.22 J	3.3	20.9	4.2	0.027 B	22.7	7.4	18.5 L	28600
D-SB-790-SS	SB-790	0	1	20100908	--	0.71	3.7	--	--	8.2	0.52	2.9	3870
D-SB-791-03	SB-791	3	3	20100909	0.26 B	5.4 L	20.6	3.1 J	0.027 B	23.8	10.9	15.1	37400
D-SB-791-05	SB-791	5	5	20100909	0.14 B	3.7 L	14.9	1.6 J	0.022 B	16.9	4.3	22	22100
D-SB-791-07	SB-791	7	7	20100909	0.3 B	7.9 L	12.6	3.4 J	0.019 B	31	10.3	24.7	50200
D-SB-791-09	SB-791	9	9	20100909	--	5 L	7.4	0.82 J	0.017 B	2.2	3.4	4.7	1420
D-SB-791-11	SB-791	11	11	20100909	0.11 B	3.9 L	7.3	1 J	0.015 B	15.9	3.7	6.1	17100
D-SB-791-13	SB-791	13	13	20100909	0.18 B	2.8 L	7.2	1.3 J	0.017 B	20.6	5.9	12.5	26600
D-SB-791-15	SB-791	15	15	20100909	0.68 J	8.2 L	14.3	3.5 J	0.025 B	56.1	13.5	30.2	87200
D-SB-791-SS	SB-791	0	1	20100909	--	0.72 L	3.9	0.055 J	--	8.6	0.5	3.2	4450
D-SB-792-03	SB-792	3	3	20100909	--	5.4 L	40.6	1.5 J	0.24 B	19.6	33	31.1	18800
D-SB-792-05	SB-792	5	5	20100909	0.23 B	4.4 L	16.7	1.9 J	0.026 B	22.3	7	20.4	35700
D-SB-792-07	SB-792	7	7	20100909	0.21 B	2.9 L	12.2	1.7 J	--	17.9	7.1	13	27100
D-SB-792-09	SB-792	9	9	20100909	0.22 B	3.8 L	10.3	2.7 J	0.02 B	24.8	12.1	18.2	42300
D-SB-792-11	SB-792	11	11	20100909	0.14 B	3.3 L	11.5	2.1 J	0.019 B	26.3	8.7	17.8	34100
D-SB-792-13	SB-792	13	13	20100909	0.83 J	5 J	10.3	6.4 J	0.027 B	54.8	13.6	47.9	134000
D-SB-792-15	SB-792	15	15	20100909	0.043 B	0.65 L	9	0.99 J	0.02 B	12.1	5.4	6.3	6810
D-SB-792-SS	SB-792	0	1	20100909	0.11 B	2.3 L	23.6	0.59 J	0.081 B	11.6	4	9.4	9890
D-SB-793-03	SB-793	3	3	20100909	0.3 B	5.6 L	26.5	2.2 J	0.3 B	20.1	15.7	32.8	25900
D-SB-793-05	SB-793	5	5	20100909	0.12 B	3.6 L	15.6	0.92 J	--	18.7	5.3	21.5	27600
D-SB-793-07	SB-793	7	7	20100909	0.15 B	4.1 L	10.7	1.4 J	--	23.5	4.7	26.2	29300
D-SB-793-09	SB-793	9	9	20100909	0.3 B	3.6 J	15.7	2.6 J	0.028 B	27.3 J	18.2 J	27.8 J	35600 J
D-SB-793-11	SB-793	11	11	20100909	0.28 B	4.6 J	12.7	2.3 J	0.022 B	26.5 J	15 J	27.5 J	33500 J
D-SB-793-13	SB-793	13	13	20100909	0.17 B	2.7 J	12.6	1.5 J	0.024 B	18 J	11 J	15.8 J	22400 J

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	0.12 B	2.1 J	14.8	1.4 J	0.017 B	17.8 J	11.9 J	21.3 J	15400 J
D-SB-793-SS	SB-793	0	1	20100909	0.2 B	4.5 L	27.4	1.5 J	0.094 B	21.6	7.7	21.5	21500
D-SB-794-03	SB-794	3	3	20100909	0.28 B	5.5 J	40.2	2.3 J	0.2 B	19.4 J	30 J	27.7 J	30900 J
D-SB-794-05	SB-794	5	5	20100909	0.18 B	7 J	11.3	1 J	0.02 B	25.9 J	4.4 J	23.1 J	36000 J
D-SB-794-07	SB-794	7	7	20100909	0.3 B	6.1 J	8.1	1.1 J	--	29.7 J	6 J	29.7 J	46500 J
D-SB-794-09	SB-794	9	9	20100909	0.075 B	5.6 J	11.6	0.46 J	--	8.1 J	3 J	6.6 J	4650 J
D-SB-794-11	SB-794	11	11	20100909	0.074 B	1.5 J	15.3	0.78 J	0.014 B	9.6 J	6 J	6.5 J	9930 J
D-SB-794-13	SB-794	13	13	20100909	0.36 J	7 J	20.9	2.7 J	0.033 B	26.4 J	14.6 J	20.6 J	41800 J
D-SB-794-15	SB-794	15	15	20100909	0.17 B	2.3 J	14.7	1.4 J	0.02 B	22.6 J	10.6 J	11 J	23400 J
D-SB-794-SS	SB-794	0	1	20100909	0.41 J	4.3 J	54.4	1.6 J	0.27 B	16.2 J	14.1 J	33.6 J	20200 J
D-SB-795-03	SB-795	3	3	20100909	0.29 B	5.8 J	25.3	6.6 J	0.042 B	25.6 J	27.3 J	40.9 J	39700 J
D-SB-795-05	SB-795	5	5	20100909	0.087 B	3.9 J	20.5	0.97 J	0.015 B	16.7 J	6.7 J	18.1 J	20800 J
D-SB-795-07	SB-795	7	7	20100909	0.24 B	5.7 J	23.7	4.2 J	0.11 B	20.9 J	20.7 J	32.9 J	37200 J
D-SB-795-09	SB-795	9	9	20100909	0.3 B	4.4 J	12.6	1.3 J	0.012 B	21.7 J	7.7 J	16.6 J	27300 J
D-SB-795-11	SB-795	11	11	20100909	0.085 B	2.3 J	12.2	0.38 J	--	12.4 J	1.7 J	10.9 J	9260 J
D-SB-795-13	SB-795	13	13	20100909	0.42 J	4.2 J	15	2.4 J	0.02 B	32.7 J	11.8 J	24.2 J	39400 J
D-SB-795-15	SB-795	15	15	20100909	0.24 B	3.2 J	14	1.7 J	0.015 B	25.5 J	10 J	17.7 J	28500 J
D-SB-795-SS	SB-795	0	1	20100909	0.085 B	2.6 J	12.6	0.15 J	0.011 B	26.2 J	1.4 J	4.5 J	10200 J
D-SB-796-03	SB-796	3	3	20100910	0.19 J	3.4	38.2	1.3	0.24	15.3	9.3	16.7	15400
D-SB-796-05	SB-796	5	5	20100910	0.2 J	9.4	32.5	2.3	0.016 B	32.2	6.7	51.9	50200
D-SB-796-07	SB-796	7	7	20100910	0.21 J	3.1	9.8	1.3	0.016 B	15.8	3.5	17.4	28100
D-SB-796-09	SB-796	9	9	20100910	0.19 J	4.3	11.4	2.3	0.025 B	22.7	8.9	30.3	36700
D-SB-796-11	SB-796	11	11	20100910	0.065 J	1.3	10.5	0.91	0.023 B	17.3	3.9	9.4	11100
D-SB-796-13	SB-796	13	13	20100910	--	0.43 J	6.7	0.48	0.025 B	3.7	2.4	6.2	1050
D-SB-796-15	SB-796	15	15	20100910	0.2 J	7.3	9.7	0.71	0.02 B	3.5	3.6	23.2	1610
D-SB-796-SS	SB-796	0	1	20100910	0.37 J	4.9	34.3	2.1	0.053 J	19.3	10.9	26.6	22900

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	--	2.1	11 J	--	0.17 J	11	1.3	3.7	NA
D-SB-872-1-2	SB-872	1	2	20120424	--	2.2	10 J	1.1	0.068 J	19	6	9.6	NA
D-SB-872-2-4	SB-872	2	4	20120424	0.54 B	4	13 J	3.6	0.28 J	25	11	30	NA
D-SB-872-4-6	SB-872	4	6	20120424	--	3.7	15 J	2	0.1 J	18	12	13	NA
D-SB-872-6-8	SB-872	6	8	20120424	--	5.1 J	18 J	3.8	0.38 J	24	12	29	NA
D-SB-873-0-1	SB-873	0	1	20120423	--	3.5	22 J	1.1	0.29 J	18 J	9.1	11	NA
D-SB-873-1-2	SB-873	1	2	20120423	--	6.7 J	28 J	1.5 J	--	21 J	8.8	20	NA
D-SB-873-2-4	SB-873	2	4	20120423	--	6.3	17 J	1.3	0.067 J	24 J	6.6	16	NA
D-SB-873-4-6	SB-873	4	6	20120423	--	4.9	6.7 J	1.1	0.069 J	22 J	4	11	NA
D-SB-873-6-8	SB-873	6	8	20120423	2.1 J	3.2 J	5.3 J	0.61	--	16 J	1.9	9.3	NA
D-SB-874-0-1	SB-874	0	1	20120424	0.45 B	1.9	15 J	--	0.21 J	13	1.7 L	4.3	NA
D-SB-874-1-2	SB-874	1	2	20120424	0.49 B	4.2	12 J	1.1	0.26 J	21	5.9	18	NA
D-SB-874-2-4	SB-874	2	4	20120424	0.75 B	3	17 J	1.7	0.38 J	24	8.2	16	NA
D-SB-874-4-6	SB-874	4	6	20120424	0.53 B	4.4	25	1.5	0.24 J	21	7.8	16	NA
D-SB-874-6-8	SB-874	6	8	20120424	--	3.6	15 J	1.2	0.21 J	16	10	15	NA
D-SB-875-0-1	SB-875	0	1	20120423	1.3 J	1.8	15 J	--	0.1 J	12 J	1.9 L	3.9 L	NA
D-SB-875-1-2	SB-875	1	2	20120423	--	24	17 J	0.65	--	26 J	2.7	13	NA
D-SB-875-2-4	SB-875	2	4	20120423	1.7 J	7.7	77 J	1.3	0.22 J	53 J	44	38	NA
D-SB-875-4-6	SB-875	4	6	20120423	0.57 J	4.3	7.2 J	1.3	0.46 J	25 J	3.5	21	NA
D-SB-875-6-8	SB-875	6	8	20120423	1.1 J	4.6	5.2 J	1.1	0.6	30 J	5.4	9.9	NA
D-SB-876-0-1	SB-876	0	1	20120423	--	3	30 J	0.31 B	0.21 J	18 J	6.2	6.4	NA
D-SB-876-1-2	SB-876	1	2	20120423	--	3.7	12 J	0.93 J	0.12 J	26 J	4.4	11	NA
D-SB-876-2-4	SB-876	2	4	20120423	2.5 J	9 J	29 J	1.6 J	--	27 J	8.3	21	NA
D-SB-876-4-6	SB-876	4	6	20120423	0.82 J	4.5	26 J	1.4	--	23 J	6.1	27	NA
D-SB-876-6-8	SB-876	6	8	20120423	0.59 J	2.1	6.6 J	1.1	--	18 J	3.5	20	NA
D-SB-877-0-1	SB-877	0	1	20120425	--	3.9	20 J	1.3	0.054 J	19 J	7.1	13	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	--	4.2	31 J	0.86	0.21 J	19 J	15	10	NA
D-SB-877-2-4	SB-877	2	4	20120425	--	4.2	27 J	1.4	0.2 J	18 J	18	26	NA
D-SB-877-4-6	SB-877	4	6	20120425	--	4.3	6.6 J	1.2	0.08 J	29 J	10	24	NA
D-SB-877-6-8	SB-877	6	8	20120425	--	7.4 J	19 J	1.7 J	--	34 J	12	22 L	NA
D-SB-878-0-1	SB-878	0	1	20120424	--	3.8	51	1.1	0.34 J	16	8.3	14	NA
D-SB-878-1-2	SB-878	1	2	20120424	--	3.3	30	0.98	0.16 J	15	7.9	14	NA
D-SB-878-2-4	SB-878	2	4	20120424	--	3.9	13 J	2.2	0.16 J	25	25	41	NA
D-SB-878-4-6	SB-878	4	6	20120424	--	3	21	1.3	0.1 J	20	23	30	NA
D-SB-878-6-8	SB-878	6	8	20120424	--	8.3	34 J	2.3	0.3 J	30	25	35	NA
D-SB-879-0-1	SB-879	0	1	20120425	--	3	35 J	0.78	0.12 J	13 J	5.4	9.7	NA
D-SB-879-1-2	SB-879	1	2	20120425	--	2.9	33 J	0.91	0.1 J	14 J	6.2	12	NA
D-SB-879-2-4	SB-879	2	4	20120425	--	3.8	12 J	1.2	0.065 J	16 J	8.9	26	NA
D-SB-879-4-6	SB-879	4	6	20120425	--	4.9 J	50 J	1.7 J	--	17 J	19	23 L	NA
D-SB-879-6-8	SB-879	6	8	20120425	--	6.4 J	29 J	2.6 J	--	22 J	21 L	28 L	NA
D-SB-880-0-1	SB-880	0	1	20120424	--	3	46	0.64 B	0.065 J	12	3.8	7.4	NA
D-SB-880-1-2	SB-880	1	2	20120424	--	2.7	43	1.1	0.14 J	13	11	12	NA
D-SB-880-2-4	SB-880	2	4	20120424	--	3.4	20 J	2	0.15 J	23	19	28	NA
D-SB-880-4-6	SB-880	4	6	20120424	--	14	41 J	2.1 J	0.32 J	19	21	24	NA
D-SB-880-6-8	SB-880	6	8	20120424	--	4.5 J	24 J	3.8	0.23 J	22	23	37	NA
D-SB-881-0-1	SB-881	0	1	20120425	--	2.5	150 J	0.62	0.21 J	12 J	4.4	6.7	NA
D-SB-881-1-2	SB-881	1	2	20120425	--	2.3	77 J	0.46	0.12 J	9.6 J	3.1	6.4	NA
D-SB-881-2-4	SB-881	2	4	20120425	--	3.8	14 J	1.3	0.07 J	18 J	9.7	13	NA
D-SB-881-4-6	SB-881	4	6	20120425	--	5.8 J	23 J	4.2	0.33 J	23 J	17	32	NA
D-SB-881-6-8	SB-881	6	8	20120425	--	3.1	10 J	1	0.062 J	10 J	9.3	11	NA
D-SS-782-01	SB-782	0	1	20100902	0.15 J	2.2 J	40.7	0.28	0.24 K	9 J	2 J	6 J	7620 J
D-SS-783-01	SB-783	0	1	20100902	0.25 B	2.4 J	17.3	0.28	0.11 K	9.1 J	3.2 J	9 J	6110 J

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	0.076 B	2.8 J	17	0.19	0.046 B	8.5 J	6.4 J	6.7 J	5100 J
D-SS-785-01	SB-785	0	1	20100903	0.063 J	1.6	4.1 J	0.065 J	--	14.2	0.65	5.1 J	6620 J
D-SS-786-01	SB-786	0	1	20100903	0.24 J	6	37.1 J	2	0.11 J	20.8	8.9	22.4 J	25400 J
D-SS-787-01	SB-787	0	1	20100903	0.19 J	5.3	30.7 J	1.9	0.4 L	18.6	27.5	21.6 J	21500 J
SB-247-05	SB-247	5	5	20050607	0.7	4	30	2.5	0.2	22.1	10.7	21	NA
SB-247-10	SB-247	10	10	20050607	1	--	24	1.3	0.4	20.4	6.2	34	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	0.8	6	31	1.8	0.1	24.6	11.4	21	NA
SB-248-10	SB-248	10	10	20050607	--	8	13	2.5	0.1	37.2	30.1	16	NA
SB-248-15	SB-248	15	15	20050607	0.4	2 B	5	2.2	0.09	28.2	8.5	36	NA
SB-249-05	SB-249	5	5	20050607	0.4	3 B	42	2.7	0.3	18	19.6	20	NA
SB-249-10	SB-249	10	10	20050607	--	7	17	2.7	0.2	49.3	3.4	7	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	--	4.9 L	NA	--	--	23 J	NA	54	NA
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	4.91	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	--	1 L	NA	--	--	7.1 K	NA	34 L	NA
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	--	2 L	NA	--	--	35	NA	23 L	NA
SB-65-10	SB-065	10	10	20040917	--	--	NA	--	--	16	NA	17 L	NA
SB-65-15	SB-065	15	15	20040917	--	--	NA	--	--	--	NA	5 L	NA
SB-65-20	SB-065	20	20	20040917	--	--	NA	--	--	--	NA	3.4 L	NA
SB-65-SS	SB-065	0	0	20040917	--	0.54 L	NA	--	--	3.1 K	NA	--	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	20.4	34.2	0.53	0.24	11 J	1.2	0.27	0.12 B	16.8 J
D-SB-782-05	SB-782	5	5	20100902	7.3	11.1	--	0.35	8.9 J	1.3	--	0.15 J	17.7 J
D-SB-782-07	SB-782	7	7	20100902	7.9	81	--	0.57	28.5 J	2.1	--	0.17 J	53.2 J
D-SB-782-09	SB-782	9	9	20100902	7.1	42.8	--	0.45	19.3 J	1.7	--	0.14 B	44.1 J
D-SB-782-11	SB-782	11	11	20100902	4.9	33.6	--	0.43	31.6 J	2.3	--	0.11 B	41 J
D-SB-782-13	SB-782	13	13	20100902	10.4	31.6	--	0.67	15.7 J	2	0.082 J	0.13 B	29.7 J
D-SB-782-15	SB-782	15	15	20100902	5.6	9.7	--	--	17.6 J	4.5	--	0.14 B	6.6 J
D-SB-783-03	SB-783	3	3	20100902	1010	97.8	0.47	0.48	18.2 J	1	0.25	--	24.5 J
D-SB-783-05	SB-783	5	5	20100902	4.5	16.5	--	0.52	14.7 J	0.6 J	--	0.067 B	46 J
D-SB-783-07	SB-783	7	7	20100902	6.2	46.5	--	0.73	14.4 J	0.93	--	0.05 B	65.7 J

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	3.2	9.4	--	--	4.5 J	1.5	--	0.07 B	10.4 J
D-SB-783-11	SB-783	11	11	20100902	4.8	30.9	--	0.12 J	9.1 J	1.3	--	0.077 B	13.8 J
D-SB-783-13	SB-783	13	13	20100902	6	14.9	--	0.17 J	6.3 J	1.5	--	0.1 B	17.7 J
D-SB-783-15	SB-783	15	15	20100902	6.7	64.2	--	0.51	24.4 J	1.8	--	0.089 B	36.3 J
D-SB-784-03	SB-784	3	3	20100902	9.4	67.3	--	0.29	21.4 J	2.5	--	0.081 B	25.3 J
D-SB-784-05	SB-784	5	5	20100902	7.7	118	--	0.89	16.6 J	0.86	--	0.038 B	57.7 J
D-SB-784-07	SB-784	7	7	20100902	7.4	61.5	--	0.54	24.8 J	2.7	--	0.12 B	38.3 J
D-SB-784-09	SB-784	9	9	20100902	4.4	14.9	--	--	4.4 J	3.3	--	0.1 B	9.7 J
D-SB-784-11	SB-784	11	11	20100902	4.4	52.5	--	0.15 J	18.1 J	1	--	0.07 B	14.9 J
D-SB-784-13	SB-784	13	13	20100902	4.4	55.4	--	0.44	25.4 J	0.89	--	0.074 B	42.2 J
D-SB-784-15	SB-784	15	15	20100902	6.3	142	--	0.82	37.6 J	1.4	0.026 J	0.11 B	50.4 J
D-SB-785-03	SB-785	3	3	20100903	13.8 J	94.3 J	0.3 K	0.54	14.6 J	2.6 L	0.2 K	0.064 J	25.7
D-SB-785-05	SB-785	5	5	20100903	21.7 J	95.3 J	0.4 K	0.56	41 J	4 L	0.33 K	0.063 J	34.4
D-SB-785-07	SB-785	7	7	20100903	2.9 J	38 J	--	0.81	8.3 J	0.45 J	--	--	21.8
D-SB-785-09	SB-785	9	9	20100908	6.7	63.2	--	0.17 J	35.4 J	1.2 J	--	0.12	24.5
D-SB-785-11	SB-785	11	11	20100908	6.7	66.4	--	0.32	22.4 J	1.1 J	--	0.12	30.7
D-SB-785-13	SB-785	13	13	20100908	14	96	0.059 J	0.6	32.8 J	1.1 J	0.029 J	0.094 B	34.4
D-SB-785-15	SB-785	15	15	20100908	4.8	54.1	--	0.55	27.7 J	1.5 L	--	0.084 B	48.3
D-SB-786-03	SB-786	3	3	20100903	12.2 J	50.1 J	0.16 K	0.33	27.6 J	2.4 L	0.16 K	0.057 J	28.4
D-SB-786-05	SB-786	5	5	20100903	13.4 J	91.2 J	0.16 K	0.52	39.2 J	3.5 L	0.08 J	0.065 J	38.4
D-SB-786-07	SB-786	7	7	20100903	5.9 J	33.5 J	0.021 J	0.49	20.3 J	1.3 L	--	0.033 J	33.7
D-SB-786-09	SB-786	9	9	20100903	7 J	16.6 J	--	0.69	23.8 J	1.2 L	--	0.018 J	68
D-SB-786-11	SB-786	11	11	20100903	2.8 J	3.1 J	--	--	2.5 J	4.6 L	--	0.037 J	4.6
D-SB-786-13	SB-786	13	13	20100903	3.8 J	5.6 J	--	0.13 J	14 J	2 L	--	0.12 L	16.5
D-SB-786-15	SB-786	15	15	20100908	1.3	1.6	--	0.095 J	3.2 J	0.57 J	0.047 J	0.064 B	1.6
D-SB-787-03	SB-787	3	3	20100908	13.1	111	0.096 J	0.4	30 J	1.4 L	0.14 J	0.076 B	32.1

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	9.1	66.1	--	0.72	22.3 J	1.1 J	--	0.099 B	42.5
D-SB-787-07	SB-787	7	7	20100903	8 J	89 J	--	0.93	34 J	1.2 L	--	0.079 J	50.6
D-SB-787-09	SB-787	9	9	20100908	6.8	43.4	--	1	51.2 J	1.7 L	--	0.064 B	88.5
D-SB-787-11	SB-787	11	11	20100908	12.3	20.4	--	0.78	16.1 J	1.5 L	--	0.056 B	66.9
D-SB-787-13	SB-787	13	13	20100908	8.2	15.9	--	0.31	25 J	1.6 L	--	0.11 J	54.8
D-SB-787-15	SB-787	15	15	20100908	3.5	6.9	--	0.18 J	9.1 J	1.8 L	0.026 J	0.07 B	6
D-SB-788-03	SB-788	3	3	20100908	30.6	17	0.6	0.16 J	11.1	1.3 J	0.65	--	13.1
D-SB-788-05	SB-788	5	5	20100908	4.9	22.5	--	0.5	12.2	0.5 J	--	0.04 B	49.8
D-SB-788-07	SB-788	7	7	20100908	6.2	10.2	--	0.53	7.6	1.5 J	--	0.12 B	37.9
D-SB-788-09	SB-788	9	9	20100908	5.6	17.8	--	0.56	9.2	1.1 J	--	0.073 B	41.1
D-SB-788-11	SB-788	11	11	20100908	9.8	104	--	0.77	37.6	1.8 J	--	0.15 J	40
D-SB-788-13	SB-788	13	13	20100908	6.4	38.8	--	0.77	16.9	0.6 J	--	0.052 J	64.7
D-SB-788-15	SB-788	15	15	20100908	8.6	93.6	--	0.7	34.8	1.7 J	--	0.13 B	36.7
D-SB-788-SS	SB-788	0	1	20100908	2.2	28.6	--	0.23	3.3	0.16 J	--	--	12.1
D-SB-789-03	SB-789	3	3	20100908	6.8	21.1	0.028	0.37	5.7	0.61 J	0.027 B	0.089 B	20.3
D-SB-789-05	SB-789	5	5	20100908	7.8	33.5	--	0.57	17	0.6 J	0.025 B	0.075 B	44
D-SB-789-07	SB-789	7	7	20100908	5.8	29.9	--	0.73	14.3	1.1 J	0.026 B	0.047 B	69.5
D-SB-789-09	SB-789	9	9	20100908	5.3	58.6	--	0.33	17.7	1.6 J	--	0.064 B	42.6
D-SB-789-11	SB-789	11	11	20100908	4.5	49	--	0.22 J	15.7	1.8 J	--	0.057 B	24.8
D-SB-789-13	SB-789	13	13	20100908	10.3	341	--	1	54.1	1.6 J	0.029 B	0.11 B	66.2
D-SB-789-15	SB-789	15	15	20100908	5.9	106	--	0.67	41.7	1.5 J	0.024 B	0.086 B	56.5
D-SB-789-SS	SB-789	0	1	20100908	7.8	10.8	0.019 J	0.31	3.1	0.58 J	0.025 B	0.067 B	17.4
D-SB-790-03	SB-790	3	3	20100908	16.5	84.9	0.36	0.39	28.4	2.3	0.24 K	0.042 J	29.6
D-SB-790-05	SB-790	5	5	20100908	30.9	112	0.21	0.49	31	2.4	0.25 K	0.053 J	27.5
D-SB-790-07	SB-790	7	7	20100908	20.6	78.4	0.63	0.35	41.4	3.5	0.32 K	0.051 J	28
D-SB-790-09	SB-790	9	9	20100908	9.3	62.4	--	0.46	15.3	1 J	0.024 B	0.12 B	42

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	3.6	5.2	--	0.11 J	5.4	1.4 J	--	0.088 B	17.1
D-SB-790-13	SB-790	13	13	20100908	7.4	107	--	0.6	27.6	3.3 J	--	0.094 B	35.1
D-SB-790-15	SB-790	15	15	20100908	4.2	47.2	--	0.46	24.6	2.3 J	--	0.089 B	38.5
D-SB-790-SS	SB-790	0	1	20100908	0.98	14	--	0.14 J	0.64	0.16 J	--	--	10.9
D-SB-791-03	SB-791	3	3	20100909	13.4	90.1 J	--	0.52	40.7	1.4 L	--	0.082 J	37.5
D-SB-791-05	SB-791	5	5	20100909	5.5	28.4 J	--	0.63	10.7	0.98 L	0.024 B	0.11 J	30.9
D-SB-791-07	SB-791	7	7	20100909	6.7	161 J	--	0.8	36.2	2.4 L	--	0.079 J	51.2
D-SB-791-09	SB-791	9	9	20100909	5.6	7.2 J	--	--	5.3	7.2 L	--	0.064 J	2.1
D-SB-791-11	SB-791	11	11	20100909	5.6	7.4 J	--	0.28	9.3	4.9 L	--	0.06 J	23.5
D-SB-791-13	SB-791	13	13	20100909	4.9	11.7 J	--	0.61	17.7	1.4 L	--	0.051 J	44.3
D-SB-791-15	SB-791	15	15	20100909	18.4	23.8 J	--	1.5	27.9	1.3 L	--	0.1 J	102
D-SB-791-SS	SB-791	0	1	20100909	1.1	9.4 J	--	0.14 B	0.76	0.11 J	--	--	12.2
D-SB-792-03	SB-792	3	3	20100909	54.1	88.8 J	1.3	0.53	37	2 L	1.9	--	29
D-SB-792-05	SB-792	5	5	20100909	5.2	53.1 J	--	0.65	18.7	0.84 L	--	0.099 J	46
D-SB-792-07	SB-792	7	7	20100909	3.3	40.2 J	--	0.57	19	0.99 L	--	0.064 J	35.9
D-SB-792-09	SB-792	9	9	20100909	2.9	30 J	--	0.74	30.1	1.1 L	--	0.06 J	67.2
D-SB-792-11	SB-792	11	11	20100909	6.7	20.8 J	--	0.54	16.1	1 L	0.021 B	0.06 J	55.7
D-SB-792-13	SB-792	13	13	20100909	15.9	31.1 J	--	1.5	37.5	0.97 L	0.02 B	0.068 J	111
D-SB-792-15	SB-792	15	15	20100909	2.4	5.8 J	--	0.11 B	8.5	0.93 L	--	0.057 J	14.9
D-SB-792-SS	SB-792	0	1	20100909	9.8	124 J	0.17	0.5	7.7	0.61 L	0.18	0.038 J	16.6
D-SB-793-03	SB-793	3	3	20100909	26.4	69.5 J	0.47	0.49	34.2	3 L	0.37	0.069 J	30.8
D-SB-793-05	SB-793	5	5	20100909	4.7	15.2 J	--	0.55	10.2	0.73 L	--	0.069 J	41.9
D-SB-793-07	SB-793	7	7	20100909	3.7	20.4 J	--	0.4	10.9	0.81 L	--	0.044 J	39.1
D-SB-793-09	SB-793	9	9	20100909	4	69.4 J	--	0.59	39.4 J	1.3 L	--	0.1 J	46 J
D-SB-793-11	SB-793	11	11	20100909	6.8	20.5 J	--	0.65	28.5 J	1 L	0.024 B	0.093 J	54.7 J
D-SB-793-13	SB-793	13	13	20100909	6.5	10.2 J	--	0.44	18.7 J	0.97 L	--	0.091 J	35.1 J

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	4.9	7.1 J	--	0.24 B	23.3 J	1.3 L	--	0.14	28.1 J
D-SB-793-SS	SB-793	0	1	20100909	15.8	39.3 J	0.069 J	0.45	15	1.7 L	0.24 K	0.053 J	43.3
D-SB-794-03	SB-794	3	3	20100909	33.3	326 J	0.7	0.63	40.8 J	1.8 L	0.88	--	29.9 J
D-SB-794-05	SB-794	5	5	20100909	4.8	28.2 J	--	0.53	14 J	0.49 J	--	0.05 J	48.7 J
D-SB-794-07	SB-794	7	7	20100909	4.6	44.9 J	--	0.57	16.7 J	0.63 L	--	0.036 J	55 J
D-SB-794-09	SB-794	9	9	20100909	4.1	5.9 J	--	--	4.7 J	2.1 L	--	0.11 J	7.9 J
D-SB-794-11	SB-794	11	11	20100909	4.1	20 J	--	0.09 B	12.1 J	1.3 L	--	0.094 J	15.5 J
D-SB-794-13	SB-794	13	13	20100909	8.1	50.8 J	--	0.63	35.2 J	4.5 L	0.026 B	0.11 J	45.7 J
D-SB-794-15	SB-794	15	15	20100909	3	20.6 J	--	0.32	23.5 J	1.5 L	0.021 B	0.096 J	31.1 J
D-SB-794-SS	SB-794	0	1	20100909	56.2	183 J	1.7	0.52	21.3 J	1.2 L	1.4	0.094 B	25.8 J
D-SB-795-03	SB-795	3	3	20100909	12.4	110 J	--	0.45	53.2 J	4.1 L	0.028 B	0.079 J	42.7 J
D-SB-795-05	SB-795	5	5	20100909	8.2	28.1 J	--	0.86	13.3 J	0.69 J	--	0.084 J	33.3 J
D-SB-795-07	SB-795	7	7	20100909	10.5	74.5 J	0.023 J	0.39	42.5 J	4.1 L	0.034 B	0.09 J	32.7 J
D-SB-795-09	SB-795	9	9	20100909	6.4	74 J	--	0.41	20.2 J	1.4 L	--	0.08 J	38.5 J
D-SB-795-11	SB-795	11	11	20100909	4.9	11.4 J	--	0.087 B	3.9 J	1.4 L	--	0.12	14.6 J
D-SB-795-13	SB-795	13	13	20100909	7.5	52.1 J	--	0.58	30 J	1.5 L	--	0.14	43.2 J
D-SB-795-15	SB-795	15	15	20100909	4.4	41.9 J	--	0.42	24.5 J	2.2 L	--	0.1 J	36.4 J
D-SB-795-SS	SB-795	0	1	20100909	2	15.6 J	0.091 J	0.26	2.7 J	0.29 J	--	--	19.4 J
D-SB-796-03	SB-796	3	3	20100910	17.1	44.6	0.51	0.4	17.3	1.3	0.31	0.065 B	24.8
D-SB-796-05	SB-796	5	5	20100910	9.6	23.5	--	1.2	12.1	1.6	0.038 J	0.13 B	57.6
D-SB-796-07	SB-796	7	7	20100910	3.4	20	--	0.57	10.1	1.3	--	0.053 B	41.8
D-SB-796-09	SB-796	9	9	20100910	3.3	20.9	--	0.78	28.3	1.4	--	0.057 B	68.5
D-SB-796-11	SB-796	11	11	20100910	2.8	5	--	0.16 J	8.5	1 K	--	0.052 B	26.5
D-SB-796-13	SB-796	13	13	20100910	1.4	2.9	--	--	4.1	0.72 K	--	0.041 B	4.2
D-SB-796-15	SB-796	15	15	20100910	1.8	3.6	--	0.078 J	5.7	0.94 K	0.029 J	0.08 B	2.6
D-SB-796-SS	SB-796	0	1	20100910	29.8	80.2	0.56	0.61	24.6	2.2	0.35	--	28.8

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	2.2	NA	--	1.2 J	4.1	--	--	--	15
D-SB-872-1-2	SB-872	1	2	20120424	4.2	NA	--	--	16	--	--	--	34
D-SB-872-2-4	SB-872	2	4	20120424	12	NA	0.18	--	30	--	--	--	46
D-SB-872-4-6	SB-872	4	6	20120424	6.2	NA	0.075 B	--	29	--	--	--	33
D-SB-872-6-8	SB-872	6	8	20120424	15	NA	0.34	--	29	--	--	--	41
D-SB-873-0-1	SB-873	0	1	20120423	8.7	NA	0.19	0.65 J	30	--	--	--	24 J
D-SB-873-1-2	SB-873	1	2	20120423	17	NA	0.27	--	20 J	--	--	--	33 J
D-SB-873-2-4	SB-873	2	4	20120423	8.4	NA	0.024 J	0.36 J	22	--	--	--	32 J
D-SB-873-4-6	SB-873	4	6	20120423	4.8	NA	--	0.67 B	13	--	--	--	47 J
D-SB-873-6-8	SB-873	6	8	20120423	7.5	NA	--	--	6	--	--	--	33 J
D-SB-874-0-1	SB-874	0	1	20120424	4	NA	0.023 B	1.2 B	4 J	--	--	--	16
D-SB-874-1-2	SB-874	1	2	20120424	5.4	NA	0.024 B	0.32 B	14	--	0.14 J	--	36
D-SB-874-2-4	SB-874	2	4	20120424	9.4	NA	0.032 B	0.88 B	16	--	0.54 J	--	30
D-SB-874-4-6	SB-874	4	6	20120424	7.9	NA	0.05 B	0.55 B	17	--	--	--	33
D-SB-874-6-8	SB-874	6	8	20120424	8.9	NA	0.036 B	0.6 B	15	--	--	--	30
D-SB-875-0-1	SB-875	0	1	20120423	6.1	NA	0.019 J	0.29 B	10	--	--	--	16 J
D-SB-875-1-2	SB-875	1	2	20120423	8.7	NA	0.077 J	--	8.6	--	--	--	57 J
D-SB-875-2-4	SB-875	2	4	20120423	39	NA	0.15	0.39 B	64	--	--	1.2 J	360 J
D-SB-875-4-6	SB-875	4	6	20120423	5.5	NA	0.03 J	0.73 B	13	--	--	--	58 J
D-SB-875-6-8	SB-875	6	8	20120423	8.1	NA	--	0.51 B	21	--	--	--	74 J
D-SB-876-0-1	SB-876	0	1	20120423	8.7	NA	0.078 J	0.75 J	39	--	--	--	23 J
D-SB-876-1-2	SB-876	1	2	20120423	11	NA	0.16	0.49 J	11	--	--	--	71 J
D-SB-876-2-4	SB-876	2	4	20120423	13	NA	0.46	--	33	--	--	--	36 J
D-SB-876-4-6	SB-876	4	6	20120423	7.7	NA	0.053 J	0.34 B	13	--	--	--	43 J
D-SB-876-6-8	SB-876	6	8	20120423	3.5	NA	--	0.31 J	13	--	--	--	38 J
D-SB-877-0-1	SB-877	0	1	20120425	6.5 J	NA	0.021 J	0.33 J	15	--	--	--	30 J

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	78 J	NA	0.23	0.36 J	15	--	--	--	30 J
D-SB-877-2-4	SB-877	2	4	20120425	16 J	NA	0.11	0.37 J	28	--	--	--	32 J
D-SB-877-4-6	SB-877	4	6	20120425	6.4 J	NA	0.02 J	--	28	--	--	--	43 J
D-SB-877-6-8	SB-877	6	8	20120425	18 J	NA	0.13	--	24	--	--	--	38 J
D-SB-878-0-1	SB-878	0	1	20120424	21	NA	0.082 J	0.43 J	13	--	--	--	36
D-SB-878-1-2	SB-878	1	2	20120424	23	NA	0.049 B	0.4 J	11	0.5 J	--	--	32
D-SB-878-2-4	SB-878	2	4	20120424	6.8	NA	--	0.3 J	47	--	--	--	47
D-SB-878-4-6	SB-878	4	6	20120424	5.1	NA	0.016 B	0.31 J	39	--	--	--	36
D-SB-878-6-8	SB-878	6	8	20120424	37	NA	0.15 J	2.5 J	36	1.3 J	--	--	62
D-SB-879-0-1	SB-879	0	1	20120425	18 J	NA	0.038 J	0.38 J	9.6	--	--	--	26 J
D-SB-879-1-2	SB-879	1	2	20120425	13 J	NA	0.043 J	0.34 J	11	--	--	--	28 J
D-SB-879-2-4	SB-879	2	4	20120425	6.9 J	NA	--	0.29 J	21	--	--	--	28 J
D-SB-879-4-6	SB-879	4	6	20120425	20 J	NA	0.089 J	--	28	--	--	--	28 J
D-SB-879-6-8	SB-879	6	8	20120425	26 J	NA	0.42	--	46	--	--	--	28 J
D-SB-880-0-1	SB-880	0	1	20120424	5.2	NA	0.029 B	--	8.8	0.55 J	--	--	28
D-SB-880-1-2	SB-880	1	2	20120424	15	NA	0.045 B	0.29 J	12	--	--	--	28
D-SB-880-2-4	SB-880	2	4	20120424	5.7	NA	--	0.3 J	38	--	--	--	43
D-SB-880-4-6	SB-880	4	6	20120424	24	NA	1.3	--	26	--	--	--	24
D-SB-880-6-8	SB-880	6	8	20120424	18	NA	0.21	--	44	--	--	--	32
D-SB-881-0-1	SB-881	0	1	20120425	11 J	NA	--	0.44 J	7.3	--	--	1.9 J	40 J
D-SB-881-1-2	SB-881	1	2	20120425	8.4 J	NA	--	0.26 J	5.7	--	--	--	24 J
D-SB-881-2-4	SB-881	2	4	20120425	6.2 J	NA	0.027 J	0.29 J	20	--	--	--	25 J
D-SB-881-4-6	SB-881	4	6	20120425	16 J	NA	--	--	48	--	--	--	36 J
D-SB-881-6-8	SB-881	6	8	20120425	8.3 J	NA	0.063 J	1 J	13	--	--	--	20 J
D-SS-782-01	SB-782	0	1	20100902	45.5	102	0.08 J	0.45	5.1 J	0.4 J	0.099 J	0.042 B	14.2 J
D-SS-783-01	SB-783	0	1	20100902	25.1	30.8	0.077 J	0.38	5.2 J	0.46 J	0.097 J	0.069 B	15.7 J

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	16.4	24.9	0.05 J	0.33	5.6 J	0.51 J	0.023 J	0.07 B	15.1 J
D-SS-785-01	SB-785	0	1	20100903	1.1 J	9.4 J	--	0.4	0.84 J	0.25 J	--	--	18.7
D-SS-786-01	SB-786	0	1	20100903	26.5 J	102 J	0.25 K	0.56	20.7 J	3.1 L	0.38	0.034 J	34.2
D-SS-787-01	SB-787	0	1	20100903	21.4 J	70.5 J	0.48 K	0.45	40.6 J	2.3 L	0.28 K	0.054 J	29.2
SB-247-05	SB-247	5	5	20050607	18	NA	0.1 K	--	30	2	--	--	33
SB-247-10	SB-247	10	10	20050607	7	NA	--	--	12	4	--	--	28.4
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	9	NA	0.06 K	0.6 B	13	5	--	--	40.3
SB-248-10	SB-248	10	10	20050607	6	NA	--	0.5 B	52	4	--	--	51
SB-248-15	SB-248	15	15	20050607	3	NA	--	0.6 B	36	5	--	0.8 B	61.4
SB-249-05	SB-249	5	5	20050607	13	NA	0.4 K	--	37	4	--	--	24.5
SB-249-10	SB-249	10	10	20050607	18	NA	--	0.9 B	12	5	--	--	90.5
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	120	NA	3.3	NA	23	--	--	--	NA
SB-336-0203	SB-336	2	3	20071101	NA	NA	0.066 B	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	0.04 B	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	0.35	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	0.4	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	0.093 B	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	0.82	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	0.42	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	0.042 B	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	0.055 B	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	0.13 B	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	0.22 J	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	0.025 B	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	METALS (MG/KG)								
					LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM
				Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	12 L	NA	--	NA	25	--	--	--	NA
SB-340-0203	SB-340	2	3	20071101	NA	NA	0.11 B	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	0.39 L	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	0.042 B	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	0.073 B	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	0.29 L	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	0.31 L	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	0.19 J	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	0.84 L	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	0.043 B	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	0.15 B	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	0.19 J	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	0.034 B	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	0.14 B	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	0.034 B	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	0.052 B	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	6.5 L	NA	--	NA	23	--	--	--	NA
SB-65-10	SB-065	10	10	20040917	3 L	NA	--	NA	14	--	--	--	NA
SB-65-15	SB-065	15	15	20040917	--	NA	--	NA	6.6	--	--	--	NA
SB-65-20	SB-065	20	20	20040917	--	NA	--	NA	3.5 K	--	--	--	NA
SB-65-SS	SB-065	0	0	20040917	2.8 L	NA	--	NA	9.6	--	--	--	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	52 J	NA	0.36 J	NA	--	--	NA	NA	--
D-SB-782-05	SB-782	5	5	20100902	51 J	NA	--	NA	--	--	NA	NA	--
D-SB-782-07	SB-782	7	7	20100902	45.8 J	NA	0.4 J	NA	--	--	NA	NA	--
D-SB-782-09	SB-782	9	9	20100902	37.1 J	NA	--	NA	--	--	NA	NA	--
D-SB-782-11	SB-782	11	11	20100902	47.9 J	NA	0.83 J	NA	--	--	NA	NA	--
D-SB-782-13	SB-782	13	13	20100902	47 J	NA	--	NA	--	--	NA	NA	--
D-SB-782-15	SB-782	15	15	20100902	46.5 J	NA	0.34 J	NA	--	--	NA	NA	--
D-SB-783-03	SB-783	3	3	20100902	58 J	NA	0.86 J	NA	--	--	NA	NA	--
D-SB-783-05	SB-783	5	5	20100902	50.9 J	NA	--	NA	--	--	NA	NA	--
D-SB-783-07	SB-783	7	7	20100902	27.7 J	NA	0.71 J	NA	--	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	13.4 J	NA	--	NA	--	--	NA	NA	--
D-SB-783-11	SB-783	11	11	20100902	25 J	NA	--	NA	--	--	NA	NA	--
D-SB-783-13	SB-783	13	13	20100902	21.9 J	NA	--	NA	--	--	NA	NA	--
D-SB-783-15	SB-783	15	15	20100902	48.5 J	NA	--	NA	--	--	NA	NA	--
D-SB-784-03	SB-784	3	3	20100902	35 J	NA	0.73 J	NA	--	--	NA	NA	--
D-SB-784-05	SB-784	5	5	20100902	31.2 J	NA	0.94 J	NA	--	--	NA	NA	--
D-SB-784-07	SB-784	7	7	20100902	71.3 J	NA	0.5 J	NA	--	--	NA	NA	--
D-SB-784-09	SB-784	9	9	20100902	10.8 J	NA	--	NA	--	--	NA	NA	--
D-SB-784-11	SB-784	11	11	20100902	83.2 J	NA	0.35 J	NA	--	--	NA	NA	--
D-SB-784-13	SB-784	13	13	20100902	45.7 J	NA	0.63 J	NA	--	--	NA	NA	--
D-SB-784-15	SB-784	15	15	20100902	81.3 J	NA	--	NA	--	--	NA	NA	--
D-SB-785-03	SB-785	3	3	20100903	28.6 J	NA	0.91 J	NA	--	--	NA	NA	--
D-SB-785-05	SB-785	5	5	20100903	141 J	NA	--	NA	--	--	NA	NA	--
D-SB-785-07	SB-785	7	7	20100903	19.8 J	NA	--	NA	--	--	NA	NA	--
D-SB-785-09	SB-785	9	9	20100908	127	NA	0.89 J	NA	--	--	NA	NA	--
D-SB-785-11	SB-785	11	11	20100908	65.8	NA	0.88 J	NA	--	--	NA	NA	--
D-SB-785-13	SB-785	13	13	20100908	114	NA	--	NA	--	--	NA	NA	--
D-SB-785-15	SB-785	15	15	20100908	42.5	NA	0.8 J	NA	--	--	NA	NA	--
D-SB-786-03	SB-786	3	3	20100903	58.3 J	NA	--	NA	--	--	NA	NA	--
D-SB-786-05	SB-786	5	5	20100903	90 J	NA	0.7 J	NA	--	--	NA	NA	--
D-SB-786-07	SB-786	7	7	20100903	23 J	NA	0.54 J	NA	--	--	NA	NA	--
D-SB-786-09	SB-786	9	9	20100903	20.2 J	NA	0.71 J	NA	--	--	NA	NA	--
D-SB-786-11	SB-786	11	11	20100903	3.4 J	NA	--	NA	--	--	NA	NA	--
D-SB-786-13	SB-786	13	13	20100903	16.9 J	NA	0.55 J	NA	--	--	NA	NA	--
D-SB-786-15	SB-786	15	15	20100908	4.7	NA	--	NA	--	--	NA	NA	--
D-SB-787-03	SB-787	3	3	20100908	49.5	NA	--	NA	--	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	37.8	NA	0.51 J	NA	--	--	NA	NA	--
D-SB-787-07	SB-787	7	7	20100903	38.8 J	NA	--	NA	--	--	NA	NA	--
D-SB-787-09	SB-787	9	9	20100908	57.5	NA	--	NA	--	--	NA	NA	--
D-SB-787-11	SB-787	11	11	20100908	27.2	NA	--	NA	--	--	NA	NA	--
D-SB-787-13	SB-787	13	13	20100908	45.3	NA	--	NA	--	--	NA	NA	--
D-SB-787-15	SB-787	15	15	20100908	23.5	NA	0.32 J	NA	--	--	NA	NA	--
D-SB-788-03	SB-788	3	3	20100908	205 J	NA	1.1	NA	--	--	NA	NA	--
D-SB-788-05	SB-788	5	5	20100908	26.7 J	NA	0.51 J	NA	--	--	NA	NA	--
D-SB-788-07	SB-788	7	7	20100908	24.2 J	NA	0.58 J	NA	--	--	NA	NA	--
D-SB-788-09	SB-788	9	9	20100908	32 J	NA	0.63 J	NA	--	--	NA	NA	--
D-SB-788-11	SB-788	11	11	20100908	70.5 J	NA	--	NA	--	--	NA	NA	--
D-SB-788-13	SB-788	13	13	20100908	26.5 J	NA	0.79 J	NA	--	--	NA	NA	--
D-SB-788-15	SB-788	15	15	20100908	64.2 J	NA	--	NA	--	--	NA	NA	--
D-SB-788-SS	SB-788	0	1	20100908	4.8 J	NA	0.53 J	NA	--	--	NA	NA	--
D-SB-789-03	SB-789	3	3	20100908	19 J	NA	--	NA	--	--	NA	NA	--
D-SB-789-05	SB-789	5	5	20100908	50.3 J	NA	--	NA	--	--	NA	NA	--
D-SB-789-07	SB-789	7	7	20100908	35.5 J	NA	0.87 J	NA	--	--	NA	NA	--
D-SB-789-09	SB-789	9	9	20100908	26.8 J	NA	--	NA	--	--	NA	NA	--
D-SB-789-11	SB-789	11	11	20100908	24.8 J	NA	--	NA	--	--	NA	NA	--
D-SB-789-13	SB-789	13	13	20100908	96.2 J	NA	0.36 J	NA	--	--	NA	NA	--
D-SB-789-15	SB-789	15	15	20100908	66.4 J	NA	--	NA	--	--	NA	NA	--
D-SB-789-SS	SB-789	0	1	20100908	11.8 J	NA	0.57 J	NA	--	--	NA	NA	--
D-SB-790-03	SB-790	3	3	20100908	61.1	NA	--	NA	--	--	NA	NA	--
D-SB-790-05	SB-790	5	5	20100908	87.5	NA	0.57 J	NA	240	240	NA	NA	--
D-SB-790-07	SB-790	7	7	20100908	77.9	NA	--	NA	--	--	NA	NA	--
D-SB-790-09	SB-790	9	9	20100908	39.2 J	NA	0.55 J	NA	--	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	8.9 J	NA	0.49 J	NA	--	--	NA	NA	--
D-SB-790-13	SB-790	13	13	20100908	36.9 J	NA	--	NA	--	--	NA	NA	--
D-SB-790-15	SB-790	15	15	20100908	34 J	NA	0.31 J	NA	--	--	NA	NA	--
D-SB-790-SS	SB-790	0	1	20100908	2.9	NA	0.8 J	NA	--	--	NA	NA	--
D-SB-791-03	SB-791	3	3	20100909	40.1	NA	--	NA	--	--	NA	NA	--
D-SB-791-05	SB-791	5	5	20100909	31.6	NA	0.9 J	NA	--	--	NA	NA	--
D-SB-791-07	SB-791	7	7	20100909	41.3	NA	--	NA	--	--	NA	NA	--
D-SB-791-09	SB-791	9	9	20100909	8.7	NA	0.39 J	NA	--	--	NA	NA	--
D-SB-791-11	SB-791	11	11	20100909	11.1	NA	0.32 J	NA	--	--	NA	NA	--
D-SB-791-13	SB-791	13	13	20100909	17.8	NA	--	NA	--	--	NA	NA	--
D-SB-791-15	SB-791	15	15	20100909	37.2	NA	--	NA	--	--	NA	NA	--
D-SB-791-SS	SB-791	0	1	20100909	3.1 B	NA	0.54 J	NA	--	--	NA	NA	--
D-SB-792-03	SB-792	3	3	20100909	111	NA	--	NA	--	--	NA	NA	--
D-SB-792-05	SB-792	5	5	20100909	33.6	NA	0.56 J	NA	--	--	NA	NA	--
D-SB-792-07	SB-792	7	7	20100909	19	NA	--	NA	--	--	NA	NA	--
D-SB-792-09	SB-792	9	9	20100909	31.2	NA	--	NA	--	--	NA	NA	--
D-SB-792-11	SB-792	11	11	20100909	24.1	NA	--	NA	--	--	NA	NA	--
D-SB-792-13	SB-792	13	13	20100909	45.2	NA	--	NA	--	--	NA	NA	--
D-SB-792-15	SB-792	15	15	20100909	12.8	NA	--	NA	--	--	NA	NA	--
D-SB-792-SS	SB-792	0	1	20100909	28.4	NA	0.32 J	NA	--	--	NA	NA	--
D-SB-793-03	SB-793	3	3	20100909	68.6	NA	0.42 J	NA	--	--	NA	NA	--
D-SB-793-05	SB-793	5	5	20100909	20.3	NA	--	NA	--	--	NA	NA	--
D-SB-793-07	SB-793	7	7	20100909	17.5	NA	0.48 J	NA	--	--	NA	NA	--
D-SB-793-09	SB-793	9	9	20100909	43.3 L	NA	--	NA	--	--	NA	NA	--
D-SB-793-11	SB-793	11	11	20100909	35.6 L	NA	--	NA	--	--	NA	NA	--
D-SB-793-13	SB-793	13	13	20100909	24 L	NA	--	NA	--	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	29 L	NA	--	NA	--	--	NA	NA	--
D-SB-793-SS	SB-793	0	1	20100909	49	NA	0.62 J	NA	--	--	NA	NA	--
D-SB-794-03	SB-794	3	3	20100909	94.1 L	NA	--	NA	--	--	NA	NA	--
D-SB-794-05	SB-794	5	5	20100909	21.7 L	NA	--	NA	--	--	NA	NA	--
D-SB-794-07	SB-794	7	7	20100909	19.2 L	NA	0.45 J	NA	--	--	NA	NA	--
D-SB-794-09	SB-794	9	9	20100909	7 L	NA	0.33 J	NA	--	--	NA	NA	--
D-SB-794-11	SB-794	11	11	20100909	15.4 L	NA	0.36 J	NA	--	--	NA	NA	--
D-SB-794-13	SB-794	13	13	20100909	45.2 L	NA	0.44 J	NA	--	--	NA	NA	--
D-SB-794-15	SB-794	15	15	20100909	26.2 L	NA	0.59 J	NA	--	--	NA	NA	--
D-SB-794-SS	SB-794	0	1	20100909	119 L	NA	--	NA	20 J	20	NA	NA	4 J
D-SB-795-03	SB-795	3	3	20100909	123 L	NA	0.43 J	NA	--	--	NA	NA	--
D-SB-795-05	SB-795	5	5	20100909	28.1 L	NA	0.51 J	NA	--	--	NA	NA	--
D-SB-795-07	SB-795	7	7	20100909	108 L	NA	--	NA	--	--	NA	NA	--
D-SB-795-09	SB-795	9	9	20100909	24.6 L	NA	--	NA	--	--	NA	NA	--
D-SB-795-11	SB-795	11	11	20100909	5.6 L	NA	0.67 J	NA	--	--	NA	NA	--
D-SB-795-13	SB-795	13	13	20100909	38 L	NA	0.62 J	NA	--	--	NA	NA	--
D-SB-795-15	SB-795	15	15	20100909	30.6 L	NA	--	NA	--	--	NA	NA	--
D-SB-795-SS	SB-795	0	1	20100909	5.4 L	NA	--	NA	--	--	NA	NA	--
D-SB-796-03	SB-796	3	3	20100910	95.4	NA	--	NA	--	--	NA	NA	--
D-SB-796-05	SB-796	5	5	20100910	44.8	NA	--	NA	--	--	NA	NA	--
D-SB-796-07	SB-796	7	7	20100910	10.3	NA	--	NA	--	--	NA	NA	--
D-SB-796-09	SB-796	9	9	20100910	27	NA	0.37 J	NA	--	--	NA	NA	--
D-SB-796-11	SB-796	11	11	20100910	11	NA	0.56 J	NA	--	--	NA	NA	--
D-SB-796-13	SB-796	13	13	20100910	7.3	NA	--	NA	--	--	NA	NA	--
D-SB-796-15	SB-796	15	15	20100910	12.4	NA	--	NA	--	--	NA	NA	--
D-SB-796-SS	SB-796	0	1	20100910	46.1	NA	0.36 J	NA	--	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	17	NA	--	NA	--	NA	--	--	NA
D-SB-872-1-2	SB-872	1	2	20120424	20	NA	--	NA	44	NA	--	--	NA
D-SB-872-2-4	SB-872	2	4	20120424	68	NA	--	NA	--	NA	--	--	NA
D-SB-872-4-6	SB-872	4	6	20120424	67	NA	--	NA	40	NA	--	--	NA
D-SB-872-6-8	SB-872	6	8	20120424	76	NA	--	NA	--	NA	--	--	NA
D-SB-873-0-1	SB-873	0	1	20120423	85 L	NA	--	NA	--	NA	--	--	NA
D-SB-873-1-2	SB-873	1	2	20120423	51 L	NA	--	NA	--	NA	--	--	NA
D-SB-873-2-4	SB-873	2	4	20120423	33 L	NA	--	NA	--	NA	--	--	NA
D-SB-873-4-6	SB-873	4	6	20120423	18 L	NA	--	NA	--	NA	--	--	NA
D-SB-873-6-8	SB-873	6	8	20120423	9.8 L	NA	--	NA	--	NA	--	--	NA
D-SB-874-0-1	SB-874	0	1	20120424	32	NA	--	NA	--	NA	--	--	NA
D-SB-874-1-2	SB-874	1	2	20120424	18	NA	--	NA	--	NA	--	--	NA
D-SB-874-2-4	SB-874	2	4	20120424	40	NA	--	NA	--	NA	--	98 J	NA
D-SB-874-4-6	SB-874	4	6	20120424	33	NA	--	NA	--	NA	--	--	NA
D-SB-874-6-8	SB-874	6	8	20120424	30	NA	--	NA	--	NA	--	--	NA
D-SB-875-0-1	SB-875	0	1	20120423	11 L	NA	--	NA	--	NA	--	--	NA
D-SB-875-1-2	SB-875	1	2	20120423	23 J	NA	--	NA	--	NA	--	--	NA
D-SB-875-2-4	SB-875	2	4	20120423	130 L	NA	--	NA	--	NA	--	--	NA
D-SB-875-4-6	SB-875	4	6	20120423	13 L	NA	--	NA	--	NA	--	--	NA
D-SB-875-6-8	SB-875	6	8	20120423	17 L	NA	--	NA	--	NA	--	--	NA
D-SB-876-0-1	SB-876	0	1	20120423	44 L	NA	--	NA	--	NA	--	--	NA
D-SB-876-1-2	SB-876	1	2	20120423	31 L	NA	--	NA	--	NA	--	--	NA
D-SB-876-2-4	SB-876	2	4	20120423	34 L	NA	--	NA	--	NA	--	--	NA
D-SB-876-4-6	SB-876	4	6	20120423	35 L	NA	--	NA	--	NA	--	--	NA
D-SB-876-6-8	SB-876	6	8	20120423	9.5 L	NA	--	NA	--	NA	--	--	NA
D-SB-877-0-1	SB-877	0	1	20120425	34	NA	0.31 J	NA	--	NA	--	--	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	41	NA	--	NA	50	NA	66 J	--	NA
D-SB-877-2-4	SB-877	2	4	20120425	49	NA	--	NA	--	NA	--	--	NA
D-SB-877-4-6	SB-877	4	6	20120425	25	NA	--	NA	--	NA	--	--	NA
D-SB-877-6-8	SB-877	6	8	20120425	47	NA	0.87 J	NA	--	NA	--	--	NA
D-SB-878-0-1	SB-878	0	1	20120424	51	NA	--	NA	24 J	NA	--	--	NA
D-SB-878-1-2	SB-878	1	2	20120424	38	NA	--	NA	--	NA	--	--	NA
D-SB-878-2-4	SB-878	2	4	20120424	49	NA	--	NA	--	NA	--	--	NA
D-SB-878-4-6	SB-878	4	6	20120424	36	NA	--	NA	--	NA	--	--	NA
D-SB-878-6-8	SB-878	6	8	20120424	120	NA	1.2 J	NA	--	NA	--	--	NA
D-SB-879-0-1	SB-879	0	1	20120425	34	NA	--	NA	--	NA	--	--	NA
D-SB-879-1-2	SB-879	1	2	20120425	33	NA	0.71 J	NA	--	NA	--	--	NA
D-SB-879-2-4	SB-879	2	4	20120425	27	NA	--	NA	--	NA	--	--	NA
D-SB-879-4-6	SB-879	4	6	20120425	53	NA	0.47 J	NA	--	NA	--	--	NA
D-SB-879-6-8	SB-879	6	8	20120425	140	NA	--	NA	--	NA	--	--	NA
D-SB-880-0-1	SB-880	0	1	20120424	18	NA	--	NA	--	NA	--	--	NA
D-SB-880-1-2	SB-880	1	2	20120424	42	NA	--	NA	--	NA	--	--	NA
D-SB-880-2-4	SB-880	2	4	20120424	54	NA	--	NA	--	NA	--	--	NA
D-SB-880-4-6	SB-880	4	6	20120424	91	NA	--	NA	--	NA	--	--	NA
D-SB-880-6-8	SB-880	6	8	20120424	150	NA	--	NA	--	NA	--	--	NA
D-SB-881-0-1	SB-881	0	1	20120425	27	NA	0.75 J	NA	--	NA	--	--	NA
D-SB-881-1-2	SB-881	1	2	20120425	19	NA	--	NA	--	NA	--	--	NA
D-SB-881-2-4	SB-881	2	4	20120425	42	NA	0.61 J	NA	--	NA	--	--	NA
D-SB-881-4-6	SB-881	4	6	20120425	120	NA	--	NA	--	NA	--	--	NA
D-SB-881-6-8	SB-881	6	8	20120425	31	NA	--	NA	--	NA	--	--	NA
D-SS-782-01	SB-782	0	1	20100902	23.4 J	NA	--	NA	--	--	NA	NA	--
D-SS-783-01	SB-783	0	1	20100902	27.8 J	NA	--	NA	--	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	15.5 J	NA	1.3	NA	--	--	NA	NA	--
D-SS-785-01	SB-785	0	1	20100903	3.3 J	NA	0.52 J	NA	--	--	NA	NA	--
D-SS-786-01	SB-786	0	1	20100903	48.5 J	NA	--	NA	--	--	NA	NA	--
D-SS-787-01	SB-787	0	1	20100903	139 J	NA	--	NA	--	--	NA	NA	--
SB-247-05	SB-247	5	5	20050607	57	NA	--	0.31 K	--	--	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	83	NA	NA	NA	--	--	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	--	--	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	65	NA	--	NA	--	--	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	39	NA	--	NA	--	--	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	30	NA	--	NA	--	--	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	137	NA	NA	0.474 K	--	--	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	10	NA	--	NA	--	--	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	--	--	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	180	73	NA	NA	--	--	NA	NA	NA
SB-336-0203	SB-336	2	3	20071101	NA	87.3	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	79.2	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	81.7	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	84.8	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	80.3	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	79.4	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	82.4	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	81.7	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	81.8	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	88.4	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	80.2	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	86.7	NA	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE		MISCELLANEO	MISCELLANEO	MISCELLANEO	PCBS (UG/KG)		PESTICIDES (UG/KG)		PEST
					ZINC	PERCENT SOLIDS	HEXAVALENT CHROMIUM	MERCURY (METHYL)	AROCLOR-1260	TOTAL AROCLOR	4,4'-DDE	ENDOSULFAN SULFATE	4,4'-DDD
				Units	MG/KG	%	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	1.81	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	--	NA	NA	NA	--	--	NA	NA	NA
SB-340-0203	SB-340	2	3	20071101	NA	87.3	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	82.3	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	77.7	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	85.3	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	77.8	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	66.1	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	84.1	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	73.7	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	62.5	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	79.6	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	75.4	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	79.4	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	81.3	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	80.1	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	73.4	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	--	NA	NA	NA	--	--	NA	NA	NA
SB-65-10	SB-065	10	10	20040917	--	NA	NA	NA	--	--	NA	NA	NA
SB-65-15	SB-065	15	15	20040917	--	NA	NA	NA	--	--	NA	NA	NA
SB-65-20	SB-065	20	20	20040917	--	NA	NA	NA	--	--	NA	NA	NA
SB-65-SS	SB-065	0	0	20040917	--	NA	NA	NA	--	--	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

					ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	--	--	NA	140000	--	NA	--	--	--
D-SB-782-05	SB-782	5	5	20100902	--	--	NA	9500 B	--	NA	--	--	--
D-SB-782-07	SB-782	7	7	20100902	--	--	NA	6200 B	--	NA	--	--	--
D-SB-782-09	SB-782	9	9	20100902	--	--	NA	5900 B	--	NA	--	--	--
D-SB-782-11	SB-782	11	11	20100902	--	--	NA	3200 B	--	NA	--	--	--
D-SB-782-13	SB-782	13	13	20100902	--	--	NA	6600 B	--	NA	--	--	--
D-SB-782-15	SB-782	15	15	20100902	--	--	NA	6500 B	--	NA	--	--	--
D-SB-783-03	SB-783	3	3	20100902	--	--	NA	33000	--	NA	--	--	--
D-SB-783-05	SB-783	5	5	20100902	--	--	NA	10000 J	--	NA	--	--	--
D-SB-783-07	SB-783	7	7	20100902	--	--	NA	6100 J	--	NA	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
					4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	--	--	NA	--	--	NA	--	--	--
D-SB-783-11	SB-783	11	11	20100902	--	--	NA	4400 J	--	NA	--	--	--
D-SB-783-13	SB-783	13	13	20100902	--	--	NA	--	--	NA	--	--	--
D-SB-783-15	SB-783	15	15	20100902	--	--	NA	--	--	NA	--	--	--
D-SB-784-03	SB-784	3	3	20100902	--	--	NA	3400 J	--	NA	--	--	--
D-SB-784-05	SB-784	5	5	20100902	--	--	NA	37000	--	NA	--	--	--
D-SB-784-07	SB-784	7	7	20100902	--	--	NA	6700 J	--	NA	--	--	--
D-SB-784-09	SB-784	9	9	20100902	--	--	NA	--	--	NA	--	--	--
D-SB-784-11	SB-784	11	11	20100902	--	--	NA	--	--	NA	--	--	--
D-SB-784-13	SB-784	13	13	20100902	--	--	NA	--	--	NA	--	--	--
D-SB-784-15	SB-784	15	15	20100902	--	--	NA	--	--	NA	--	--	--
D-SB-785-03	SB-785	3	3	20100903	--	--	NA	73000	--	NA	--	--	--
D-SB-785-05	SB-785	5	5	20100903	--	--	NA	4700 J	--	NA	--	--	--
D-SB-785-07	SB-785	7	7	20100903	--	--	NA	56000	--	NA	--	--	--
D-SB-785-09	SB-785	9	9	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-785-11	SB-785	11	11	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-785-13	SB-785	13	13	20100908	--	--	NA	17000	--	NA	--	--	--
D-SB-785-15	SB-785	15	15	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-786-03	SB-786	3	3	20100903	--	--	NA	26000	250	NA	16	32	--
D-SB-786-05	SB-786	5	5	20100903	--	--	NA	45000	150	NA	45	23	--
D-SB-786-07	SB-786	7	7	20100903	--	--	NA	92000	190	NA	--	11	--
D-SB-786-09	SB-786	9	9	20100903	--	--	NA	--	--	NA	--	--	--
D-SB-786-11	SB-786	11	11	20100903	--	--	NA	--	--	NA	--	--	--
D-SB-786-13	SB-786	13	13	20100903	--	--	NA	4300 J	79 J	NA	--	--	--
D-SB-786-15	SB-786	15	15	20100908	--	--	NA	3800 J	--	NA	--	--	--
D-SB-787-03	SB-787	3	3	20100908	--	--	NA	81000	--	NA	50	230	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
					4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	--	--	NA	9000 J	--	NA	--	--	--
D-SB-787-07	SB-787	7	7	20100903	--	--	NA	--	--	NA	--	--	--
D-SB-787-09	SB-787	9	9	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-787-11	SB-787	11	11	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-787-13	SB-787	13	13	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-787-15	SB-787	15	15	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-788-03	SB-788	3	3	20100908	--	--	NA	26000	--	NA	7.9	--	--
D-SB-788-05	SB-788	5	5	20100908	--	--	NA	7500 J	--	NA	--	--	--
D-SB-788-07	SB-788	7	7	20100908	--	--	NA	5900 J	--	NA	--	--	--
D-SB-788-09	SB-788	9	9	20100908	--	--	NA	17000	--	NA	--	--	--
D-SB-788-11	SB-788	11	11	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-788-13	SB-788	13	13	20100908	--	--	NA	4600 J	--	NA	--	--	--
D-SB-788-15	SB-788	15	15	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-788-SS	SB-788	0	1	20100908	--	6.4 J	NA	24000	--	NA	10	16	--
D-SB-789-03	SB-789	3	3	20100908	--	--	NA	17000	--	NA	--	--	--
D-SB-789-05	SB-789	5	5	20100908	--	--	NA	15000	--	NA	--	--	--
D-SB-789-07	SB-789	7	7	20100908	--	--	NA	10000 J	--	NA	--	--	--
D-SB-789-09	SB-789	9	9	20100908	--	--	NA	4700 J	--	NA	--	--	--
D-SB-789-11	SB-789	11	11	20100908	--	--	NA	3700 J	--	NA	--	--	--
D-SB-789-13	SB-789	13	13	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-789-15	SB-789	15	15	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-789-SS	SB-789	0	1	20100908	--	--	NA	9700 J	--	NA	--	--	--
D-SB-790-03	SB-790	3	3	20100908	--	--	NA	12000	--	NA	8	34	--
D-SB-790-05	SB-790	5	5	20100908	34 J	--	NA	63000	--	NA	--	140	--
D-SB-790-07	SB-790	7	7	20100908	--	--	NA	230000	--	NA	64	20	--
D-SB-790-09	SB-790	9	9	20100908	--	--	NA	9800 J	--	NA	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
					4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	--	--	NA	3400 J	--	NA	--	--	--
D-SB-790-13	SB-790	13	13	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-790-15	SB-790	15	15	20100908	--	--	NA	--	--	NA	--	--	--
D-SB-790-SS	SB-790	0	1	20100908	--	--	NA	33000	--	NA	--	--	--
D-SB-791-03	SB-791	3	3	20100909	--	--	NA	41000	--	NA	8.6	17	--
D-SB-791-05	SB-791	5	5	20100909	--	--	NA	22000	--	NA	--	--	--
D-SB-791-07	SB-791	7	7	20100909	--	--	NA	5400 J	--	NA	--	--	--
D-SB-791-09	SB-791	9	9	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-791-11	SB-791	11	11	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-791-13	SB-791	13	13	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-791-15	SB-791	15	15	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-791-SS	SB-791	0	1	20100909	--	--	NA	11000	--	NA	--	--	--
D-SB-792-03	SB-792	3	3	20100909	--	1.3 J	NA	83000	--	NA	--	8.2	--
D-SB-792-05	SB-792	5	5	20100909	--	--	NA	8000 J	--	NA	--	--	--
D-SB-792-07	SB-792	7	7	20100909	--	--	NA	7800 J	--	NA	--	--	--
D-SB-792-09	SB-792	9	9	20100909	--	--	NA	4100 J	--	NA	--	--	--
D-SB-792-11	SB-792	11	11	20100909	--	--	NA	4500 J	--	NA	--	--	--
D-SB-792-13	SB-792	13	13	20100909	--	--	NA	4800 J	--	NA	--	--	--
D-SB-792-15	SB-792	15	15	20100909	--	--	NA	8900 J	--	NA	--	--	--
D-SB-792-SS	SB-792	0	1	20100909	--	--	NA	36000	--	NA	--	--	--
D-SB-793-03	SB-793	3	3	20100909	--	--	NA	47000	--	NA	--	--	--
D-SB-793-05	SB-793	5	5	20100909	--	--	NA	7900 J	--	NA	--	--	--
D-SB-793-07	SB-793	7	7	20100909	--	--	NA	5300 J	--	NA	--	--	--
D-SB-793-09	SB-793	9	9	20100909	--	--	NA	7700 J	--	NA	--	--	--
D-SB-793-11	SB-793	11	11	20100909	--	--	NA	4000 J	--	NA	--	--	--
D-SB-793-13	SB-793	13	13	20100909	--	--	NA	--	--	NA	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
					4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-793-SS	SB-793	0	1	20100909	--	--	NA	40000	--	NA	--	--	--
D-SB-794-03	SB-794	3	3	20100909	--	--	NA	70000	--	NA	59 J	39 J	--
D-SB-794-05	SB-794	5	5	20100909	--	--	NA	8400 J	--	NA	--	--	--
D-SB-794-07	SB-794	7	7	20100909	--	--	NA	5100 J	--	NA	--	--	--
D-SB-794-09	SB-794	9	9	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-794-11	SB-794	11	11	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-794-13	SB-794	13	13	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-794-15	SB-794	15	15	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-794-SS	SB-794	0	1	20100909	7.1 J	--	NA	39000	--	NA	69	160	--
D-SB-795-03	SB-795	3	3	20100909	--	--	NA	11000 J	--	NA	--	--	--
D-SB-795-05	SB-795	5	5	20100909	--	--	NA	33000	--	NA	--	--	--
D-SB-795-07	SB-795	7	7	20100909	--	--	NA	4200 J	--	NA	--	--	--
D-SB-795-09	SB-795	9	9	20100909	--	--	NA	5300 J	--	NA	--	--	--
D-SB-795-11	SB-795	11	11	20100909	--	--	NA	4800 J	--	NA	--	--	--
D-SB-795-13	SB-795	13	13	20100909	--	--	NA	8300 J	--	NA	--	--	--
D-SB-795-15	SB-795	15	15	20100909	--	--	NA	--	--	NA	--	--	--
D-SB-795-SS	SB-795	0	1	20100909	--	--	NA	34000	--	NA	--	--	--
D-SB-796-03	SB-796	3	3	20100910	--	--	NA	160000	--	NA	--	--	--
D-SB-796-05	SB-796	5	5	20100910	--	--	NA	57000	--	NA	--	--	--
D-SB-796-07	SB-796	7	7	20100910	--	--	NA	5600 J	--	NA	--	--	--
D-SB-796-09	SB-796	9	9	20100910	--	--	NA	5600 J	--	NA	--	--	--
D-SB-796-11	SB-796	11	11	20100910	--	--	NA	5000 J	--	NA	--	--	--
D-SB-796-13	SB-796	13	13	20100910	--	--	NA	3400 J	--	NA	--	--	--
D-SB-796-15	SB-796	15	15	20100910	--	--	NA	--	--	NA	--	--	--
D-SB-796-SS	SB-796	0	1	20100910	--	--	NA	64000	--	NA	10	13	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

					ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	NA	NA	1100	NA	NA	--	NA	NA	NA
D-SB-872-1-2	SB-872	1	2	20120424	NA	NA	270	NA	NA	--	NA	NA	NA
D-SB-872-2-4	SB-872	2	4	20120424	NA	NA	260	NA	NA	94 J	NA	NA	NA
D-SB-872-4-6	SB-872	4	6	20120424	NA	NA	110	NA	NA	280	NA	NA	NA
D-SB-872-6-8	SB-872	6	8	20120424	NA	NA	52	NA	NA	--	NA	NA	NA
D-SB-873-0-1	SB-873	0	1	20120423	NA	NA	330	NA	NA	130	NA	NA	NA
D-SB-873-1-2	SB-873	1	2	20120423	NA	NA	100	NA	NA	--	NA	NA	NA
D-SB-873-2-4	SB-873	2	4	20120423	NA	NA	63	NA	NA	--	NA	NA	NA
D-SB-873-4-6	SB-873	4	6	20120423	NA	NA	86	NA	NA	--	NA	NA	NA
D-SB-873-6-8	SB-873	6	8	20120423	NA	NA	14 J	NA	NA	--	NA	NA	NA
D-SB-874-0-1	SB-874	0	1	20120424	NA	NA	780	NA	NA	78 J	NA	NA	NA
D-SB-874-1-2	SB-874	1	2	20120424	NA	NA	810	NA	NA	300	NA	NA	NA
D-SB-874-2-4	SB-874	2	4	20120424	NA	NA	2300	NA	NA	7600	NA	NA	NA
D-SB-874-4-6	SB-874	4	6	20120424	NA	NA	190	NA	NA	1800	NA	NA	NA
D-SB-874-6-8	SB-874	6	8	20120424	NA	NA	12 J	NA	NA	95 J	NA	NA	NA
D-SB-875-0-1	SB-875	0	1	20120423	NA	NA	430	NA	NA	94 J	NA	NA	NA
D-SB-875-1-2	SB-875	1	2	20120423	NA	NA	78	NA	NA	--	NA	NA	NA
D-SB-875-2-4	SB-875	2	4	20120423	NA	NA	130	NA	NA	--	NA	NA	NA
D-SB-875-4-6	SB-875	4	6	20120423	NA	NA	--	NA	NA	--	NA	NA	NA
D-SB-875-6-8	SB-875	6	8	20120423	NA	NA	--	NA	NA	--	NA	NA	NA
D-SB-876-0-1	SB-876	0	1	20120423	NA	NA	730	NA	NA	--	NA	NA	NA
D-SB-876-1-2	SB-876	1	2	20120423	NA	NA	51	NA	NA	--	NA	NA	NA
D-SB-876-2-4	SB-876	2	4	20120423	NA	NA	44	NA	NA	--	NA	NA	NA
D-SB-876-4-6	SB-876	4	6	20120423	NA	NA	73	NA	NA	--	NA	NA	NA
D-SB-876-6-8	SB-876	6	8	20120423	NA	NA	--	NA	NA	--	NA	NA	NA
D-SB-877-0-1	SB-877	0	1	20120425	NA	NA	28 B	NA	NA	--	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
					4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	NA	NA	75 B	NA	NA	--	NA	NA	NA
D-SB-877-2-4	SB-877	2	4	20120425	NA	NA	--	NA	NA	--	NA	NA	NA
D-SB-877-4-6	SB-877	4	6	20120425	NA	NA	16 B	NA	NA	--	NA	NA	NA
D-SB-877-6-8	SB-877	6	8	20120425	NA	NA	20 B	NA	NA	--	NA	NA	NA
D-SB-878-0-1	SB-878	0	1	20120424	NA	NA	48	NA	NA	--	NA	NA	NA
D-SB-878-1-2	SB-878	1	2	20120424	NA	NA	19 J	NA	NA	--	NA	NA	NA
D-SB-878-2-4	SB-878	2	4	20120424	NA	NA	--	NA	NA	--	NA	NA	NA
D-SB-878-4-6	SB-878	4	6	20120424	NA	NA	--	NA	NA	--	NA	NA	NA
D-SB-878-6-8	SB-878	6	8	20120424	NA	NA	220	NA	NA	--	NA	NA	NA
D-SB-879-0-1	SB-879	0	1	20120425	NA	NA	59 B	NA	NA	--	NA	NA	NA
D-SB-879-1-2	SB-879	1	2	20120425	NA	NA	29 B	NA	NA	--	NA	NA	NA
D-SB-879-2-4	SB-879	2	4	20120425	NA	NA	--	NA	NA	--	NA	NA	NA
D-SB-879-4-6	SB-879	4	6	20120425	NA	NA	15 B	NA	NA	--	NA	NA	NA
D-SB-879-6-8	SB-879	6	8	20120425	NA	NA	2000	NA	NA	--	NA	NA	NA
D-SB-880-0-1	SB-880	0	1	20120424	NA	NA	250	NA	NA	--	NA	NA	NA
D-SB-880-1-2	SB-880	1	2	20120424	NA	NA	82	NA	NA	--	NA	NA	NA
D-SB-880-2-4	SB-880	2	4	20120424	NA	NA	25	NA	NA	--	NA	NA	NA
D-SB-880-4-6	SB-880	4	6	20120424	NA	NA	52	NA	NA	--	NA	NA	NA
D-SB-880-6-8	SB-880	6	8	20120424	NA	NA	--	NA	NA	--	NA	NA	NA
D-SB-881-0-1	SB-881	0	1	20120425	NA	NA	74 B	NA	NA	--	NA	NA	NA
D-SB-881-1-2	SB-881	1	2	20120425	NA	NA	62 B	NA	NA	--	NA	NA	NA
D-SB-881-2-4	SB-881	2	4	20120425	NA	NA	45 B	NA	NA	--	NA	NA	NA
D-SB-881-4-6	SB-881	4	6	20120425	NA	NA	46 B	NA	NA	--	NA	NA	NA
D-SB-881-6-8	SB-881	6	8	20120425	NA	NA	70 B	NA	NA	--	NA	NA	NA
D-SS-782-01	SB-782	0	1	20100902	--	--	NA	26000	--	NA	--	11	12
D-SS-783-01	SB-783	0	1	20100902	7.8 J	9.1 J	NA	18000 B	--	NA	8.9	15	12

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
					4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	1.5 J	--	NA	8600 J	--	NA	--	--	--
D-SS-785-01	SB-785	0	1	20100903	--	--	NA	9700 J	--	NA	--	--	--
D-SS-786-01	SB-786	0	1	20100903	--	--	NA	520000	71 J	NA	27	100	10
D-SS-787-01	SB-787	0	1	20100903	--	--	NA	59000	--	NA	--	11	--
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	NA	NA	NA	--	--	NA	--	110 J	--
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	ICIDES/PCBS (UG/KG)		PETROLEUM	PETROLEUM HYDROCARBONS					
					4,4'-DDE	BETA-BHC	TPH (C10-C32)	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	TPH (C06-C10)	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE
				Units	UG/KG	UG/KG	MG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	NA	NA	NA	--	3200	NA	--	--	--
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	NA	NA	NA	--	--	NA	--	--	--
SB-65-10	SB-065	10	10	20040917	NA	NA	NA	12000	--	NA	--	--	--
SB-65-15	SB-065	15	15	20040917	NA	NA	NA	--	--	NA	--	--	--
SB-65-20	SB-065	20	20	20040917	NA	NA	NA	--	--	NA	--	--	--
SB-65-SS	SB-065	0	0	20040917	NA	NA	NA	--	250	NA	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-10	SB-065	10	10	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-11	SB-065	11	11	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-12	SB-065	12	12	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-13	SB-065	13	13	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-14	SB-065	14	14	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-15	SB-065	15	15	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-2	SB-065	2	2	20090916	NA	19	18	NA	13	13	24	NA	9.4
D-SB-65RE-3	SB-065	3	3	20090916	NA	15	14	NA	9.1	11	14	NA	--
D-SB-65RE-5	SB-065	5	5	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-6	SB-065	6	6	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-7	SB-065	7	7	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-8	SB-065	8	8	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-65RE-9	SB-065	9	9	20090916	NA	--	--	NA	--	--	--	NA	--
D-SB-782-03	SB-782	3	3	20100902	--	60	60	NA	29	30	38	19	19
D-SB-782-05	SB-782	5	5	20100902	--	--	--	NA	--	--	--	--	--
D-SB-782-07	SB-782	7	7	20100902	--	--	--	NA	--	--	--	--	--
D-SB-782-09	SB-782	9	9	20100902	--	--	--	NA	--	--	--	--	--
D-SB-782-11	SB-782	11	11	20100902	--	--	--	NA	--	--	--	--	--
D-SB-782-13	SB-782	13	13	20100902	--	6	1	NA	--	--	13	--	--
D-SB-782-15	SB-782	15	15	20100902	--	--	--	NA	--	--	--	--	--
D-SB-783-03	SB-783	3	3	20100902	--	--	--	NA	--	--	--	--	--
D-SB-783-05	SB-783	5	5	20100902	--	--	--	NA	--	--	--	--	--
D-SB-783-07	SB-783	7	7	20100902	--	--	--	NA	--	--	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	--	--	--	NA	--	--	--	--	--
D-SB-783-11	SB-783	11	11	20100902	--	--	--	NA	--	--	--	--	--
D-SB-783-13	SB-783	13	13	20100902	--	--	--	NA	--	--	--	--	--
D-SB-783-15	SB-783	15	15	20100902	--	--	--	NA	--	--	--	--	--
D-SB-784-03	SB-784	3	3	20100902	--	--	--	NA	--	--	--	--	--
D-SB-784-05	SB-784	5	5	20100902	--	--	--	NA	--	--	--	--	--
D-SB-784-07	SB-784	7	7	20100902	--	--	--	NA	--	--	--	--	--
D-SB-784-09	SB-784	9	9	20100902	--	--	--	NA	--	--	--	--	--
D-SB-784-11	SB-784	11	11	20100902	--	--	--	NA	--	--	--	--	--
D-SB-784-13	SB-784	13	13	20100902	--	--	--	NA	--	--	--	--	--
D-SB-784-15	SB-784	15	15	20100902	--	--	--	NA	--	--	--	--	--
D-SB-785-03	SB-785	3	3	20100903	8.5	39	39	NA	21	17	25	12	--
D-SB-785-05	SB-785	5	5	20100903	--	--	--	NA	--	--	--	--	--
D-SB-785-07	SB-785	7	7	20100903	--	14	12	NA	8.6	9.9	14	9.1	--
D-SB-785-09	SB-785	9	9	20100908	--	--	--	NA	--	--	--	--	--
D-SB-785-11	SB-785	11	11	20100908	--	--	--	NA	--	--	--	--	--
D-SB-785-13	SB-785	13	13	20100908	--	18	16	NA	12	12	17	12	--
D-SB-785-15	SB-785	15	15	20100908	--	--	--	NA	--	--	--	--	--
D-SB-786-03	SB-786	3	3	20100903	38	161	161	NA	96	100	170	67	71
D-SB-786-05	SB-786	5	5	20100903	20	50	50	NA	25	24	40	16	16
D-SB-786-07	SB-786	7	7	20100903	23	58	58	NA	41	30	56	16	19
D-SB-786-09	SB-786	9	9	20100903	--	--	--	NA	--	--	--	--	--
D-SB-786-11	SB-786	11	11	20100903	--	--	--	NA	--	--	--	--	--
D-SB-786-13	SB-786	13	13	20100903	--	--	--	NA	--	--	--	--	--
D-SB-786-15	SB-786	15	15	20100908	--	--	--	NA	--	--	--	--	--
D-SB-787-03	SB-787	3	3	20100908	430	772	772	NA	720	520	680	250	310

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	--	--	--	NA	--	--	--	--	--
D-SB-787-07	SB-787	7	7	20100903	--	--	--	NA	--	--	--	--	--
D-SB-787-09	SB-787	9	9	20100908	--	--	--	NA	--	--	--	--	--
D-SB-787-11	SB-787	11	11	20100908	--	--	--	NA	--	--	--	--	--
D-SB-787-13	SB-787	13	13	20100908	--	--	--	NA	--	--	--	--	--
D-SB-787-15	SB-787	15	15	20100908	--	--	--	NA	--	--	--	--	--
D-SB-788-03	SB-788	3	3	20100908	--	53	51	NA	26	40	48	25	23
D-SB-788-05	SB-788	5	5	20100908	--	--	--	NA	--	--	--	--	--
D-SB-788-07	SB-788	7	7	20100908	--	--	--	NA	--	--	--	--	--
D-SB-788-09	SB-788	9	9	20100908	--	--	--	NA	--	--	--	--	--
D-SB-788-11	SB-788	11	11	20100908	--	--	--	NA	--	--	--	--	--
D-SB-788-13	SB-788	13	13	20100908	--	--	--	NA	--	--	--	--	--
D-SB-788-15	SB-788	15	15	20100908	--	--	--	NA	--	--	--	--	--
D-SB-788-SS	SB-788	0	1	20100908	20	105	105	NA	53	63	83	36	29
D-SB-789-03	SB-789	3	3	20100908	--	17	15	NA	--	14	11	--	--
D-SB-789-05	SB-789	5	5	20100908	--	--	--	NA	--	--	--	--	--
D-SB-789-07	SB-789	7	7	20100908	--	--	--	NA	--	--	--	--	--
D-SB-789-09	SB-789	9	9	20100908	--	--	--	NA	--	--	--	--	--
D-SB-789-11	SB-789	11	11	20100908	--	--	--	NA	--	--	--	--	--
D-SB-789-13	SB-789	13	13	20100908	--	--	--	NA	--	--	--	--	--
D-SB-789-15	SB-789	15	15	20100908	--	--	--	NA	--	--	--	--	--
D-SB-789-SS	SB-789	0	1	20100908	--	22	20	NA	--	17	15	--	--
D-SB-790-03	SB-790	3	3	20100908	72	224	224	NA	160	140	180	77	72
D-SB-790-05	SB-790	5	5	20100908	620	1353	1345	NA	1500	1000	1400	490	570
D-SB-790-07	SB-790	7	7	20100908	28	73	71	NA	48	53	82	34	40
D-SB-790-09	SB-790	9	9	20100908	--	--	--	NA	--	--	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	--	--	--	NA	--	--	--	--	--
D-SB-790-13	SB-790	13	13	20100908	--	--	--	NA	--	--	--	--	--
D-SB-790-15	SB-790	15	15	20100908	--	--	--	NA	--	--	--	--	--
D-SB-790-SS	SB-790	0	1	20100908	--	19	16	NA	--	15	14	--	--
D-SB-791-03	SB-791	3	3	20100909	16	60	58	NA	46	44	65	33	24
D-SB-791-05	SB-791	5	5	20100909	--	--	--	NA	--	--	--	--	--
D-SB-791-07	SB-791	7	7	20100909	--	--	--	NA	--	--	--	--	--
D-SB-791-09	SB-791	9	9	20100909	--	--	--	NA	--	--	--	--	--
D-SB-791-11	SB-791	11	11	20100909	--	--	--	NA	--	--	--	--	--
D-SB-791-13	SB-791	13	13	20100909	--	--	--	NA	--	--	--	--	--
D-SB-791-15	SB-791	15	15	20100909	--	--	--	NA	--	--	--	--	--
D-SB-791-SS	SB-791	0	1	20100909	--	--	--	NA	--	--	--	--	--
D-SB-792-03	SB-792	3	3	20100909	--	5	1	NA	--	--	7.9	--	--
D-SB-792-05	SB-792	5	5	20100909	--	--	--	NA	--	--	--	--	--
D-SB-792-07	SB-792	7	7	20100909	--	--	--	NA	--	--	--	--	--
D-SB-792-09	SB-792	9	9	20100909	--	--	--	NA	--	--	--	--	--
D-SB-792-11	SB-792	11	11	20100909	--	--	--	NA	--	--	--	--	--
D-SB-792-13	SB-792	13	13	20100909	--	--	--	NA	--	--	--	--	--
D-SB-792-15	SB-792	15	15	20100909	--	--	--	NA	--	--	--	--	--
D-SB-792-SS	SB-792	0	1	20100909	--	4	0	NA	--	--	--	--	--
D-SB-793-03	SB-793	3	3	20100909	--	23	21	NA	17	16	18	10	13
D-SB-793-05	SB-793	5	5	20100909	--	--	--	NA	--	--	--	--	--
D-SB-793-07	SB-793	7	7	20100909	--	--	--	NA	--	--	--	--	--
D-SB-793-09	SB-793	9	9	20100909	--	--	--	NA	--	--	--	--	--
D-SB-793-11	SB-793	11	11	20100909	--	--	--	NA	--	--	--	--	--
D-SB-793-13	SB-793	13	13	20100909	--	--	--	NA	--	--	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	--	--	--	NA	--	--	--	--	--
D-SB-793-SS	SB-793	0	1	20100909	--	17	15	NA	12	11	17	10	11
D-SB-794-03	SB-794	3	3	20100909	48 J	137	135	NA	110 J	100 J	160 J	75 J	63 J
D-SB-794-05	SB-794	5	5	20100909	--	--	--	NA	--	--	--	--	--
D-SB-794-07	SB-794	7	7	20100909	--	--	--	NA	--	--	--	--	--
D-SB-794-09	SB-794	9	9	20100909	--	--	--	NA	--	--	--	--	--
D-SB-794-11	SB-794	11	11	20100909	--	--	--	NA	--	--	--	--	--
D-SB-794-13	SB-794	13	13	20100909	--	--	--	NA	--	--	--	--	--
D-SB-794-15	SB-794	15	15	20100909	--	--	--	NA	--	--	--	--	--
D-SB-794-SS	SB-794	0	1	20100909	460	714	711	NA	740	540	650	310	370
D-SB-795-03	SB-795	3	3	20100909	--	20	17	NA	--	17	--	--	--
D-SB-795-05	SB-795	5	5	20100909	--	7	2	NA	--	--	19	--	--
D-SB-795-07	SB-795	7	7	20100909	--	--	--	NA	--	--	--	--	--
D-SB-795-09	SB-795	9	9	20100909	--	--	--	NA	--	--	--	--	--
D-SB-795-11	SB-795	11	11	20100909	--	--	--	NA	--	--	--	--	--
D-SB-795-13	SB-795	13	13	20100909	--	--	--	NA	--	--	--	--	--
D-SB-795-15	SB-795	15	15	20100909	--	--	--	NA	--	--	--	--	--
D-SB-795-SS	SB-795	0	1	20100909	--	39	37	NA	16	29	33	17	13
D-SB-796-03	SB-796	3	3	20100910	--	75	73	NA	36	58	66	33	28
D-SB-796-05	SB-796	5	5	20100910	--	--	--	NA	--	--	--	--	--
D-SB-796-07	SB-796	7	7	20100910	--	--	--	NA	--	--	--	--	--
D-SB-796-09	SB-796	9	9	20100910	--	--	--	NA	--	--	--	--	--
D-SB-796-11	SB-796	11	11	20100910	--	--	--	NA	--	--	--	--	--
D-SB-796-13	SB-796	13	13	20100910	--	--	--	NA	--	--	--	--	--
D-SB-796-15	SB-796	15	15	20100910	--	--	--	NA	--	--	--	--	--
D-SB-796-SS	SB-796	0	1	20100910	15	79	77	NA	49	60	74	40	31

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-1-2	SB-872	1	2	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-2-4	SB-872	2	4	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-4-6	SB-872	4	6	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-6-8	SB-872	6	8	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-0-1	SB-873	0	1	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-1-2	SB-873	1	2	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-2-4	SB-873	2	4	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-4-6	SB-873	4	6	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-6-8	SB-873	6	8	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-0-1	SB-874	0	1	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-1-2	SB-874	1	2	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-2-4	SB-874	2	4	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-4-6	SB-874	4	6	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-6-8	SB-874	6	8	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-0-1	SB-875	0	1	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-1-2	SB-875	1	2	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-2-4	SB-875	2	4	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-4-6	SB-875	4	6	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-6-8	SB-875	6	8	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-0-1	SB-876	0	1	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-1-2	SB-876	1	2	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-2-4	SB-876	2	4	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-4-6	SB-876	4	6	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-6-8	SB-876	6	8	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-0-1	SB-877	0	1	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-2-4	SB-877	2	4	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-4-6	SB-877	4	6	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-6-8	SB-877	6	8	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-0-1	SB-878	0	1	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-1-2	SB-878	1	2	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-2-4	SB-878	2	4	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-4-6	SB-878	4	6	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-6-8	SB-878	6	8	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-0-1	SB-879	0	1	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-1-2	SB-879	1	2	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-2-4	SB-879	2	4	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-4-6	SB-879	4	6	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-6-8	SB-879	6	8	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-0-1	SB-880	0	1	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-1-2	SB-880	1	2	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-2-4	SB-880	2	4	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-4-6	SB-880	4	6	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-6-8	SB-880	6	8	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-0-1	SB-881	0	1	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-1-2	SB-881	1	2	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-2-4	SB-881	2	4	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-4-6	SB-881	4	6	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-6-8	SB-881	6	8	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-782-01	SB-782	0	1	20100902	26	130	130	NA	86	77	110	60	46
D-SS-783-01	SB-783	0	1	20100902	29	216	216	NA	140	140	190	90	60

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	--	40	39	NA	27	30	40	24	13
D-SS-785-01	SB-785	0	1	20100903	--	--	--	NA	--	--	--	--	--
D-SS-786-01	SB-786	0	1	20100903	190	574	574	NA	520	380	440	210	220
D-SS-787-01	SB-787	0	1	20100903	20	72	72	NA	49	40	58	26	22
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	260 J	944	696	731	640	570	560	220 J	580
SB-336-0203	SB-336	2	3	20071101	NA	--	--	2	NA	--	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	--	--	0	NA	--	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	24	24	24	NA	24 J	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	13	13	13	NA	13 J	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	700	700	700	NA	700 J	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	--	--	2	NA	--	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	40	40	40	NA	40 J	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	50	50	50	NA	50 J	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	--	--	2	NA	--	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	14	14	14	NA	14 J	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	--	--	0	NA	--	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	--	--	0	NA	--	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG								
					ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BAP EQUIVALENT-UCL	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	195	195	195	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	--	--	--	25	--	--	--	--	--
SB-340-0203	SB-340	2	3	20071101	NA	110	110	110	NA	110 J	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	30	30	30	NA	30 J	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	--	--	0	NA	--	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	23	23	23	NA	23 J	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	25	25	25	NA	25 J	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	38	38	38	NA	38 J	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	78	78	78	NA	78 J	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	17	17	17	NA	17 J	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	--	--	1	NA	--	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	11	11	11	NA	11 J	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	--	--	0	NA	--	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	--	--	0	NA	--	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	--	--	0	NA	--	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	--	--	0	NA	--	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	--	--	0	NA	--	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	--	--	--	328	--	--	--	--	--
SB-65-10	SB-065	10	10	20040917	--	--	--	178	--	--	--	--	--
SB-65-15	SB-065	15	15	20040917	--	--	--	336	--	--	--	--	--
SB-65-20	SB-065	20	20	20040917	--	--	--	235	--	--	--	--	--
SB-65-SS	SB-065	0	0	20040917	--	--	--	240	--	--	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-10	SB-065	10	10	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-11	SB-065	11	11	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-12	SB-065	12	12	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-13	SB-065	13	13	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-14	SB-065	14	14	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-15	SB-065	15	15	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-2	SB-065	2	2	20090916	22	--	NA	NA	9.4	NA	NA	NA	90.8
D-SB-65RE-3	SB-065	3	3	20090916	11	--	NA	NA	9.8	NA	NA	NA	54.9
D-SB-65RE-5	SB-065	5	5	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-5-AVG	SB-065	5	5	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-5-D	SB-065	5	5	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-6	SB-065	6	6	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-7	SB-065	7	7	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-8	SB-065	8	8	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-65RE-9	SB-065	9	9	20090916	--	--	NA	NA	--	NA	NA	NA	--
D-SB-782-03	SB-782	3	3	20100902	31	21	49	--	18	--	24	39	317
D-SB-782-05	SB-782	5	5	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-07	SB-782	7	7	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-09	SB-782	9	9	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-11	SB-782	11	11	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-13	SB-782	13	13	20100902	8.7	--	15	--	--	--	--	15	51.7
D-SB-782-15	SB-782	15	15	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-03	SB-783	3	3	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-05	SB-783	5	5	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-07	SB-783	7	7	20100902	--	--	--	--	--	--	--	--	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-11	SB-783	11	11	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-13	SB-783	13	13	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-15	SB-783	15	15	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-03	SB-784	3	3	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-05	SB-784	5	5	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-07	SB-784	7	7	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-09	SB-784	9	9	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-11	SB-784	11	11	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-13	SB-784	13	13	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-15	SB-784	15	15	20100902	--	--	--	--	--	--	--	--	--
D-SB-785-03	SB-785	3	3	20100903	17	16	35	--	10	--	36	28	225.5
D-SB-785-05	SB-785	5	5	20100903	--	--	--	--	--	--	--	--	--
D-SB-785-07	SB-785	7	7	20100903	9.1	--	17	--	--	--	15	13	95.7
D-SB-785-09	SB-785	9	9	20100908	--	--	--	--	--	--	--	--	--
D-SB-785-11	SB-785	11	11	20100908	--	--	--	--	--	--	--	--	--
D-SB-785-13	SB-785	13	13	20100908	11	--	14	--	9.1	--	--	14	101.1
D-SB-785-15	SB-785	15	15	20100908	--	--	--	--	--	--	--	--	--
D-SB-786-03	SB-786	3	3	20100903	230	28	140	29	53	220	89	110	1489
D-SB-786-05	SB-786	5	5	20100903	57	18	84	17	13	820	84	61	1363
D-SB-786-07	SB-786	7	7	20100903	54	17	140	12	13	--	84	110	626
D-SB-786-09	SB-786	9	9	20100903	--	--	--	--	--	--	--	--	--
D-SB-786-11	SB-786	11	11	20100903	--	--	--	--	--	--	--	--	--
D-SB-786-13	SB-786	13	13	20100903	--	--	--	--	--	11	--	--	11
D-SB-786-15	SB-786	15	15	20100908	--	--	--	--	--	--	--	--	--
D-SB-787-03	SB-787	3	3	20100908	680	85	1700	230	230	75	1600	1100	8890

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	--	--	--	--	--	--	--	--	--
D-SB-787-07	SB-787	7	7	20100903	--	--	--	--	--	--	--	--	--
D-SB-787-09	SB-787	9	9	20100908	--	--	--	--	--	--	--	--	--
D-SB-787-11	SB-787	11	11	20100908	--	--	--	--	--	--	--	--	--
D-SB-787-13	SB-787	13	13	20100908	--	--	--	--	--	--	--	--	--
D-SB-787-15	SB-787	15	15	20100908	--	--	--	--	--	--	--	--	--
D-SB-788-03	SB-788	3	3	20100908	32	--	49	--	34	20	29	46	379.9
D-SB-788-05	SB-788	5	5	20100908	--	--	--	--	--	--	--	--	--
D-SB-788-07	SB-788	7	7	20100908	--	--	--	--	--	--	--	--	--
D-SB-788-09	SB-788	9	9	20100908	--	--	--	--	--	--	--	--	--
D-SB-788-11	SB-788	11	11	20100908	--	--	--	--	--	--	--	--	--
D-SB-788-13	SB-788	13	13	20100908	--	--	--	--	--	--	--	--	--
D-SB-788-15	SB-788	15	15	20100908	--	--	--	--	--	--	--	--	--
D-SB-788-SS	SB-788	0	1	20100908	62	24	110	18	45	19	87	93	768
D-SB-789-03	SB-789	3	3	20100908	--	--	--	--	--	--	--	--	25
D-SB-789-05	SB-789	5	5	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-07	SB-789	7	7	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-09	SB-789	9	9	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-11	SB-789	11	11	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-13	SB-789	13	13	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-15	SB-789	15	15	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-SS	SB-789	0	1	20100908	--	--	14	--	18	--	--	14	78
D-SB-790-03	SB-790	3	3	20100908	140	41	320	30	82	13	250	240	1859
D-SB-790-05	SB-790	5	5	20100908	1500	--	3700	180	480	34	2100	2900	16614
D-SB-790-07	SB-790	7	7	20100908	82	--	110	29	42	45	120	87	884
D-SB-790-09	SB-790	9	9	20100908	--	--	--	--	--	--	--	--	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	--	--	--	--	--	--	--	--	--
D-SB-790-13	SB-790	13	13	20100908	--	--	--	--	--	--	--	--	--
D-SB-790-15	SB-790	15	15	20100908	--	--	--	--	--	--	--	--	--
D-SB-790-SS	SB-790	0	1	20100908	--	--	8.5	--	--	--	--	9.6	47.1
D-SB-791-03	SB-791	3	3	20100909	51	--	95	15	28	13	76	75	606.6
D-SB-791-05	SB-791	5	5	20100909	--	--	--	--	--	--	--	--	--
D-SB-791-07	SB-791	7	7	20100909	--	--	--	--	--	--	--	--	--
D-SB-791-09	SB-791	9	9	20100909	--	--	--	--	--	--	--	--	--
D-SB-791-11	SB-791	11	11	20100909	--	--	--	--	--	--	--	--	--
D-SB-791-13	SB-791	13	13	20100909	--	--	--	--	--	--	--	--	--
D-SB-791-15	SB-791	15	15	20100909	--	--	--	--	--	--	--	--	--
D-SB-791-SS	SB-791	0	1	20100909	--	--	8.4	--	--	--	--	8.2	16.6
D-SB-792-03	SB-792	3	3	20100909	7.8	--	11	--	--	--	--	8.1	43
D-SB-792-05	SB-792	5	5	20100909	--	--	--	--	--	--	--	--	--
D-SB-792-07	SB-792	7	7	20100909	--	--	--	--	--	--	--	--	--
D-SB-792-09	SB-792	9	9	20100909	--	--	--	--	--	--	--	--	--
D-SB-792-11	SB-792	11	11	20100909	--	--	--	--	--	--	--	--	--
D-SB-792-13	SB-792	13	13	20100909	--	--	--	--	--	--	--	--	--
D-SB-792-15	SB-792	15	15	20100909	--	--	--	--	--	--	--	--	--
D-SB-792-SS	SB-792	0	1	20100909	7.2	--	8.4	--	--	--	--	8	23.6
D-SB-793-03	SB-793	3	3	20100909	19	--	36	--	9.2	--	22	27	187.2
D-SB-793-05	SB-793	5	5	20100909	--	--	--	--	--	--	--	--	--
D-SB-793-07	SB-793	7	7	20100909	--	--	--	--	--	--	--	--	--
D-SB-793-09	SB-793	9	9	20100909	--	--	--	--	--	--	--	--	--
D-SB-793-11	SB-793	11	11	20100909	--	--	--	--	--	--	--	--	--
D-SB-793-13	SB-793	13	13	20100909	--	--	--	--	--	--	--	--	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	--	--	--	--	--	--	--	--	--
D-SB-793-SS	SB-793	0	1	20100909	15	--	20	--	8.7	--	12	16	132.7
D-SB-794-03	SB-794	3	3	20100909	130 J	--	210 J	38 J	77 J	47 J	190 J	170 J	1516
D-SB-794-05	SB-794	5	5	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-07	SB-794	7	7	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-09	SB-794	9	9	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-11	SB-794	11	11	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-13	SB-794	13	13	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-15	SB-794	15	15	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-SS	SB-794	0	1	20100909	640	--	1700	210	280	82	1600	1200	9011
D-SB-795-03	SB-795	3	3	20100909	--	--	10	--	--	11	9	--	47
D-SB-795-05	SB-795	5	5	20100909	--	--	10	--	--	--	--	--	29
D-SB-795-07	SB-795	7	7	20100909	--	--	--	--	--	--	--	--	--
D-SB-795-09	SB-795	9	9	20100909	--	--	--	--	--	--	--	--	--
D-SB-795-11	SB-795	11	11	20100909	--	--	--	--	--	--	--	--	--
D-SB-795-13	SB-795	13	13	20100909	--	--	--	--	--	--	--	--	--
D-SB-795-15	SB-795	15	15	20100909	--	--	--	--	--	--	--	--	--
D-SB-795-SS	SB-795	0	1	20100909	26	--	36	--	29	--	27	37	263
D-SB-796-03	SB-796	3	3	20100910	41	--	42	--	43	--	18	37	402
D-SB-796-05	SB-796	5	5	20100910	--	--	--	--	--	--	--	--	--
D-SB-796-07	SB-796	7	7	20100910	--	--	--	--	--	--	--	--	--
D-SB-796-09	SB-796	9	9	20100910	--	--	--	--	--	--	--	--	--
D-SB-796-11	SB-796	11	11	20100910	--	--	--	--	--	--	--	--	--
D-SB-796-13	SB-796	13	13	20100910	--	--	--	--	--	--	--	--	--
D-SB-796-15	SB-796	15	15	20100910	--	--	--	--	--	--	--	--	--
D-SB-796-SS	SB-796	0	1	20100910	59	--	96	12	46	18	60	81	664

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-1-2	SB-872	1	2	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-2-4	SB-872	2	4	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-4-6	SB-872	4	6	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-6-8	SB-872	6	8	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-0-1	SB-873	0	1	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-1-2	SB-873	1	2	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-2-4	SB-873	2	4	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-4-6	SB-873	4	6	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-873-6-8	SB-873	6	8	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-0-1	SB-874	0	1	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-1-2	SB-874	1	2	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-2-4	SB-874	2	4	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-4-6	SB-874	4	6	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-874-6-8	SB-874	6	8	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-0-1	SB-875	0	1	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-1-2	SB-875	1	2	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-2-4	SB-875	2	4	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-4-6	SB-875	4	6	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-875-6-8	SB-875	6	8	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-0-1	SB-876	0	1	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-1-2	SB-876	1	2	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-2-4	SB-876	2	4	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-4-6	SB-876	4	6	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-876-6-8	SB-876	6	8	20120423	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-0-1	SB-877	0	1	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-2-4	SB-877	2	4	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-4-6	SB-877	4	6	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-6-8	SB-877	6	8	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-0-1	SB-878	0	1	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-1-2	SB-878	1	2	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-2-4	SB-878	2	4	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-4-6	SB-878	4	6	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-878-6-8	SB-878	6	8	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-0-1	SB-879	0	1	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-1-2	SB-879	1	2	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-2-4	SB-879	2	4	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-4-6	SB-879	4	6	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-879-6-8	SB-879	6	8	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-0-1	SB-880	0	1	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-1-2	SB-880	1	2	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-2-4	SB-880	2	4	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-4-6	SB-880	4	6	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-880-6-8	SB-880	6	8	20120424	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-0-1	SB-881	0	1	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-1-2	SB-881	1	2	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-2-4	SB-881	2	4	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-4-6	SB-881	4	6	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-881-6-8	SB-881	6	8	20120425	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-782-01	SB-782	0	1	20100902	91	28	180	10	49	--	96	150	1032
D-SS-783-01	SB-783	0	1	20100902	150	35	370	16	75	11	290	320	1951.9

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	32	--	60	--	17	--	20	65	328
D-SS-785-01	SB-785	0	1	20100903	--	--	--	--	--	--	--	--	--
D-SS-786-01	SB-786	0	1	20100903	480	76	890	93	190	85	630	850	5391
D-SS-787-01	SB-787	0	1	20100903	44	19	93	9.8	24	--	53	73	541.8
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	610	--	1000	150 J	--	--	910	1000	6610
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	24
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	13
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	700
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	40
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	50
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	14
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	CHRYSENE	DIBENZO(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	TOTAL PAHS
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	--	--	--	--	--	--	--	--	--
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	110
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	30
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	23
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	25
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	38
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	78
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	17
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	11
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	--
SB-65-05	SB-065	5	5	20040917	--	--	--	--	--	--	--	--	--
SB-65-10	SB-065	10	10	20040917	--	--	--	--	--	--	--	--	--
SB-65-15	SB-065	15	15	20040917	--	--	--	--	--	--	--	--	--
SB-65-20	SB-065	20	20	20040917	--	--	--	--	--	--	--	--	--
SB-65-SS	SB-065	0	0	20040917	--	--	--	--	--	--	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-782-05	SB-782	5	5	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-782-07	SB-782	7	7	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-782-09	SB-782	9	9	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-782-11	SB-782	11	11	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-782-13	SB-782	13	13	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-782-15	SB-782	15	15	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-783-03	SB-783	3	3	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-783-05	SB-783	5	5	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-783-07	SB-783	7	7	20100902	--	--	NA	NA	NA	NA	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
D-SB-783-09	SB-783	9	9	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-783-11	SB-783	11	11	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-783-13	SB-783	13	13	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-783-15	SB-783	15	15	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-784-03	SB-784	3	3	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-784-05	SB-784	5	5	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-784-07	SB-784	7	7	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-784-09	SB-784	9	9	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-784-11	SB-784	11	11	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-784-13	SB-784	13	13	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-784-15	SB-784	15	15	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-785-03	SB-785	3	3	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-785-05	SB-785	5	5	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-785-07	SB-785	7	7	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-785-09	SB-785	9	9	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-785-11	SB-785	11	11	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-785-13	SB-785	13	13	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-785-15	SB-785	15	15	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-786-03	SB-786	3	3	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-786-05	SB-786	5	5	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-786-07	SB-786	7	7	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-786-09	SB-786	9	9	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-786-11	SB-786	11	11	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-786-13	SB-786	13	13	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-786-15	SB-786	15	15	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-787-03	SB-787	3	3	20100908	--	--	NA	NA	NA	NA	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
D-SB-787-05	SB-787	5	5	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-787-07	SB-787	7	7	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-787-09	SB-787	9	9	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-787-11	SB-787	11	11	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-787-13	SB-787	13	13	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-787-15	SB-787	15	15	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-788-03	SB-788	3	3	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-788-05	SB-788	5	5	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-788-07	SB-788	7	7	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-788-09	SB-788	9	9	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-788-11	SB-788	11	11	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-788-13	SB-788	13	13	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-788-15	SB-788	15	15	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-788-SS	SB-788	0	1	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-789-03	SB-789	3	3	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-789-05	SB-789	5	5	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-789-07	SB-789	7	7	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-789-09	SB-789	9	9	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-789-11	SB-789	11	11	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-789-13	SB-789	13	13	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-789-15	SB-789	15	15	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-789-SS	SB-789	0	1	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-790-03	SB-790	3	3	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-790-05	SB-790	5	5	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-790-07	SB-790	7	7	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-790-09	SB-790	9	9	20100908	--	--	NA	NA	NA	NA	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
D-SB-790-11	SB-790	11	11	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-790-13	SB-790	13	13	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-790-15	SB-790	15	15	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-790-SS	SB-790	0	1	20100908	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-791-03	SB-791	3	3	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-791-05	SB-791	5	5	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-791-07	SB-791	7	7	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-791-09	SB-791	9	9	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-791-11	SB-791	11	11	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-791-13	SB-791	13	13	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-791-15	SB-791	15	15	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-791-SS	SB-791	0	1	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-792-03	SB-792	3	3	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-792-05	SB-792	5	5	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-792-07	SB-792	7	7	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-792-09	SB-792	9	9	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-792-11	SB-792	11	11	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-792-13	SB-792	13	13	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-792-15	SB-792	15	15	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-792-SS	SB-792	0	1	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-793-03	SB-793	3	3	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-793-05	SB-793	5	5	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-793-07	SB-793	7	7	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-793-09	SB-793	9	9	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-793-11	SB-793	11	11	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-793-13	SB-793	13	13	20100909	--	--	NA	NA	NA	NA	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
D-SB-793-15	SB-793	15	15	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-793-SS	SB-793	0	1	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-794-03	SB-794	3	3	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-794-05	SB-794	5	5	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-794-07	SB-794	7	7	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-794-09	SB-794	9	9	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-794-11	SB-794	11	11	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-794-13	SB-794	13	13	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-794-15	SB-794	15	15	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-794-SS	SB-794	0	1	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-795-03	SB-795	3	3	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-795-05	SB-795	5	5	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-795-07	SB-795	7	7	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-795-09	SB-795	9	9	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-795-11	SB-795	11	11	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-795-13	SB-795	13	13	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-795-15	SB-795	15	15	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-795-SS	SB-795	0	1	20100909	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-796-03	SB-796	3	3	20100910	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-796-05	SB-796	5	5	20100910	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-796-07	SB-796	7	7	20100910	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-796-09	SB-796	9	9	20100910	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-796-11	SB-796	11	11	20100910	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-796-13	SB-796	13	13	20100910	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-796-15	SB-796	15	15	20100910	--	--	NA	NA	NA	NA	NA	NA	--
D-SB-796-SS	SB-796	0	1	20100910	--	--	NA	NA	NA	NA	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
D-SB-872-0-1	SB-872	0	1	20120424	--	--	--	52	--	87	134	130	--
D-SB-872-1-2	SB-872	1	2	20120424	--	--	13 J	160	27	200	1480	1477	--
D-SB-872-2-4	SB-872	2	4	20120424	--	150 J	72	160	--	38	279	274	--
D-SB-872-4-6	SB-872	4	6	20120424	93 J	120 J	590	480	--	110	178	174	--
D-SB-872-6-8	SB-872	6	8	20120424	--	--	45	57	--	94	124	120	--
D-SB-873-0-1	SB-873	0	1	20120423	--	--	11	13	--	38	61	59	--
D-SB-873-1-2	SB-873	1	2	20120423	--	--	--	--	--	--	6	1	--
D-SB-873-2-4	SB-873	2	4	20120423	--	--	--	--	--	--	5	1	--
D-SB-873-4-6	SB-873	4	6	20120423	--	--	--	--	--	--	--	--	27 J
D-SB-873-6-8	SB-873	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-874-0-1	SB-874	0	1	20120424	--	--	50 J	49 J	--	88	133	120	--
D-SB-874-1-2	SB-874	1	2	20120424	--	--	6400	9700	--	4600	6008	5913	--
D-SB-874-2-4	SB-874	2	4	20120424	--	--	2600	4200	--	2600	1673	1634	--
D-SB-874-4-6	SB-874	4	6	20120424	1100 J	--	6200	6200	--	2000	965	915	--
D-SB-874-6-8	SB-874	6	8	20120424	--	--	36	38	--	16	22	20	--
D-SB-875-0-1	SB-875	0	1	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-1-2	SB-875	1	2	20120423	--	--	69	18	--	42	67	65	--
D-SB-875-2-4	SB-875	2	4	20120423	--	--	32	15	--	54	36	34	--
D-SB-875-4-6	SB-875	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-6-8	SB-875	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-0-1	SB-876	0	1	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-1-2	SB-876	1	2	20120423	--	--	11	27	--	60	131	129	--
D-SB-876-2-4	SB-876	2	4	20120423	--	--	11	--	--	11	67	65	--
D-SB-876-4-6	SB-876	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-6-8	SB-876	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-877-0-1	SB-877	0	1	20120425	--	--	--	--	--	--	17	16	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
D-SB-877-1-2	SB-877	1	2	20120425	--	--	--	--	--	11	67	65	--
D-SB-877-2-4	SB-877	2	4	20120425	--	--	--	--	--	--	--	--	--
D-SB-877-4-6	SB-877	4	6	20120425	--	--	--	--	--	--	--	--	--
D-SB-877-6-8	SB-877	6	8	20120425	--	--	--	10	--	19	46	44	--
D-SB-878-0-1	SB-878	0	1	20120424	--	--	7.6 J	--	25	25	68	65	--
D-SB-878-1-2	SB-878	1	2	20120424	--	--	--	--	--	10	29	27	--
D-SB-878-2-4	SB-878	2	4	20120424	--	--	--	--	--	--	--	--	--
D-SB-878-4-6	SB-878	4	6	20120424	--	--	--	--	--	--	--	--	--
D-SB-878-6-8	SB-878	6	8	20120424	--	--	--	--	--	--	--	--	86 J
D-SB-879-0-1	SB-879	0	1	20120425	--	--	--	--	12	15	51	49	--
D-SB-879-1-2	SB-879	1	2	20120425	--	--	--	--	48	49	226	219	--
D-SB-879-2-4	SB-879	2	4	20120425	--	--	--	--	--	--	--	--	--
D-SB-879-4-6	SB-879	4	6	20120425	--	--	--	12	--	20	66	64	--
D-SB-879-6-8	SB-879	6	8	20120425	--	--	8.3	11	--	14	28	26	--
D-SB-880-0-1	SB-880	0	1	20120424	--	--	5.1 J	--	6.3 J	8.7 J	28	27	--
D-SB-880-1-2	SB-880	1	2	20120424	--	--	--	--	4.4 J	5.3 J	15	13	--
D-SB-880-2-4	SB-880	2	4	20120424	--	--	--	--	6.4 J	6.1 J	6	2	--
D-SB-880-4-6	SB-880	4	6	20120424	--	--	9.5	--	--	6.2 J	9	5	--
D-SB-880-6-8	SB-880	6	8	20120424	--	--	--	--	--	--	--	--	--
D-SB-881-0-1	SB-881	0	1	20120425	--	--	--	--	13	21	124	122	--
D-SB-881-1-2	SB-881	1	2	20120425	--	--	--	--	--	--	--	--	--
D-SB-881-2-4	SB-881	2	4	20120425	--	--	--	--	--	--	5	1	--
D-SB-881-4-6	SB-881	4	6	20120425	--	--	--	--	--	--	--	--	--
D-SB-881-6-8	SB-881	6	8	20120425	--	--	--	--	--	--	--	--	--
D-SS-782-01	SB-782	0	1	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SS-783-01	SB-783	0	1	20100902	--	--	NA	NA	NA	NA	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
D-SS-784-01	SB-784	0	1	20100902	--	--	NA	NA	NA	NA	NA	NA	--
D-SS-785-01	SB-785	0	1	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SS-786-01	SB-786	0	1	20100903	--	--	NA	NA	NA	NA	NA	NA	--
D-SS-787-01	SB-787	0	1	20100903	--	--	NA	NA	NA	NA	NA	NA	--
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	--	--	NA	NA	NA	NA	NA	NA	NA
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	1,1-BIPHENYL	2,4-DIMETHYLPHENOL	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BAP EQUIVALENT-HALFND	BAP EQUIVALENT-POS	BENZALDEHYDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	195	195	NA
SB-33A-SS	SB-033	0	0	20040917	--	--	NA	NA	NA	NA	NA	NA	NA
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	--	--	NA	NA	NA	NA	NA	NA	NA
SB-65-10	SB-065	10	10	20040917	--	--	NA	NA	NA	NA	NA	NA	NA
SB-65-15	SB-065	15	15	20040917	--	--	NA	NA	NA	NA	NA	NA	NA
SB-65-20	SB-065	20	20	20040917	--	--	NA	NA	NA	NA	NA	NA	NA
SB-65-SS	SB-065	0	0	20040917	--	--	NA	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	NA	NA	NA	NA	NA	59	--	--	NA
D-SB-782-05	SB-782	5	5	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-782-07	SB-782	7	7	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-782-09	SB-782	9	9	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-782-11	SB-782	11	11	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-782-13	SB-782	13	13	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-782-15	SB-782	15	15	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-783-03	SB-783	3	3	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-783-05	SB-783	5	5	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-783-07	SB-783	7	7	20100902	NA	NA	NA	NA	NA	--	--	--	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-783-11	SB-783	11	11	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-783-13	SB-783	13	13	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-783-15	SB-783	15	15	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-784-03	SB-784	3	3	20100902	NA	NA	NA	NA	NA	35 J	--	--	NA
D-SB-784-05	SB-784	5	5	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-784-07	SB-784	7	7	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-784-09	SB-784	9	9	20100902	NA	NA	NA	NA	NA	110	--	--	NA
D-SB-784-11	SB-784	11	11	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-784-13	SB-784	13	13	20100902	NA	NA	NA	NA	NA	78	--	--	NA
D-SB-784-15	SB-784	15	15	20100902	NA	NA	NA	NA	NA	--	22 J	--	NA
D-SB-785-03	SB-785	3	3	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-785-05	SB-785	5	5	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-785-07	SB-785	7	7	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-785-09	SB-785	9	9	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-785-11	SB-785	11	11	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-785-13	SB-785	13	13	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-785-15	SB-785	15	15	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-786-03	SB-786	3	3	20100903	NA	NA	NA	NA	NA	22 J	--	33 J	NA
D-SB-786-05	SB-786	5	5	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-786-07	SB-786	7	7	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-786-09	SB-786	9	9	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-786-11	SB-786	11	11	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-786-13	SB-786	13	13	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-786-15	SB-786	15	15	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-787-03	SB-787	3	3	20100908	NA	NA	NA	NA	NA	--	--	180	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-787-07	SB-787	7	7	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-787-09	SB-787	9	9	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-787-11	SB-787	11	11	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-787-13	SB-787	13	13	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-787-15	SB-787	15	15	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-788-03	SB-788	3	3	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-788-05	SB-788	5	5	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-788-07	SB-788	7	7	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-788-09	SB-788	9	9	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-788-11	SB-788	11	11	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-788-13	SB-788	13	13	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-788-15	SB-788	15	15	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-788-SS	SB-788	0	1	20100908	NA	NA	NA	NA	NA	20 J	--	--	NA
D-SB-789-03	SB-789	3	3	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-789-05	SB-789	5	5	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-789-07	SB-789	7	7	20100908	NA	NA	NA	NA	NA	24 J	--	--	NA
D-SB-789-09	SB-789	9	9	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-789-11	SB-789	11	11	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-789-13	SB-789	13	13	20100908	NA	NA	NA	NA	NA	--	29 J	--	NA
D-SB-789-15	SB-789	15	15	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-789-SS	SB-789	0	1	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-790-03	SB-790	3	3	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-790-05	SB-790	5	5	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-790-07	SB-790	7	7	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-790-09	SB-790	9	9	20100908	NA	NA	NA	NA	NA	--	--	--	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-790-13	SB-790	13	13	20100908	NA	NA	NA	NA	NA	140	--	--	NA
D-SB-790-15	SB-790	15	15	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-790-SS	SB-790	0	1	20100908	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-791-03	SB-791	3	3	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-791-05	SB-791	5	5	20100909	NA	NA	NA	NA	NA	52 J	--	--	NA
D-SB-791-07	SB-791	7	7	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-791-09	SB-791	9	9	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-791-11	SB-791	11	11	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-791-13	SB-791	13	13	20100909	NA	NA	NA	NA	NA	23 J	--	--	NA
D-SB-791-15	SB-791	15	15	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-791-SS	SB-791	0	1	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-792-03	SB-792	3	3	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-792-05	SB-792	5	5	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-792-07	SB-792	7	7	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-792-09	SB-792	9	9	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-792-11	SB-792	11	11	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-792-13	SB-792	13	13	20100909	NA	NA	NA	NA	NA	110	--	--	NA
D-SB-792-15	SB-792	15	15	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-792-SS	SB-792	0	1	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-793-03	SB-793	3	3	20100909	NA	NA	NA	NA	NA	30 J	--	--	NA
D-SB-793-05	SB-793	5	5	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-793-07	SB-793	7	7	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-793-09	SB-793	9	9	20100909	NA	NA	NA	NA	NA	32 J	--	--	NA
D-SB-793-11	SB-793	11	11	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-793-13	SB-793	13	13	20100909	NA	NA	NA	NA	NA	--	--	--	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	NA	NA	NA	NA	NA	--	28 J	--	NA
D-SB-793-SS	SB-793	0	1	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-794-03	SB-794	3	3	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-794-05	SB-794	5	5	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-794-07	SB-794	7	7	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-794-09	SB-794	9	9	20100909	NA	NA	NA	NA	NA	23 J	--	--	NA
D-SB-794-11	SB-794	11	11	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-794-13	SB-794	13	13	20100909	NA	NA	NA	NA	NA	27 J	--	--	NA
D-SB-794-15	SB-794	15	15	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-794-SS	SB-794	0	1	20100909	NA	NA	NA	NA	NA	--	--	120	NA
D-SB-795-03	SB-795	3	3	20100909	NA	NA	NA	NA	NA	23 J	--	--	NA
D-SB-795-05	SB-795	5	5	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-795-07	SB-795	7	7	20100909	NA	NA	NA	NA	NA	--	36 J	--	NA
D-SB-795-09	SB-795	9	9	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-795-11	SB-795	11	11	20100909	NA	NA	NA	NA	NA	25 J	--	--	NA
D-SB-795-13	SB-795	13	13	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-795-15	SB-795	15	15	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-795-SS	SB-795	0	1	20100909	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-796-03	SB-796	3	3	20100910	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-796-05	SB-796	5	5	20100910	NA	NA	NA	NA	NA	27 J	--	--	NA
D-SB-796-07	SB-796	7	7	20100910	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-796-09	SB-796	9	9	20100910	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-796-11	SB-796	11	11	20100910	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-796-13	SB-796	13	13	20100910	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-796-15	SB-796	15	15	20100910	NA	NA	NA	NA	NA	--	--	--	NA
D-SB-796-SS	SB-796	0	1	20100910	NA	NA	NA	NA	NA	--	--	--	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	140	96	150	57	67	--	--	--	170
D-SB-872-1-2	SB-872	1	2	20120424	1200	1100	1900	700	650	--	--	--	1100
D-SB-872-2-4	SB-872	2	4	20120424	150	210	350	170	120	--	--	280	260
D-SB-872-4-6	SB-872	4	6	20120424	250	120	220	69	110	--	--	350	320
D-SB-872-6-8	SB-872	6	8	20120424	140	87	140	36	80	--	--	96 J	230
D-SB-873-0-1	SB-873	0	1	20120423	82	45	51	--	69	27 B	--	--	82
D-SB-873-1-2	SB-873	1	2	20120423	--	--	12	--	--	--	--	--	11
D-SB-873-2-4	SB-873	2	4	20120423	--	--	8.2	--	--	--	--	--	10
D-SB-873-4-6	SB-873	4	6	20120423	--	--	--	--	--	27 B	--	--	--
D-SB-873-6-8	SB-873	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-874-0-1	SB-874	0	1	20120424	92	86	180	93	79	--	--	--	180
D-SB-874-1-2	SB-874	1	2	20120424	6900	4300	7200	1900	2900	--	--	2500 J	4000
D-SB-874-2-4	SB-874	2	4	20120424	1800	1200	1900	600	860	--	--	2700	2100
D-SB-874-4-6	SB-874	4	6	20120424	980	670	1100	320	570	--	--	11000	1400
D-SB-874-6-8	SB-874	6	8	20120424	16	15	25	8.3	12	--	--	49 J	31
D-SB-875-0-1	SB-875	0	1	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-1-2	SB-875	1	2	20120423	85	42	110	41	45	34 B	--	--	130
D-SB-875-2-4	SB-875	2	4	20120423	43	25	45	--	20	40 B	--	--	57
D-SB-875-4-6	SB-875	4	6	20120423	--	--	--	--	--	36 B	--	--	--
D-SB-875-6-8	SB-875	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-0-1	SB-876	0	1	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-1-2	SB-876	1	2	20120423	110	100	120	63	60	21 B	--	--	110
D-SB-876-2-4	SB-876	2	4	20120423	45	49	75	48	33	--	--	--	63
D-SB-876-4-6	SB-876	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-6-8	SB-876	6	8	20120423	--	--	--	--	--	88 B	--	--	--
D-SB-877-0-1	SB-877	0	1	20120425	9	12	17	11	6.8 J	79 B	--	--	13

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	46	51	62	38	33	41 B	--	--	58
D-SB-877-2-4	SB-877	2	4	20120425	--	--	--	--	--	57 B	--	--	--
D-SB-877-4-6	SB-877	4	6	20120425	--	--	--	--	--	42 B	--	--	--
D-SB-877-6-8	SB-877	6	8	20120425	42	33	39	25	21	--	--	--	42
D-SB-878-0-1	SB-878	0	1	20120424	71	48	96	--	45	45 J	--	--	80
D-SB-878-1-2	SB-878	1	2	20120424	24	21	23	14	18	36 B	--	--	25
D-SB-878-2-4	SB-878	2	4	20120424	--	--	--	--	--	56 B	--	--	--
D-SB-878-4-6	SB-878	4	6	20120424	--	--	--	--	--	34 B	--	--	--
D-SB-878-6-8	SB-878	6	8	20120424	--	--	--	--	--	--	--	--	--
D-SB-879-0-1	SB-879	0	1	20120425	24	38	56	32	22	61 B	--	--	37
D-SB-879-1-2	SB-879	1	2	20120425	66	170	300	130	110	97 B	--	--	130
D-SB-879-2-4	SB-879	2	4	20120425	--	--	--	--	--	39 B	--	--	--
D-SB-879-4-6	SB-879	4	6	20120425	49	49	64	37	31	40 B	--	--	56
D-SB-879-6-8	SB-879	6	8	20120425	18	20	28	17	14	41 B	--	--	24
D-SB-880-0-1	SB-880	0	1	20120424	20 J	21 J	26 J	12 J	11 J	--	--	--	28 J
D-SB-880-1-2	SB-880	1	2	20120424	11	12	--	--	--	--	--	--	20
D-SB-880-2-4	SB-880	2	4	20120424	22	--	--	--	--	--	--	--	26
D-SB-880-4-6	SB-880	4	6	20120424	20	--	27	--	16	--	--	--	27
D-SB-880-6-8	SB-880	6	8	20120424	--	--	--	--	--	--	--	--	--
D-SB-881-0-1	SB-881	0	1	20120425	93	94	130	58	47	51 B	--	--	98
D-SB-881-1-2	SB-881	1	2	20120425	--	--	--	--	--	--	--	--	--
D-SB-881-2-4	SB-881	2	4	20120425	--	--	9.6	--	--	26 B	--	--	10
D-SB-881-4-6	SB-881	4	6	20120425	--	--	--	--	--	34 B	--	--	--
D-SB-881-6-8	SB-881	6	8	20120425	--	--	--	--	--	--	--	--	--
D-SS-782-01	SB-782	0	1	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SS-783-01	SB-783	0	1	20100902	NA	NA	NA	NA	NA	--	--	--	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	NA	NA	NA	NA	NA	--	--	--	NA
D-SS-785-01	SB-785	0	1	20100903	NA	NA	NA	NA	NA	--	--	--	NA
D-SS-786-01	SB-786	0	1	20100903	NA	NA	NA	NA	NA	--	--	62	NA
D-SS-787-01	SB-787	0	1	20100903	NA	NA	NA	NA	NA	--	--	--	NA
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	NA	NA	NA	NA	NA	--	--	120 J	NA
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	SEMIVOLATILES (UG/KG)								
					BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	BIS(2-ETHYLHEXYL)PHTHALATE	BUTYL BENZYL PHTHALATE	CARBAZOLE	CHRYSENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	NA	NA	NA	NA	NA	--	--	--	NA
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	NA	NA	NA	NA	NA	--	--	--	NA
SB-65-10	SB-065	10	10	20040917	NA	NA	NA	NA	NA	--	--	--	NA
SB-65-15	SB-065	15	15	20040917	NA	NA	NA	NA	NA	--	--	--	NA
SB-65-20	SB-065	20	20	20040917	NA	NA	NA	NA	NA	--	--	--	NA
SB-65-SS	SB-065	0	0	20040917	NA	NA	NA	NA	NA	--	--	--	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-782-05	SB-782	5	5	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-782-07	SB-782	7	7	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-782-09	SB-782	9	9	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-782-11	SB-782	11	11	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-782-13	SB-782	13	13	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-782-15	SB-782	15	15	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-783-03	SB-783	3	3	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-783-05	SB-783	5	5	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-783-07	SB-783	7	7	20100902	--	--	NA	NA	NA	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-783-11	SB-783	11	11	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-783-13	SB-783	13	13	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-783-15	SB-783	15	15	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-784-03	SB-784	3	3	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-784-05	SB-784	5	5	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-784-07	SB-784	7	7	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-784-09	SB-784	9	9	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-784-11	SB-784	11	11	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-784-13	SB-784	13	13	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-784-15	SB-784	15	15	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SB-785-03	SB-785	3	3	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SB-785-05	SB-785	5	5	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SB-785-07	SB-785	7	7	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SB-785-09	SB-785	9	9	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-785-11	SB-785	11	11	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-785-13	SB-785	13	13	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-785-15	SB-785	15	15	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-786-03	SB-786	3	3	20100903	18 J	--	NA	NA	NA	--	NA	NA	--
D-SB-786-05	SB-786	5	5	20100903	8.9 J	--	NA	NA	NA	--	NA	NA	--
D-SB-786-07	SB-786	7	7	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SB-786-09	SB-786	9	9	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SB-786-11	SB-786	11	11	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SB-786-13	SB-786	13	13	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SB-786-15	SB-786	15	15	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-787-03	SB-787	3	3	20100908	120	--	NA	NA	NA	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-787-07	SB-787	7	7	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SB-787-09	SB-787	9	9	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-787-11	SB-787	11	11	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-787-13	SB-787	13	13	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-787-15	SB-787	15	15	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-788-03	SB-788	3	3	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-788-05	SB-788	5	5	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-788-07	SB-788	7	7	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-788-09	SB-788	9	9	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-788-11	SB-788	11	11	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-788-13	SB-788	13	13	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-788-15	SB-788	15	15	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-788-SS	SB-788	0	1	20100908	11 J	--	NA	NA	NA	--	NA	NA	--
D-SB-789-03	SB-789	3	3	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-789-05	SB-789	5	5	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-789-07	SB-789	7	7	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-789-09	SB-789	9	9	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-789-11	SB-789	11	11	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-789-13	SB-789	13	13	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-789-15	SB-789	15	15	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-789-SS	SB-789	0	1	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-790-03	SB-790	3	3	20100908	14 J	--	NA	NA	NA	--	NA	NA	--
D-SB-790-05	SB-790	5	5	20100908	58 J	--	NA	NA	NA	--	NA	NA	--
D-SB-790-07	SB-790	7	7	20100908	29 J	--	NA	NA	NA	--	NA	NA	--
D-SB-790-09	SB-790	9	9	20100908	--	--	NA	NA	NA	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-790-13	SB-790	13	13	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-790-15	SB-790	15	15	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-790-SS	SB-790	0	1	20100908	--	--	NA	NA	NA	--	NA	NA	--
D-SB-791-03	SB-791	3	3	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-791-05	SB-791	5	5	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-791-07	SB-791	7	7	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-791-09	SB-791	9	9	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-791-11	SB-791	11	11	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-791-13	SB-791	13	13	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-791-15	SB-791	15	15	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-791-SS	SB-791	0	1	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-792-03	SB-792	3	3	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-792-05	SB-792	5	5	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-792-07	SB-792	7	7	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-792-09	SB-792	9	9	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-792-11	SB-792	11	11	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-792-13	SB-792	13	13	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-792-15	SB-792	15	15	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-792-SS	SB-792	0	1	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-793-03	SB-793	3	3	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-793-05	SB-793	5	5	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-793-07	SB-793	7	7	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-793-09	SB-793	9	9	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-793-11	SB-793	11	11	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-793-13	SB-793	13	13	20100909	--	--	NA	NA	NA	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-793-SS	SB-793	0	1	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-794-03	SB-794	3	3	20100909	35 J	--	NA	NA	NA	--	NA	NA	--
D-SB-794-05	SB-794	5	5	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-794-07	SB-794	7	7	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-794-09	SB-794	9	9	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-794-11	SB-794	11	11	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-794-13	SB-794	13	13	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-794-15	SB-794	15	15	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-794-SS	SB-794	0	1	20100909	110	--	NA	NA	NA	--	NA	NA	--
D-SB-795-03	SB-795	3	3	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-795-05	SB-795	5	5	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-795-07	SB-795	7	7	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-795-09	SB-795	9	9	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-795-11	SB-795	11	11	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-795-13	SB-795	13	13	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-795-15	SB-795	15	15	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-795-SS	SB-795	0	1	20100909	--	--	NA	NA	NA	--	NA	NA	--
D-SB-796-03	SB-796	3	3	20100910	--	--	NA	NA	NA	--	NA	NA	--
D-SB-796-05	SB-796	5	5	20100910	--	--	NA	NA	NA	--	NA	NA	--
D-SB-796-07	SB-796	7	7	20100910	--	--	NA	NA	NA	--	NA	NA	--
D-SB-796-09	SB-796	9	9	20100910	--	--	NA	NA	NA	--	NA	NA	--
D-SB-796-11	SB-796	11	11	20100910	--	--	NA	NA	NA	--	NA	NA	--
D-SB-796-13	SB-796	13	13	20100910	--	--	NA	NA	NA	--	NA	NA	--
D-SB-796-15	SB-796	15	15	20100910	--	--	NA	NA	NA	--	NA	NA	--
D-SB-796-SS	SB-796	0	1	20100910	--	--	NA	NA	NA	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	30 J	--	360	33	46	--	22	180	--
D-SB-872-1-2	SB-872	1	2	20120424	78 J	--	2100	91	590	--	98	120	--
D-SB-872-2-4	SB-872	2	4	20120424	55 J	--	340	70	130	--	3200	120	--
D-SB-872-4-6	SB-872	4	6	20120424	210	--	1100	160	57	--	5500	580	--
D-SB-872-6-8	SB-872	6	8	20120424	47 J	--	650	72	40	--	1200	410	--
D-SB-873-0-1	SB-873	0	1	20120423	10 J	--	160	14	--	--	9	130	--
D-SB-873-1-2	SB-873	1	2	20120423	--	--	11	--	--	--	--	--	--
D-SB-873-2-4	SB-873	2	4	20120423	--	--	10	--	--	--	--	--	--
D-SB-873-4-6	SB-873	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-873-6-8	SB-873	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-874-0-1	SB-874	0	1	20120424	--	--	230	--	62	--	1000	100	--
D-SB-874-1-2	SB-874	1	2	20120424	6800	--	27000	9600	1700	--	21000	37000	--
D-SB-874-2-4	SB-874	2	4	20120424	2600	--	10000	4000	530	--	27000	15000	--
D-SB-874-4-6	SB-874	4	6	20120424	4300	--	3900	4900	300	--	34000	11000	--
D-SB-874-6-8	SB-874	6	8	20120424	26 J	--	77	31	6.8 J	--	270	140	--
D-SB-875-0-1	SB-875	0	1	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-1-2	SB-875	1	2	20120423	44 J	--	130	25	34	--	58	160	--
D-SB-875-2-4	SB-875	2	4	20120423	23 J	--	120	44	--	--	34	210	--
D-SB-875-4-6	SB-875	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-6-8	SB-875	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-0-1	SB-876	0	1	20120423	--	--	45	--	--	--	--	--	--
D-SB-876-1-2	SB-876	1	2	20120423	18 J	--	210	33	53	--	15	210	--
D-SB-876-2-4	SB-876	2	4	20120423	--	--	66	8.2	35	--	15	42	--
D-SB-876-4-6	SB-876	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-6-8	SB-876	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-877-0-1	SB-877	0	1	20120425	--	--	17	--	8.6	--	--	7.8	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	--	--	89	--	31	--	--	42	--
D-SB-877-2-4	SB-877	2	4	20120425	--	22 J	--	--	--	--	--	--	42 J
D-SB-877-4-6	SB-877	4	6	20120425	--	21 J	--	--	--	--	--	--	--
D-SB-877-6-8	SB-877	6	8	20120425	--	--	80	11	23	--	10	64	--
D-SB-878-0-1	SB-878	0	1	20120424	--	290 J	120	--	--	--	9.4	43	--
D-SB-878-1-2	SB-878	1	2	20120424	--	--	49	--	11	--	--	38	--
D-SB-878-2-4	SB-878	2	4	20120424	--	--	7.9	--	--	--	--	--	--
D-SB-878-4-6	SB-878	4	6	20120424	--	--	--	--	--	--	--	--	--
D-SB-878-6-8	SB-878	6	8	20120424	--	--	--	--	--	--	--	--	--
D-SB-879-0-1	SB-879	0	1	20120425	--	--	42	--	26	--	--	22	--
D-SB-879-1-2	SB-879	1	2	20120425	--	--	81	--	110	--	--	34	--
D-SB-879-2-4	SB-879	2	4	20120425	--	--	--	--	--	--	--	--	--
D-SB-879-4-6	SB-879	4	6	20120425	8.2 J	--	96	12	33	--	12	79	--
D-SB-879-6-8	SB-879	6	8	20120425	13 J	--	43	14	15	--	17	52	--
D-SB-880-0-1	SB-880	0	1	20120424	--	--	34 J	--	8.8 J	--	11 J	20 J	--
D-SB-880-1-2	SB-880	1	2	20120424	--	--	19	--	--	--	--	9.8	--
D-SB-880-2-4	SB-880	2	4	20120424	--	--	34	--	--	--	4.2 J	11	--
D-SB-880-4-6	SB-880	4	6	20120424	--	--	46	--	--	--	19	25	--
D-SB-880-6-8	SB-880	6	8	20120424	--	--	4.4 J	--	--	--	13	7.2 J	--
D-SB-881-0-1	SB-881	0	1	20120425	--	--	130	3.9 J	51	--	--	56	--
D-SB-881-1-2	SB-881	1	2	20120425	--	--	--	--	--	410 J	--	--	--
D-SB-881-2-4	SB-881	2	4	20120425	--	--	11	--	--	--	--	13	--
D-SB-881-4-6	SB-881	4	6	20120425	--	--	8.1	--	--	--	--	8.8	--
D-SB-881-6-8	SB-881	6	8	20120425	--	--	--	--	--	--	--	--	--
D-SS-782-01	SB-782	0	1	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SS-783-01	SB-783	0	1	20100902	15 J	--	NA	NA	NA	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	--	--	NA	NA	NA	--	NA	NA	--
D-SS-785-01	SB-785	0	1	20100903	--	--	NA	NA	NA	--	NA	NA	--
D-SS-786-01	SB-786	0	1	20100903	34 J	--	NA	NA	NA	--	NA	NA	--
D-SS-787-01	SB-787	0	1	20100903	--	--	NA	NA	NA	--	NA	NA	--
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	65 J	--	NA	NA	NA	--	NA	NA	--
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	DIBENZOFURAN	DI-N-BUTYL PHTHALATE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	PHENANTHRENE	PHENOL
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	--	--	NA	NA	NA	--	NA	NA	--
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	--	--	NA	NA	NA	--	NA	NA	--
SB-65-10	SB-065	10	10	20040917	--	--	NA	NA	NA	--	NA	NA	--
SB-65-15	SB-065	15	15	20040917	--	--	NA	NA	NA	--	NA	NA	--
SB-65-20	SB-065	20	20	20040917	--	--	NA	NA	NA	--	NA	NA	--
SB-65-SS	SB-065	0	0	20040917	--	--	NA	NA	NA	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-782-05	SB-782	5	5	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-782-07	SB-782	7	7	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-782-09	SB-782	9	9	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-782-11	SB-782	11	11	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-782-13	SB-782	13	13	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-782-15	SB-782	15	15	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-783-03	SB-783	3	3	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-783-05	SB-783	5	5	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-783-07	SB-783	7	7	20100902	NA	NA	--	--	--	NA	NA	NA	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-783-11	SB-783	11	11	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-783-13	SB-783	13	13	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-783-15	SB-783	15	15	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-784-03	SB-784	3	3	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-784-05	SB-784	5	5	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-784-07	SB-784	7	7	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-784-09	SB-784	9	9	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-784-11	SB-784	11	11	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-784-13	SB-784	13	13	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-784-15	SB-784	15	15	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-785-03	SB-785	3	3	20100903	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-785-05	SB-785	5	5	20100903	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-785-07	SB-785	7	7	20100903	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-785-09	SB-785	9	9	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-785-11	SB-785	11	11	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-785-13	SB-785	13	13	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-785-15	SB-785	15	15	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-786-03	SB-786	3	3	20100903	NA	NA	--	23 J	41 J	NA	NA	NA	NA
D-SB-786-05	SB-786	5	5	20100903	NA	NA	--	8.3 J	--	NA	NA	NA	NA
D-SB-786-07	SB-786	7	7	20100903	NA	NA	--	3.4 J	19	NA	NA	NA	NA
D-SB-786-09	SB-786	9	9	20100903	NA	NA	--	0.41 B	0.74 J	NA	NA	NA	NA
D-SB-786-11	SB-786	11	11	20100903	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-786-13	SB-786	13	13	20100903	NA	NA	--	3.2 J	--	NA	NA	NA	NA
D-SB-786-15	SB-786	15	15	20100908	NA	NA	--	0.16 J	--	NA	NA	NA	NA
D-SB-787-03	SB-787	3	3	20100908	NA	NA	--	--	--	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-787-07	SB-787	7	7	20100903	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-787-09	SB-787	9	9	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-787-11	SB-787	11	11	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-787-13	SB-787	13	13	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-787-15	SB-787	15	15	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-788-03	SB-788	3	3	20100908	NA	NA	--	0.15 J	--	NA	NA	NA	NA
D-SB-788-05	SB-788	5	5	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-788-07	SB-788	7	7	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-788-09	SB-788	9	9	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-788-11	SB-788	11	11	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-788-13	SB-788	13	13	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-788-15	SB-788	15	15	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-788-SS	SB-788	0	1	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-789-03	SB-789	3	3	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-789-05	SB-789	5	5	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-789-07	SB-789	7	7	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-789-09	SB-789	9	9	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-789-11	SB-789	11	11	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-789-13	SB-789	13	13	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-789-15	SB-789	15	15	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-789-SS	SB-789	0	1	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-790-03	SB-790	3	3	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-790-05	SB-790	5	5	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-790-07	SB-790	7	7	20100908	NA	NA	--	0.19 J	--	NA	NA	NA	NA
D-SB-790-09	SB-790	9	9	20100908	NA	NA	--	--	--	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-790-13	SB-790	13	13	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-790-15	SB-790	15	15	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-790-SS	SB-790	0	1	20100908	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-791-03	SB-791	3	3	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-791-05	SB-791	5	5	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-791-07	SB-791	7	7	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-791-09	SB-791	9	9	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-791-11	SB-791	11	11	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-791-13	SB-791	13	13	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-791-15	SB-791	15	15	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-791-SS	SB-791	0	1	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-792-03	SB-792	3	3	20100909	NA	NA	--	0.21 J	--	NA	NA	NA	NA
D-SB-792-05	SB-792	5	5	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-792-07	SB-792	7	7	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-792-09	SB-792	9	9	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-792-11	SB-792	11	11	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-792-13	SB-792	13	13	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-792-15	SB-792	15	15	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-792-SS	SB-792	0	1	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-793-03	SB-793	3	3	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-793-05	SB-793	5	5	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-793-07	SB-793	7	7	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-793-09	SB-793	9	9	20100909	NA	NA	1.1 J	--	--	NA	NA	NA	NA
D-SB-793-11	SB-793	11	11	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-793-13	SB-793	13	13	20100909	NA	NA	--	--	--	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-793-SS	SB-793	0	1	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-794-03	SB-794	3	3	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-794-05	SB-794	5	5	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-794-07	SB-794	7	7	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-794-09	SB-794	9	9	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-794-11	SB-794	11	11	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-794-13	SB-794	13	13	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-794-15	SB-794	15	15	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-794-SS	SB-794	0	1	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-795-03	SB-795	3	3	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-795-05	SB-795	5	5	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-795-07	SB-795	7	7	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-795-09	SB-795	9	9	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-795-11	SB-795	11	11	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-795-13	SB-795	13	13	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-795-15	SB-795	15	15	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-795-SS	SB-795	0	1	20100909	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-796-03	SB-796	3	3	20100910	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-796-05	SB-796	5	5	20100910	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-796-07	SB-796	7	7	20100910	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-796-09	SB-796	9	9	20100910	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-796-11	SB-796	11	11	20100910	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-796-13	SB-796	13	13	20100910	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-796-15	SB-796	15	15	20100910	NA	NA	--	--	--	NA	NA	NA	NA
D-SB-796-SS	SB-796	0	1	20100910	NA	NA	--	--	--	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	270	NA	--	--	--	NA	NA	NA	NA
D-SB-872-1-2	SB-872	1	2	20120424	2200	NA	--	--	--	NA	NA	NA	NA
D-SB-872-2-4	SB-872	2	4	20120424	310	NA	--	--	5.6 J	NA	NA	270 NJ	NA
D-SB-872-4-6	SB-872	4	6	20120424	790	NA	--	26 J	43 J	19 NJ	NA	370 NJ	NA
D-SB-872-6-8	SB-872	6	8	20120424	430	NA	--	10 J	11 J	6.7 NJ	NA	NA	NA
D-SB-873-0-1	SB-873	0	1	20120423	120	NA	--	--	--	NA	NA	NA	NA
D-SB-873-1-2	SB-873	1	2	20120423	10	NA	--	--	--	NA	NA	NA	NA
D-SB-873-2-4	SB-873	2	4	20120423	9.9	NA	--	--	--	NA	NA	NA	NA
D-SB-873-4-6	SB-873	4	6	20120423	--	NA	--	--	--	NA	NA	NA	NA
D-SB-873-6-8	SB-873	6	8	20120423	--	NA	--	--	--	NA	NA	NA	NA
D-SB-874-0-1	SB-874	0	1	20120424	200	NA	--	--	--	NA	NA	NA	NA
D-SB-874-1-2	SB-874	1	2	20120424	18000	NA	--	170 J	110 J	NA	NA	NA	NA
D-SB-874-2-4	SB-874	2	4	20120424	7300	NA	--	39 J	62 J	27 NJ	NA	NA	1300 NJ
D-SB-874-4-6	SB-874	4	6	20120424	2800	NA	--	320 J	480 J	200 NJ	9200 NJ	NA	NA
D-SB-874-6-8	SB-874	6	8	20120424	53	NA	--	16 J	29 J	10 NJ	NA	NA	NA
D-SB-875-0-1	SB-875	0	1	20120423	--	NA	--	--	--	NA	NA	NA	NA
D-SB-875-1-2	SB-875	1	2	20120423	120	NA	--	--	--	NA	NA	NA	NA
D-SB-875-2-4	SB-875	2	4	20120423	110	NA	--	--	--	NA	NA	NA	NA
D-SB-875-4-6	SB-875	4	6	20120423	--	NA	--	--	--	NA	NA	NA	NA
D-SB-875-6-8	SB-875	6	8	20120423	--	NA	--	--	--	NA	NA	NA	NA
D-SB-876-0-1	SB-876	0	1	20120423	49	NA	--	--	--	NA	NA	NA	NA
D-SB-876-1-2	SB-876	1	2	20120423	180	NA	--	--	--	NA	NA	NA	NA
D-SB-876-2-4	SB-876	2	4	20120423	56	NA	--	--	--	NA	NA	NA	NA
D-SB-876-4-6	SB-876	4	6	20120423	--	NA	--	--	--	NA	NA	NA	NA
D-SB-876-6-8	SB-876	6	8	20120423	--	NA	--	--	--	NA	NA	NA	NA
D-SB-877-0-1	SB-877	0	1	20120425	17	NA	--	--	--	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	86	NA	--	--	--	NA	NA	NA	NA
D-SB-877-2-4	SB-877	2	4	20120425	--	NA	--	--	--	NA	NA	NA	NA
D-SB-877-4-6	SB-877	4	6	20120425	--	NA	--	--	--	NA	NA	NA	NA
D-SB-877-6-8	SB-877	6	8	20120425	68	NA	--	--	--	NA	NA	NA	NA
D-SB-878-0-1	SB-878	0	1	20120424	110	NA	--	--	--	NA	NA	NA	NA
D-SB-878-1-2	SB-878	1	2	20120424	36	NA	--	--	--	NA	NA	NA	NA
D-SB-878-2-4	SB-878	2	4	20120424	7.9	NA	--	--	--	NA	NA	NA	NA
D-SB-878-4-6	SB-878	4	6	20120424	--	NA	--	--	--	NA	NA	NA	NA
D-SB-878-6-8	SB-878	6	8	20120424	--	NA	--	--	--	NA	NA	NA	NA
D-SB-879-0-1	SB-879	0	1	20120425	44	19 NJ	--	--	--	NA	NA	NA	NA
D-SB-879-1-2	SB-879	1	2	20120425	120	NA	--	--	--	NA	NA	NA	NA
D-SB-879-2-4	SB-879	2	4	20120425	--	NA	--	--	--	NA	NA	NA	NA
D-SB-879-4-6	SB-879	4	6	20120425	76	NA	--	--	--	NA	NA	NA	NA
D-SB-879-6-8	SB-879	6	8	20120425	35	NA	--	--	--	NA	NA	NA	NA
D-SB-880-0-1	SB-880	0	1	20120424	34 J	NA	--	--	--	NA	NA	NA	NA
D-SB-880-1-2	SB-880	1	2	20120424	23	NA	--	--	--	NA	NA	NA	NA
D-SB-880-2-4	SB-880	2	4	20120424	31	NA	--	--	--	NA	NA	NA	NA
D-SB-880-4-6	SB-880	4	6	20120424	36	NA	--	--	--	NA	NA	NA	NA
D-SB-880-6-8	SB-880	6	8	20120424	3.9 J	NA	--	--	--	NA	NA	NA	NA
D-SB-881-0-1	SB-881	0	1	20120425	130	NA	--	--	--	NA	NA	NA	NA
D-SB-881-1-2	SB-881	1	2	20120425	--	NA	--	--	--	NA	NA	NA	NA
D-SB-881-2-4	SB-881	2	4	20120425	--	NA	--	--	--	NA	NA	NA	NA
D-SB-881-4-6	SB-881	4	6	20120425	--	NA	--	--	--	NA	NA	NA	NA
D-SB-881-6-8	SB-881	6	8	20120425	--	NA	--	--	--	NA	NA	NA	NA
D-SS-782-01	SB-782	0	1	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SS-783-01	SB-783	0	1	20100902	NA	NA	--	--	--	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	NA	NA	--	--	--	NA	NA	NA	NA
D-SS-785-01	SB-785	0	1	20100903	NA	NA	--	--	--	NA	NA	NA	NA
D-SS-786-01	SB-786	0	1	20100903	NA	NA	--	--	--	NA	NA	NA	NA
D-SS-787-01	SB-787	0	1	20100903	NA	NA	--	--	--	NA	NA	NA	NA
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	NA	NA	--	NA	--	--	NA	NA	NA
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	PYRENE	.BETA.-SESQUIPHELLANDRENE	1,1-DICHLOROETHENE	1,2,3-TRIMETHYLBENZENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	1-BUTANOL	1-METHYLNAPHTHALENE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	NA	NA	--	NA	--	--	NA	NA	NA
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	NA	NA	--	NA	--	--	NA	NA	NA
SB-65-10	SB-065	10	10	20040917	NA	NA	--	NA	--	--	NA	NA	NA
SB-65-15	SB-065	15	15	20040917	NA	NA	--	NA	--	--	NA	NA	NA
SB-65-20	SB-065	20	20	20040917	NA	NA	--	NA	--	--	NA	NA	NA
SB-65-SS	SB-065	0	0	20040917	NA	NA	--	NA	--	--	NA	NA	NA

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-782-05	SB-782	5	5	20100902	3.5 J	--	NA	--	42 B	--	NA	--	--
D-SB-782-07	SB-782	7	7	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-782-09	SB-782	9	9	20100902	2.2 J	--	NA	--	21 B	--	NA	--	--
D-SB-782-11	SB-782	11	11	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-782-13	SB-782	13	13	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-782-15	SB-782	15	15	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-783-03	SB-783	3	3	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-783-05	SB-783	5	5	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-783-07	SB-783	7	7	20100902	2.7 J	--	NA	--	59 B	--	NA	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	--	--	NA	--	--	--	NA	0.49	--
D-SB-783-11	SB-783	11	11	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-783-13	SB-783	13	13	20100902	--	--	NA	--	5.8 B	--	NA	--	--
D-SB-783-15	SB-783	15	15	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-784-03	SB-784	3	3	20100902	--	--	NA	--	6.1 B	--	NA	--	--
D-SB-784-05	SB-784	5	5	20100902	5.5 J	--	NA	--	71	--	NA	--	1.4 J
D-SB-784-07	SB-784	7	7	20100902	--	--	NA	--	13 B	--	NA	--	--
D-SB-784-09	SB-784	9	9	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-784-11	SB-784	11	11	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-784-13	SB-784	13	13	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-784-15	SB-784	15	15	20100902	--	--	NA	--	--	--	NA	--	--
D-SB-785-03	SB-785	3	3	20100903	4.3 B	--	NA	--	320 B	--	NA	--	0.81 B
D-SB-785-05	SB-785	5	5	20100903	1.4 J	--	NA	--	11 B	--	NA	--	0.9 B
D-SB-785-07	SB-785	7	7	20100903	5 J	--	NA	--	390 B	--	NA	--	2.3 B
D-SB-785-09	SB-785	9	9	20100908	--	--	NA	--	220 B	--	NA	--	0.97 B
D-SB-785-11	SB-785	11	11	20100908	1.6 J	--	NA	--	37 B	--	NA	--	0.81 B
D-SB-785-13	SB-785	13	13	20100908	--	--	NA	--	28 B	--	NA	--	1.2 B
D-SB-785-15	SB-785	15	15	20100908	3.3 J	--	NA	--	200 B	--	NA	--	--
D-SB-786-03	SB-786	3	3	20100903	120 B	--	NA	--	--	--	NA	--	35 J
D-SB-786-05	SB-786	5	5	20100903	--	--	NA	--	--	--	NA	--	--
D-SB-786-07	SB-786	7	7	20100903	5.9 B	--	NA	0.34 J	35 B	--	NA	--	1.4 B
D-SB-786-09	SB-786	9	9	20100903	1.3 B	--	NA	--	26 B	0.79 J	NA	--	0.94 B
D-SB-786-11	SB-786	11	11	20100903	120 B	--	NA	--	260 B	10 J	NA	--	--
D-SB-786-13	SB-786	13	13	20100903	--	--	NA	--	350 B	20 J	NA	--	--
D-SB-786-15	SB-786	15	15	20100908	--	--	NA	--	16 B	3.4 J	NA	--	--
D-SB-787-03	SB-787	3	3	20100908	5.6 J	--	NA	--	36 B	--	NA	--	1.2 B

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	6.1 J	--	NA	--	240 B	--	NA	--	0.91 B
D-SB-787-07	SB-787	7	7	20100903	1.9 B	--	NA	--	45 B	--	NA	--	0.84 B
D-SB-787-09	SB-787	9	9	20100908	2.5 J	--	NA	--	290	--	NA	--	--
D-SB-787-11	SB-787	11	11	20100908	--	--	NA	--	29 B	--	NA	--	0.73 B
D-SB-787-13	SB-787	13	13	20100908	--	--	NA	--	100 B	--	NA	--	--
D-SB-787-15	SB-787	15	15	20100908	1.7 J	--	NA	--	200 B	--	NA	--	0.78 B
D-SB-788-03	SB-788	3	3	20100908	19	--	NA	0.85 J	110 B	--	NA	--	1 B
D-SB-788-05	SB-788	5	5	20100908	4.6 J	--	NA	--	120 B	--	NA	--	0.97 B
D-SB-788-07	SB-788	7	7	20100908	--	--	NA	--	23 B	--	NA	--	0.81 B
D-SB-788-09	SB-788	9	9	20100908	6 J	--	NA	--	130 B	--	NA	--	1.5 B
D-SB-788-11	SB-788	11	11	20100908	--	--	NA	--	18 B	--	NA	--	1.1 B
D-SB-788-13	SB-788	13	13	20100908	1.9 J	--	NA	--	22 B	--	NA	--	1.1 B
D-SB-788-15	SB-788	15	15	20100908	1.3 J	--	NA	--	230	--	NA	--	--
D-SB-788-SS	SB-788	0	1	20100908	1.6 J	--	NA	--	440 J	--	NA	--	0.65 J
D-SB-789-03	SB-789	3	3	20100908	6.6 J	--	NA	--	78 B	--	NA	--	0.53 J
D-SB-789-05	SB-789	5	5	20100908	12	--	NA	--	100	--	NA	--	0.45 J
D-SB-789-07	SB-789	7	7	20100908	4.7 J	--	NA	--	170	--	NA	--	--
D-SB-789-09	SB-789	9	9	20100908	--	--	NA	--	250	--	NA	--	--
D-SB-789-11	SB-789	11	11	20100908	--	--	NA	--	30 B	--	NA	--	--
D-SB-789-13	SB-789	13	13	20100908	--	--	NA	--	--	--	NA	--	--
D-SB-789-15	SB-789	15	15	20100908	1.7 J	--	NA	--	100	--	NA	--	--
D-SB-789-SS	SB-789	0	1	20100908	6 J	--	NA	--	210 B	--	NA	--	0.82 J
D-SB-790-03	SB-790	3	3	20100908	2 J	--	NA	--	29 B	--	NA	--	--
D-SB-790-05	SB-790	5	5	20100908	1.9 J	--	NA	--	44 B	--	NA	--	--
D-SB-790-07	SB-790	7	7	20100908	3.6 J	--	NA	--	28 B	--	NA	--	0.67 J
D-SB-790-09	SB-790	9	9	20100908	--	--	NA	--	11 B	--	NA	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	--	--	NA	--	--	--	NA	--	--
D-SB-790-13	SB-790	13	13	20100908	--	--	NA	--	110	--	NA	--	--
D-SB-790-15	SB-790	15	15	20100908	--	--	NA	--	19 B	--	NA	--	--
D-SB-790-SS	SB-790	0	1	20100908	--	--	NA	--	110	--	NA	--	--
D-SB-791-03	SB-791	3	3	20100909	4.9 J	--	NA	--	49 B	--	NA	--	0.99 B
D-SB-791-05	SB-791	5	5	20100909	14	--	NA	--	400 J	--	NA	--	1.6 B
D-SB-791-07	SB-791	7	7	20100909	3.1 J	--	NA	--	220 B	--	NA	--	0.86 B
D-SB-791-09	SB-791	9	9	20100909	--	--	NA	--	68 B	--	NA	--	0.94 B
D-SB-791-11	SB-791	11	11	20100909	--	--	NA	--	--	--	NA	--	--
D-SB-791-13	SB-791	13	13	20100909	4 J	--	NA	--	60 B	--	NA	--	4.3 B
D-SB-791-15	SB-791	15	15	20100909	--	--	NA	--	11 B	--	NA	--	--
D-SB-791-SS	SB-791	0	1	20100909	1.7 J	--	NA	--	14 B	--	NA	--	0.65 J
D-SB-792-03	SB-792	3	3	20100909	52	--	NA	--	240 J	--	NA	--	2 B
D-SB-792-05	SB-792	5	5	20100909	3.7 J	--	NA	--	160 B	--	NA	--	0.87 B
D-SB-792-07	SB-792	7	7	20100909	1.6 J	--	NA	--	18 B	--	NA	--	0.83 B
D-SB-792-09	SB-792	9	9	20100909	--	--	NA	--	310 J	--	NA	--	--
D-SB-792-11	SB-792	11	11	20100909	--	--	NA	--	130 B	--	NA	--	--
D-SB-792-13	SB-792	13	13	20100909	--	--	NA	--	38 B	--	NA	--	--
D-SB-792-15	SB-792	15	15	20100909	2 J	--	NA	--	170 B	--	NA	--	--
D-SB-792-SS	SB-792	0	1	20100909	7.6 J	--	NA	--	43 B	--	NA	--	1.4 B
D-SB-793-03	SB-793	3	3	20100909	22	--	NA	--	100 B	--	NA	--	1.8 B
D-SB-793-05	SB-793	5	5	20100909	--	--	NA	--	29 B	--	NA	--	0.81 B
D-SB-793-07	SB-793	7	7	20100909	5.1 J	--	NA	--	190 B	--	NA	--	1 B
D-SB-793-09	SB-793	9	9	20100909	--	--	NA	--	--	--	NA	--	--
D-SB-793-11	SB-793	11	11	20100909	--	--	NA	--	--	--	NA	--	--
D-SB-793-13	SB-793	13	13	20100909	--	--	NA	--	--	--	NA	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	--	--	NA	--	--	--	NA	--	--
D-SB-793-SS	SB-793	0	1	20100909	12	--	NA	--	130 B	--	NA	--	1.7 B
D-SB-794-03	SB-794	3	3	20100909	3 J	--	NA	--	31 B	--	NA	--	0.99 B
D-SB-794-05	SB-794	5	5	20100909	6.8 J	--	NA	--	62 B	--	NA	--	1 B
D-SB-794-07	SB-794	7	7	20100909	1.7 J	--	NA	--	15 B	--	NA	--	0.87 B
D-SB-794-09	SB-794	9	9	20100909	--	--	NA	--	--	--	NA	--	--
D-SB-794-11	SB-794	11	11	20100909	--	--	NA	--	--	--	NA	--	--
D-SB-794-13	SB-794	13	13	20100909	--	--	NA	--	--	--	NA	--	--
D-SB-794-15	SB-794	15	15	20100909	--	--	NA	--	8.1 B	--	NA	--	--
D-SB-794-SS	SB-794	0	1	20100909	--	--	NA	--	21 B	--	NA	--	1.1 B
D-SB-795-03	SB-795	3	3	20100909	1.9 J	--	NA	--	9.2 B	--	NA	--	0.99 B
D-SB-795-05	SB-795	5	5	20100909	15	--	NA	--	70 B	--	NA	--	2 B
D-SB-795-07	SB-795	7	7	20100909	2.2 J	--	NA	--	15 B	--	NA	--	0.89 B
D-SB-795-09	SB-795	9	9	20100909	--	--	NA	--	--	--	NA	--	0.85 B
D-SB-795-11	SB-795	11	11	20100909	--	--	NA	--	16 B	--	NA	--	--
D-SB-795-13	SB-795	13	13	20100909	--	--	NA	--	--	--	NA	--	0.91 B
D-SB-795-15	SB-795	15	15	20100909	--	--	NA	--	--	--	NA	--	1 B
D-SB-795-SS	SB-795	0	1	20100909	17	--	NA	--	96 B	--	NA	--	1.9 B
D-SB-796-03	SB-796	3	3	20100910	2.7 J	--	NA	--	35 B	--	NA	--	0.78 B
D-SB-796-05	SB-796	5	5	20100910	8.1 J	--	NA	--	88 B	--	NA	--	1.5 B
D-SB-796-07	SB-796	7	7	20100910	--	--	NA	--	16 B	--	NA	--	0.88 B
D-SB-796-09	SB-796	9	9	20100910	1.3 J	--	NA	--	6.2 B	--	NA	--	0.81 B
D-SB-796-11	SB-796	11	11	20100910	--	--	NA	--	--	--	NA	--	--
D-SB-796-13	SB-796	13	13	20100910	--	--	NA	--	--	--	NA	--	0.79 B
D-SB-796-15	SB-796	15	15	20100910	--	--	NA	--	--	--	NA	--	0.84 B
D-SB-796-SS	SB-796	0	1	20100910	2.2 J	--	NA	--	17 B	--	NA	--	0.73 B

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	--	--	NA	--	12 B	--	NA	--	3.9 J
D-SB-872-1-2	SB-872	1	2	20120424	--	--	NA	--	16 B	--	NA	--	1.7 J
D-SB-872-2-4	SB-872	2	4	20120424	--	--	62 NJ	--	--	18 J	NA	--	--
D-SB-872-4-6	SB-872	4	6	20120424	--	--	550 NJ	10 J	--	26 J	NA	--	160 J
D-SB-872-6-8	SB-872	6	8	20120424	--	22 J	59 NJ	--	--	--	NA	--	--
D-SB-873-0-1	SB-873	0	1	20120423	--	--	NA	--	11 B	--	NA	--	1.9 J
D-SB-873-1-2	SB-873	1	2	20120423	2.5 J	--	NA	--	32 B	--	NA	--	1.4 J
D-SB-873-2-4	SB-873	2	4	20120423	2.8 J	--	NA	--	43 B	--	NA	--	1.4 J
D-SB-873-4-6	SB-873	4	6	20120423	3.7 J	--	NA	--	52 B	--	NA	--	1.9 J
D-SB-873-6-8	SB-873	6	8	20120423	1.5 J	--	NA	--	23 B	--	NA	--	1.5 J
D-SB-874-0-1	SB-874	0	1	20120424	--	--	NA	--	19 J	--	NA	--	3.7 J
D-SB-874-1-2	SB-874	1	2	20120424	--	--	7800 NJ	--	--	--	3500 NJ	--	--
D-SB-874-2-4	SB-874	2	4	20120424	--	--	2600 NJ	--	810 J	--	NA	--	--
D-SB-874-4-6	SB-874	4	6	20120424	--	--	22000 NJ	--	--	--	NA	--	--
D-SB-874-6-8	SB-874	6	8	20120424	--	--	560 NJ	--	--	17 J	NA	--	--
D-SB-875-0-1	SB-875	0	1	20120423	--	--	NA	--	11 B	--	NA	--	2.7 J
D-SB-875-1-2	SB-875	1	2	20120423	--	--	NA	--	10 B	--	NA	--	1.4 J
D-SB-875-2-4	SB-875	2	4	20120423	--	--	NA	--	23 B	--	NA	--	1.9 J
D-SB-875-4-6	SB-875	4	6	20120423	--	--	NA	--	23 B	--	NA	--	--
D-SB-875-6-8	SB-875	6	8	20120423	2.9 J	--	NA	--	25 B	--	NA	--	1.9 J
D-SB-876-0-1	SB-876	0	1	20120423	--	--	NA	--	24 B	--	NA	--	2.1 J
D-SB-876-1-2	SB-876	1	2	20120423	3.5 J	--	NA	--	37 B	--	NA	--	2.2 J
D-SB-876-2-4	SB-876	2	4	20120423	--	--	NA	--	22 B	--	NA	--	--
D-SB-876-4-6	SB-876	4	6	20120423	9.8 J	--	NA	--	110 K	--	NA	--	3 J
D-SB-876-6-8	SB-876	6	8	20120423	--	--	NA	--	35 B	--	NA	--	--
D-SB-877-0-1	SB-877	0	1	20120425	--	--	NA	--	--	--	NA	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	--	--	NA	--	--	--	NA	--	--
D-SB-877-2-4	SB-877	2	4	20120425	--	--	NA	--	--	--	NA	--	--
D-SB-877-4-6	SB-877	4	6	20120425	--	--	NA	--	30 B	--	NA	--	1.7 J
D-SB-877-6-8	SB-877	6	8	20120425	--	--	NA	--	21 B	--	NA	--	--
D-SB-878-0-1	SB-878	0	1	20120424	--	--	NA	--	14 B	--	NA	--	--
D-SB-878-1-2	SB-878	1	2	20120424	--	--	NA	--	--	--	NA	--	--
D-SB-878-2-4	SB-878	2	4	20120424	--	--	NA	--	--	--	NA	--	1.8 J
D-SB-878-4-6	SB-878	4	6	20120424	--	--	NA	--	--	--	NA	--	1.6 J
D-SB-878-6-8	SB-878	6	8	20120424	24 J	--	NA	--	130 B	--	NA	--	6.2 J
D-SB-879-0-1	SB-879	0	1	20120425	--	--	NA	--	--	--	NA	--	--
D-SB-879-1-2	SB-879	1	2	20120425	--	--	NA	--	--	--	NA	--	--
D-SB-879-2-4	SB-879	2	4	20120425	--	--	NA	--	5.7 B	--	NA	--	--
D-SB-879-4-6	SB-879	4	6	20120425	1.7 J	--	NA	--	20 B	--	NA	--	1.8 J
D-SB-879-6-8	SB-879	6	8	20120425	4.9 J	--	NA	--	34 B	--	NA	--	1.7 J
D-SB-880-0-1	SB-880	0	1	20120424	--	--	NA	--	--	--	NA	--	--
D-SB-880-1-2	SB-880	1	2	20120424	--	--	NA	--	--	--	NA	--	2.1 J
D-SB-880-2-4	SB-880	2	4	20120424	--	--	NA	--	--	--	NA	--	--
D-SB-880-4-6	SB-880	4	6	20120424	--	--	NA	--	25 K	--	NA	--	1.9 J
D-SB-880-6-8	SB-880	6	8	20120424	2.3 J	--	NA	--	24 K	--	NA	--	1.6 J
D-SB-881-0-1	SB-881	0	1	20120425	--	--	NA	--	11 B	--	NA	--	--
D-SB-881-1-2	SB-881	1	2	20120425	--	--	NA	--	--	--	NA	--	1.8 J
D-SB-881-2-4	SB-881	2	4	20120425	--	--	NA	--	--	--	NA	--	--
D-SB-881-4-6	SB-881	4	6	20120425	--	--	NA	--	--	--	NA	--	--
D-SB-881-6-8	SB-881	6	8	20120425	22 J	--	NA	--	120 B	--	NA	--	4 J
D-SS-782-01	SB-782	0	1	20100902	--	--	NA	--	--	--	NA	--	--
D-SS-783-01	SB-783	0	1	20100902	--	--	NA	--	--	--	NA	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	--	--	NA	--	--	--	NA	--	--
D-SS-785-01	SB-785	0	1	20100903	--	--	NA	--	18 B	--	NA	--	--
D-SS-786-01	SB-786	0	1	20100903	2.1 B	--	NA	--	21 B	0.72 J	NA	--	2.2 B
D-SS-787-01	SB-787	0	1	20100903	2.8 B	--	NA	--	17 B	--	NA	--	1 B
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	6 J	--	NA	--	59 J	--	NA	--	--
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	2-BUTANONE	2-HEXANONE	2-METHYLNAPHTHALENE	4-ISOPROPYLTOLUENE	ACETONE	BENZENE	BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	BROMOMETHANE	CARBON DISULFIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	--	--	NA	--	--	--	NA	--	--
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	--	--	NA	--	--	--	NA	--	--
SB-65-10	SB-065	10	10	20040917	--	--	NA	--	--	--	NA	--	--
SB-65-15	SB-065	15	15	20040917	--	--	NA	--	--	--	NA	--	--
SB-65-20	SB-065	20	20	20040917	--	--	NA	--	--	--	NA	--	--
SB-65-SS	SB-065	0	0	20040917	--	--	NA	--	--	--	NA	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-782-05	SB-782	5	5	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-782-07	SB-782	7	7	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-782-09	SB-782	9	9	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-782-11	SB-782	11	11	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-782-13	SB-782	13	13	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-782-15	SB-782	15	15	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-783-03	SB-783	3	3	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-783-05	SB-783	5	5	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-783-07	SB-783	7	7	20100902	--	NA	--	NA	--	--	NA	NA	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-783-11	SB-783	11	11	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-783-13	SB-783	13	13	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-783-15	SB-783	15	15	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-784-03	SB-784	3	3	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-784-05	SB-784	5	5	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-784-07	SB-784	7	7	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-784-09	SB-784	9	9	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-784-11	SB-784	11	11	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-784-13	SB-784	13	13	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-784-15	SB-784	15	15	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SB-785-03	SB-785	3	3	20100903	--	NA	--	NA	--	--	NA	NA	1 B
D-SB-785-05	SB-785	5	5	20100903	--	NA	--	NA	--	--	NA	NA	1.3 B
D-SB-785-07	SB-785	7	7	20100903	--	NA	--	NA	--	--	NA	NA	3.8 B
D-SB-785-09	SB-785	9	9	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-785-11	SB-785	11	11	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-785-13	SB-785	13	13	20100908	0.7 J	NA	--	NA	--	--	NA	NA	--
D-SB-785-15	SB-785	15	15	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-786-03	SB-786	3	3	20100903	--	NA	40 J	NA	5.2 J	68 J	NA	NA	120 J
D-SB-786-05	SB-786	5	5	20100903	--	NA	13 J	NA	--	21 J	NA	NA	120 J
D-SB-786-07	SB-786	7	7	20100903	--	NA	0.67 J	NA	3.1 J	6 J	NA	NA	5.2 B
D-SB-786-09	SB-786	9	9	20100903	--	NA	--	NA	--	--	NA	NA	5.4 B
D-SB-786-11	SB-786	11	11	20100903	--	NA	--	NA	--	12 J	NA	NA	74 J
D-SB-786-13	SB-786	13	13	20100903	--	NA	9.2 J	NA	--	20 J	NA	NA	77 J
D-SB-786-15	SB-786	15	15	20100908	--	NA	0.35 J	NA	--	--	NA	NA	--
D-SB-787-03	SB-787	3	3	20100908	--	NA	--	NA	--	--	NA	NA	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-787-07	SB-787	7	7	20100903	--	NA	--	NA	--	--	NA	NA	3.1 B
D-SB-787-09	SB-787	9	9	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-787-11	SB-787	11	11	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-787-13	SB-787	13	13	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-787-15	SB-787	15	15	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-788-03	SB-788	3	3	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-788-05	SB-788	5	5	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-788-07	SB-788	7	7	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-788-09	SB-788	9	9	20100908	--	NA	--	NA	--	--	NA	NA	0.6 B
D-SB-788-11	SB-788	11	11	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-788-13	SB-788	13	13	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-788-15	SB-788	15	15	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-788-SS	SB-788	0	1	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-789-03	SB-789	3	3	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-789-05	SB-789	5	5	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-789-07	SB-789	7	7	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-789-09	SB-789	9	9	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-789-11	SB-789	11	11	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-789-13	SB-789	13	13	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-789-15	SB-789	15	15	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-789-SS	SB-789	0	1	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-790-03	SB-790	3	3	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-790-05	SB-790	5	5	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-790-07	SB-790	7	7	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-790-09	SB-790	9	9	20100908	--	NA	--	NA	--	--	NA	NA	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-790-13	SB-790	13	13	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-790-15	SB-790	15	15	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-790-SS	SB-790	0	1	20100908	--	NA	--	NA	--	--	NA	NA	--
D-SB-791-03	SB-791	3	3	20100909	--	NA	--	NA	--	--	NA	NA	0.84 B
D-SB-791-05	SB-791	5	5	20100909	--	NA	--	NA	--	--	NA	NA	1.1 B
D-SB-791-07	SB-791	7	7	20100909	--	NA	--	NA	--	--	NA	NA	0.9 B
D-SB-791-09	SB-791	9	9	20100909	--	NA	--	NA	--	--	NA	NA	0.98 B
D-SB-791-11	SB-791	11	11	20100909	--	NA	--	NA	--	--	NA	NA	0.81 B
D-SB-791-13	SB-791	13	13	20100909	--	NA	--	NA	--	--	NA	NA	0.82 B
D-SB-791-15	SB-791	15	15	20100909	--	NA	--	NA	--	--	NA	NA	0.9 B
D-SB-791-SS	SB-791	0	1	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-792-03	SB-792	3	3	20100909	--	NA	--	NA	--	--	NA	NA	0.79 B
D-SB-792-05	SB-792	5	5	20100909	--	NA	--	NA	--	--	NA	NA	0.78 B
D-SB-792-07	SB-792	7	7	20100909	--	NA	--	NA	--	--	NA	NA	0.82 B
D-SB-792-09	SB-792	9	9	20100909	--	NA	--	NA	--	--	NA	NA	1 B
D-SB-792-11	SB-792	11	11	20100909	--	NA	--	NA	--	--	NA	NA	1.1 B
D-SB-792-13	SB-792	13	13	20100909	--	NA	--	NA	--	--	NA	NA	0.77 B
D-SB-792-15	SB-792	15	15	20100909	--	NA	--	NA	--	--	NA	NA	1.9 B
D-SB-792-SS	SB-792	0	1	20100909	--	NA	--	NA	--	--	NA	NA	0.72 B
D-SB-793-03	SB-793	3	3	20100909	--	NA	--	NA	--	--	NA	NA	0.93 B
D-SB-793-05	SB-793	5	5	20100909	--	NA	--	NA	--	--	NA	NA	0.83 B
D-SB-793-07	SB-793	7	7	20100909	--	NA	--	NA	--	--	NA	NA	1.2 B
D-SB-793-09	SB-793	9	9	20100909	--	NA	--	NA	--	--	NA	NA	0.76 B
D-SB-793-11	SB-793	11	11	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-793-13	SB-793	13	13	20100909	--	NA	--	NA	--	--	NA	NA	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-793-SS	SB-793	0	1	20100909	--	NA	--	NA	--	--	NA	NA	1 B
D-SB-794-03	SB-794	3	3	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-794-05	SB-794	5	5	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-794-07	SB-794	7	7	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-794-09	SB-794	9	9	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-794-11	SB-794	11	11	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-794-13	SB-794	13	13	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-794-15	SB-794	15	15	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-794-SS	SB-794	0	1	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-795-03	SB-795	3	3	20100909	--	NA	--	NA	--	--	NA	NA	2.7 B
D-SB-795-05	SB-795	5	5	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-795-07	SB-795	7	7	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-795-09	SB-795	9	9	20100909	--	NA	--	NA	--	--	NA	NA	0.93 B
D-SB-795-11	SB-795	11	11	20100909	--	NA	--	NA	--	--	NA	NA	1.2 B
D-SB-795-13	SB-795	13	13	20100909	--	NA	--	NA	--	--	NA	NA	1.1 B
D-SB-795-15	SB-795	15	15	20100909	--	NA	--	NA	--	--	NA	NA	--
D-SB-795-SS	SB-795	0	1	20100909	--	NA	--	NA	--	--	NA	NA	2.1 B
D-SB-796-03	SB-796	3	3	20100910	--	NA	--	NA	--	--	NA	NA	0.75 B
D-SB-796-05	SB-796	5	5	20100910	--	NA	--	NA	--	--	NA	NA	0.98 B
D-SB-796-07	SB-796	7	7	20100910	--	NA	--	NA	--	--	NA	NA	1 B
D-SB-796-09	SB-796	9	9	20100910	--	NA	--	NA	--	--	NA	NA	1 B
D-SB-796-11	SB-796	11	11	20100910	--	NA	--	NA	--	--	NA	NA	0.78 B
D-SB-796-13	SB-796	13	13	20100910	--	NA	--	NA	--	--	NA	NA	0.86 B
D-SB-796-15	SB-796	15	15	20100910	--	NA	--	NA	--	--	NA	NA	0.96 B
D-SB-796-SS	SB-796	0	1	20100910	--	NA	--	NA	--	--	NA	NA	0.82 B

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	--	6.4 NJ	0.29 J	NA	--	--	NA	NA	--
D-SB-872-1-2	SB-872	1	2	20120424	--	NA	--	NA	--	--	NA	0.31 NJ	1.4 J
D-SB-872-2-4	SB-872	2	4	20120424	--	NA	12 B	NA	--	13 B	26 NJ	NA	--
D-SB-872-4-6	SB-872	4	6	20120424	--	NA	62 B	700 NJ	--	69 B	62 NJ	NA	--
D-SB-872-6-8	SB-872	6	8	20120424	--	NA	19 B	NA	--	21 B	52 NJ	NA	--
D-SB-873-0-1	SB-873	0	1	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-873-1-2	SB-873	1	2	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-873-2-4	SB-873	2	4	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-873-4-6	SB-873	4	6	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-873-6-8	SB-873	6	8	20120423	--	NA	--	NA	--	--	NA	NA	0.72 J
D-SB-874-0-1	SB-874	0	1	20120424	--	NA	--	NA	--	--	NA	NA	1.5 J
D-SB-874-1-2	SB-874	1	2	20120424	--	NA	200 B	4600 NJ	--	110 B	NA	NA	--
D-SB-874-2-4	SB-874	2	4	20120424	--	NA	46 B	NA	--	54 B	120 NJ	NA	--
D-SB-874-4-6	SB-874	4	6	20120424	--	NA	260 B	6200 NJ	--	380 B	NA	NA	--
D-SB-874-6-8	SB-874	6	8	20120424	--	NA	21 B	440 NJ	--	28 B	43 NJ	NA	--
D-SB-875-0-1	SB-875	0	1	20120423	--	NA	--	NA	--	--	NA	NA	2 J
D-SB-875-1-2	SB-875	1	2	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-875-2-4	SB-875	2	4	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-875-4-6	SB-875	4	6	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-875-6-8	SB-875	6	8	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-876-0-1	SB-876	0	1	20120423	--	NA	--	NA	--	--	NA	NA	1.4 J
D-SB-876-1-2	SB-876	1	2	20120423	--	NA	--	NA	--	--	NA	NA	1.4 J
D-SB-876-2-4	SB-876	2	4	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-876-4-6	SB-876	4	6	20120423	--	NA	--	NA	--	--	NA	NA	--
D-SB-876-6-8	SB-876	6	8	20120423	--	NA	--	NA	--	--	NA	NA	1.1 J
D-SB-877-0-1	SB-877	0	1	20120425	--	NA	--	NA	--	--	NA	NA	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	--	NA	--	NA	--	--	2.2 NJ	NA	0.63 B
D-SB-877-2-4	SB-877	2	4	20120425	--	NA	--	NA	--	--	NA	NA	0.9 B
D-SB-877-4-6	SB-877	4	6	20120425	--	NA	--	NA	--	--	NA	NA	2.3 B
D-SB-877-6-8	SB-877	6	8	20120425	--	NA	--	NA	--	--	NA	NA	--
D-SB-878-0-1	SB-878	0	1	20120424	--	NA	--	NA	--	--	25 NJ	NA	--
D-SB-878-1-2	SB-878	1	2	20120424	--	NA	--	NA	--	--	3.9 NJ	NA	--
D-SB-878-2-4	SB-878	2	4	20120424	--	NA	--	NA	--	--	NA	NA	1 J
D-SB-878-4-6	SB-878	4	6	20120424	--	NA	--	NA	--	--	NA	NA	--
D-SB-878-6-8	SB-878	6	8	20120424	--	NA	--	NA	--	--	NA	NA	--
D-SB-879-0-1	SB-879	0	1	20120425	--	NA	--	NA	--	--	5.8 NJ	NA	1.5 B
D-SB-879-1-2	SB-879	1	2	20120425	--	NA	--	NA	--	--	3.7 NJ	NA	--
D-SB-879-2-4	SB-879	2	4	20120425	--	NA	--	NA	--	--	NA	NA	--
D-SB-879-4-6	SB-879	4	6	20120425	--	NA	--	NA	--	--	NA	NA	1.8 B
D-SB-879-6-8	SB-879	6	8	20120425	--	NA	--	NA	--	--	NA	NA	1 B
D-SB-880-0-1	SB-880	0	1	20120424	--	NA	--	NA	--	--	2.3 NJ	NA	--
D-SB-880-1-2	SB-880	1	2	20120424	--	NA	--	NA	--	--	NA	NA	--
D-SB-880-2-4	SB-880	2	4	20120424	--	NA	--	NA	--	--	NA	NA	--
D-SB-880-4-6	SB-880	4	6	20120424	--	NA	--	NA	--	--	NA	NA	--
D-SB-880-6-8	SB-880	6	8	20120424	--	NA	--	NA	--	--	NA	NA	--
D-SB-881-0-1	SB-881	0	1	20120425	--	NA	--	NA	--	--	38 NJ	NA	--
D-SB-881-1-2	SB-881	1	2	20120425	--	NA	--	NA	--	--	NA	NA	--
D-SB-881-2-4	SB-881	2	4	20120425	--	NA	--	NA	--	--	NA	NA	--
D-SB-881-4-6	SB-881	4	6	20120425	--	NA	--	NA	--	--	NA	NA	1.3 B
D-SB-881-6-8	SB-881	6	8	20120425	--	NA	--	NA	--	--	NA	NA	--
D-SS-782-01	SB-782	0	1	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SS-783-01	SB-783	0	1	20100902	--	NA	--	NA	--	--	NA	NA	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	--	NA	--	NA	--	--	NA	NA	--
D-SS-785-01	SB-785	0	1	20100903	--	NA	--	NA	--	--	NA	NA	1.5 B
D-SS-786-01	SB-786	0	1	20100903	--	NA	--	NA	--	--	NA	NA	3.9 B
D-SS-787-01	SB-787	0	1	20100903	--	NA	--	NA	--	--	NA	NA	2.8 B
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	--	NA	--	NA	--	--	NA	NA	11 J
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	VOLATILES (UG/KG)								
					CHLOROMETHANE	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	ETHYLBENZENE	INDANE	ISOPROPYLBENZENE	M+P-XYLENES	METHYL ACETATE	METHYL CYCLOHEXANE	METHYLENE CHLORIDE
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	--	NA	--	NA	--	10 J	NA	NA	8 J
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	--	NA	--	NA	--	--	NA	NA	8 J
SB-65-10	SB-065	10	10	20040917	--	NA	--	NA	--	--	NA	NA	8 J
SB-65-15	SB-065	15	15	20040917	--	NA	--	NA	--	--	NA	NA	8 J
SB-65-20	SB-065	20	20	20040917	--	NA	--	NA	--	--	NA	NA	9 J
SB-65-SS	SB-065	0	0	20040917	--	NA	--	NA	--	--	NA	NA	7 J

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-782-03	SB-782	3	3	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-05	SB-782	5	5	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-07	SB-782	7	7	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-09	SB-782	9	9	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-11	SB-782	11	11	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-13	SB-782	13	13	20100902	--	--	--	--	--	--	--	--	--
D-SB-782-15	SB-782	15	15	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-03	SB-783	3	3	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-05	SB-783	5	5	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-07	SB-783	7	7	20100902	--	--	--	--	--	--	--	--	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-783-09	SB-783	9	9	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-11	SB-783	11	11	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-13	SB-783	13	13	20100902	--	--	--	--	--	--	--	--	--
D-SB-783-15	SB-783	15	15	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-03	SB-784	3	3	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-05	SB-784	5	5	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-07	SB-784	7	7	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-09	SB-784	9	9	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-11	SB-784	11	11	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-13	SB-784	13	13	20100902	--	--	--	--	--	--	--	--	--
D-SB-784-15	SB-784	15	15	20100902	--	--	--	--	--	--	--	--	--
D-SB-785-03	SB-785	3	3	20100903	0.75 B	--	--	--	--	--	--	--	--
D-SB-785-05	SB-785	5	5	20100903	0.95 B	--	--	--	--	--	--	--	--
D-SB-785-07	SB-785	7	7	20100903	1.1 B	--	--	--	--	--	--	--	--
D-SB-785-09	SB-785	9	9	20100908	0.85 B	--	--	--	--	--	--	--	--
D-SB-785-11	SB-785	11	11	20100908	0.8 B	--	--	--	--	--	--	0.28 J	--
D-SB-785-13	SB-785	13	13	20100908	0.81 B	--	--	--	--	--	--	--	--
D-SB-785-15	SB-785	15	15	20100908	0.81 B	--	--	--	--	--	--	--	--
D-SB-786-03	SB-786	3	3	20100903	4000	--	--	50 J	--	--	--	--	120 J
D-SB-786-05	SB-786	5	5	20100903	1900	--	--	20 J	--	--	--	--	41 J
D-SB-786-07	SB-786	7	7	20100903	4.1 B	--	1.2 J	35	--	--	--	--	42
D-SB-786-09	SB-786	9	9	20100903	16	--	--	2 J	--	--	--	--	2.9 J
D-SB-786-11	SB-786	11	11	20100903	260	--	--	6.3 J	--	--	--	13 J	18 J
D-SB-786-13	SB-786	13	13	20100903	530	--	--	12 J	--	--	--	31 J	32 J
D-SB-786-15	SB-786	15	15	20100908	47	--	--	0.57 J	--	--	--	0.58 J	1 J
D-SB-787-03	SB-787	3	3	20100908	0.99 B	--	--	--	--	--	--	0.26 J	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-787-05	SB-787	5	5	20100908	0.92 B	--	--	--	--	--	--	--	--
D-SB-787-07	SB-787	7	7	20100903	0.92 B	--	--	--	--	--	--	--	--
D-SB-787-09	SB-787	9	9	20100908	0.78 B	--	--	--	--	--	--	--	--
D-SB-787-11	SB-787	11	11	20100908	0.76 B	--	--	--	--	--	--	--	--
D-SB-787-13	SB-787	13	13	20100908	0.77 B	--	--	--	--	--	--	--	--
D-SB-787-15	SB-787	15	15	20100908	0.76 B	--	--	--	--	--	--	--	--
D-SB-788-03	SB-788	3	3	20100908	6 B	--	--	--	--	--	--	0.69 J	--
D-SB-788-05	SB-788	5	5	20100908	0.85 B	--	--	--	--	--	--	--	--
D-SB-788-07	SB-788	7	7	20100908	0.75 B	--	--	--	--	--	--	--	--
D-SB-788-09	SB-788	9	9	20100908	0.8 B	--	--	--	--	--	--	--	--
D-SB-788-11	SB-788	11	11	20100908	1.1 B	--	--	--	--	--	--	0.43 J	--
D-SB-788-13	SB-788	13	13	20100908	0.87 B	--	--	--	--	--	--	0.4 J	--
D-SB-788-15	SB-788	15	15	20100908	0.73 B	--	--	--	--	--	--	--	--
D-SB-788-SS	SB-788	0	1	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-03	SB-789	3	3	20100908	2.2 B	--	--	--	--	--	--	--	--
D-SB-789-05	SB-789	5	5	20100908	--	--	2.6 J	--	--	--	--	0.32 J	--
D-SB-789-07	SB-789	7	7	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-09	SB-789	9	9	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-11	SB-789	11	11	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-13	SB-789	13	13	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-15	SB-789	15	15	20100908	--	--	--	--	--	--	--	--	--
D-SB-789-SS	SB-789	0	1	20100908	--	--	--	--	--	--	--	--	--
D-SB-790-03	SB-790	3	3	20100908	2.1 B	--	--	--	--	--	--	--	--
D-SB-790-05	SB-790	5	5	20100908	2.2 B	--	--	--	--	--	--	--	--
D-SB-790-07	SB-790	7	7	20100908	2.9 B	--	--	--	--	--	--	--	--
D-SB-790-09	SB-790	9	9	20100908	--	--	--	--	--	--	--	--	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-790-11	SB-790	11	11	20100908	--	--	--	--	--	--	--	--	--
D-SB-790-13	SB-790	13	13	20100908	--	--	--	--	--	--	--	--	--
D-SB-790-15	SB-790	15	15	20100908	--	--	--	--	--	--	--	--	--
D-SB-790-SS	SB-790	0	1	20100908	--	--	--	--	--	--	--	--	--
D-SB-791-03	SB-791	3	3	20100909	1.6 B	--	--	--	--	--	--	--	--
D-SB-791-05	SB-791	5	5	20100909	1.1 B	--	--	--	--	--	--	--	--
D-SB-791-07	SB-791	7	7	20100909	0.75 B	--	--	--	--	--	--	--	--
D-SB-791-09	SB-791	9	9	20100909	0.93 B	--	--	--	--	--	--	--	--
D-SB-791-11	SB-791	11	11	20100909	0.79 B	--	--	--	--	--	--	--	--
D-SB-791-13	SB-791	13	13	20100909	1 B	--	--	--	0.16 J	--	--	--	--
D-SB-791-15	SB-791	15	15	20100909	0.83 B	--	--	--	--	--	--	--	--
D-SB-791-SS	SB-791	0	1	20100909	--	--	--	--	--	--	--	--	--
D-SB-792-03	SB-792	3	3	20100909	2.1 B	--	--	--	--	--	--	0.71 J	--
D-SB-792-05	SB-792	5	5	20100909	0.8 B	--	--	--	--	--	--	--	--
D-SB-792-07	SB-792	7	7	20100909	0.75 B	--	--	--	--	--	--	0.41 J	--
D-SB-792-09	SB-792	9	9	20100909	0.76 B	--	--	--	--	--	--	--	--
D-SB-792-11	SB-792	11	11	20100909	0.8 B	--	--	--	--	--	--	--	--
D-SB-792-13	SB-792	13	13	20100909	0.79 B	--	--	--	--	--	--	--	--
D-SB-792-15	SB-792	15	15	20100909	0.87 B	--	--	--	--	--	--	--	--
D-SB-792-SS	SB-792	0	1	20100909	0.85 B	--	--	--	--	--	--	0.38 J	--
D-SB-793-03	SB-793	3	3	20100909	1.1 B	--	--	--	--	--	--	--	--
D-SB-793-05	SB-793	5	5	20100909	0.75 B	--	--	--	--	--	--	--	--
D-SB-793-07	SB-793	7	7	20100909	0.84 B	--	--	--	--	--	--	--	--
D-SB-793-09	SB-793	9	9	20100909	0.76 B	--	--	--	--	--	--	--	--
D-SB-793-11	SB-793	11	11	20100909	--	--	--	--	--	--	--	--	--
D-SB-793-13	SB-793	13	13	20100909	--	--	--	--	--	0.96 J	--	--	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-793-15	SB-793	15	15	20100909	--	--	--	--	--	--	--	--	--
D-SB-793-SS	SB-793	0	1	20100909	2.2 B	--	--	--	--	--	--	--	--
D-SB-794-03	SB-794	3	3	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-05	SB-794	5	5	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-07	SB-794	7	7	20100909	0.8 B	--	--	--	--	--	--	--	--
D-SB-794-09	SB-794	9	9	20100909	0.72 B	--	--	--	--	--	--	--	--
D-SB-794-11	SB-794	11	11	20100909	--	--	--	--	--	--	--	--	--
D-SB-794-13	SB-794	13	13	20100909	0.75 B	--	--	--	--	--	--	--	--
D-SB-794-15	SB-794	15	15	20100909	0.77 B	--	--	--	--	--	--	--	--
D-SB-794-SS	SB-794	0	1	20100909	--	--	--	--	--	--	--	--	--
D-SB-795-03	SB-795	3	3	20100909	0.84 B	--	--	--	--	--	--	--	--
D-SB-795-05	SB-795	5	5	20100909	1 B	--	--	--	--	--	--	--	--
D-SB-795-07	SB-795	7	7	20100909	--	--	--	--	--	--	--	--	--
D-SB-795-09	SB-795	9	9	20100909	0.8 B	--	--	--	--	--	--	--	--
D-SB-795-11	SB-795	11	11	20100909	0.88 B	--	--	--	--	--	--	--	--
D-SB-795-13	SB-795	13	13	20100909	0.86 B	--	--	--	--	--	--	--	--
D-SB-795-15	SB-795	15	15	20100909	0.92 B	--	--	--	--	--	--	--	--
D-SB-795-SS	SB-795	0	1	20100909	0.78 B	--	--	--	--	--	--	--	--
D-SB-796-03	SB-796	3	3	20100910	0.7 B	--	--	--	--	--	--	--	--
D-SB-796-05	SB-796	5	5	20100910	0.83 B	--	--	--	--	--	--	--	--
D-SB-796-07	SB-796	7	7	20100910	0.83 B	--	--	--	--	--	--	--	--
D-SB-796-09	SB-796	9	9	20100910	0.77 B	--	--	--	--	--	--	--	--
D-SB-796-11	SB-796	11	11	20100910	0.69 B	--	--	--	--	--	--	--	--
D-SB-796-13	SB-796	13	13	20100910	0.74 B	--	--	--	--	--	--	--	--
D-SB-796-15	SB-796	15	15	20100910	0.7 B	--	--	--	--	--	--	--	--
D-SB-796-SS	SB-796	0	1	20100910	0.71 B	--	--	--	--	--	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-872-0-1	SB-872	0	1	20120424	9.8	--	--	--	--	--	--	--	--
D-SB-872-1-2	SB-872	1	2	20120424	2.5 J	--	--	--	--	--	--	--	--
D-SB-872-2-4	SB-872	2	4	20120424	920	--	--	--	--	--	--	--	13 B
D-SB-872-4-6	SB-872	4	6	20120424	9500	--	--	21 B	--	--	--	--	90 B
D-SB-872-6-8	SB-872	6	8	20120424	400	9.2 J	--	15 B	6.7 B	--	--	19 J	36 B
D-SB-873-0-1	SB-873	0	1	20120423	0.31 B	--	--	--	0.16 B	--	1.9 J	--	--
D-SB-873-1-2	SB-873	1	2	20120423	--	--	--	--	--	--	--	--	--
D-SB-873-2-4	SB-873	2	4	20120423	--	--	--	--	--	--	--	--	--
D-SB-873-4-6	SB-873	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-873-6-8	SB-873	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-874-0-1	SB-874	0	1	20120424	29	--	--	--	--	--	--	0.43 J	--
D-SB-874-1-2	SB-874	1	2	20120424	70000	--	--	120 B	--	--	--	--	230 B
D-SB-874-2-4	SB-874	2	4	20120424	20000	--	--	--	--	--	--	95 J	54 B
D-SB-874-4-6	SB-874	4	6	20120424	130000	--	--	240 B	--	--	--	--	620 B
D-SB-874-6-8	SB-874	6	8	20120424	5300	--	--	26 B	--	--	--	19 J	54 B
D-SB-875-0-1	SB-875	0	1	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-1-2	SB-875	1	2	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-2-4	SB-875	2	4	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-4-6	SB-875	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-875-6-8	SB-875	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-0-1	SB-876	0	1	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-1-2	SB-876	1	2	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-2-4	SB-876	2	4	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-4-6	SB-876	4	6	20120423	--	--	--	--	--	--	--	--	--
D-SB-876-6-8	SB-876	6	8	20120423	--	--	--	--	--	--	--	--	--
D-SB-877-0-1	SB-877	0	1	20120425	--	--	--	--	--	--	--	--	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SB-877-1-2	SB-877	1	2	20120425	--	--	--	--	--	--	--	--	--
D-SB-877-2-4	SB-877	2	4	20120425	--	--	--	--	--	--	--	--	--
D-SB-877-4-6	SB-877	4	6	20120425	--	--	--	--	--	--	--	--	--
D-SB-877-6-8	SB-877	6	8	20120425	--	--	--	--	--	--	--	--	--
D-SB-878-0-1	SB-878	0	1	20120424	--	--	--	--	--	--	--	--	--
D-SB-878-1-2	SB-878	1	2	20120424	--	--	--	--	--	--	--	--	--
D-SB-878-2-4	SB-878	2	4	20120424	--	--	--	--	--	--	--	--	--
D-SB-878-4-6	SB-878	4	6	20120424	--	--	--	--	--	--	--	--	--
D-SB-878-6-8	SB-878	6	8	20120424	2.5 J	--	--	--	--	--	--	--	--
D-SB-879-0-1	SB-879	0	1	20120425	--	--	--	--	--	--	--	--	--
D-SB-879-1-2	SB-879	1	2	20120425	--	--	--	--	--	--	--	--	--
D-SB-879-2-4	SB-879	2	4	20120425	--	--	--	--	--	--	--	--	--
D-SB-879-4-6	SB-879	4	6	20120425	--	--	--	--	--	--	--	--	--
D-SB-879-6-8	SB-879	6	8	20120425	--	--	--	--	--	--	--	--	--
D-SB-880-0-1	SB-880	0	1	20120424	0.55 J	--	--	--	--	--	--	--	--
D-SB-880-1-2	SB-880	1	2	20120424	0.35 B	--	--	--	--	--	--	--	--
D-SB-880-2-4	SB-880	2	4	20120424	0.23 B	--	--	--	--	--	--	--	--
D-SB-880-4-6	SB-880	4	6	20120424	0.24 B	--	--	--	--	--	--	--	--
D-SB-880-6-8	SB-880	6	8	20120424	0.73 B	--	--	--	--	--	--	--	--
D-SB-881-0-1	SB-881	0	1	20120425	--	--	--	--	--	--	--	--	--
D-SB-881-1-2	SB-881	1	2	20120425	0.24 B	--	--	--	--	--	--	--	--
D-SB-881-2-4	SB-881	2	4	20120425	--	--	--	--	--	--	--	--	--
D-SB-881-4-6	SB-881	4	6	20120425	--	--	--	--	--	--	--	--	--
D-SB-881-6-8	SB-881	6	8	20120425	--	--	--	--	--	--	--	--	--
D-SS-782-01	SB-782	0	1	20100902	--	--	--	--	--	--	--	--	--
D-SS-783-01	SB-783	0	1	20100902	--	--	--	--	--	--	--	--	--

APPENDIX B
BLOCK D PANHANDLE INDUSTRIAL EXCEEDANCES OF RISK-BASED SCREENING CRITERIA
ALL BLOCK D PANHANDLE SOIL SAMPLES
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
D-SS-784-01	SB-784	0	1	20100902	--	--	--	--	--	--	--	--	--
D-SS-785-01	SB-785	0	1	20100903	1.1 B	--	--	--	--	--	--	--	--
D-SS-786-01	SB-786	0	1	20100903	2.2 B	--	--	--	--	--	--	--	--
D-SS-787-01	SB-787	0	1	20100903	1.7 B	--	--	--	--	--	--	--	--
SB-247-05	SB-247	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-10	SB-247	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-247-15	SB-247	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-05	SB-248	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-10	SB-248	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-248-15	SB-248	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-05	SB-249	5	5	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-10	SB-249	10	10	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-249-15	SB-249	15	15	20050607	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33-05	SB-033	5	5	20031121	--	--	--	--	--	NA	--	--	NA
SB-336-0203	SB-336	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0506	SB-336	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-336-0809	SB-336	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0203	SB-337	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0506	SB-337	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-337-0809	SB-337	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0203	SB-338	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0506	SB-338	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-338-0809	SB-338	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0203	SB-339	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0506	SB-339	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-339-0809	SB-339	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	O-XYLENE	STYRENE	TERT-AMYL METHYL ETHER	TETRACHLOROETHENE	TOLUENE	TOTAL XYLENES
				Units	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
				Risk Based IND Cleanup	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-33A-SS	SB-033	0	0	20040917	--	--	--	--	--	NA	--	--	NA
SB-340-0203	SB-340	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0506	SB-340	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-340-0809	SB-340	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0203	SB-341	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0506	SB-341	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-341-0809	SB-341	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0203	SB-342	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0506	SB-342	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-342-0809	SB-342	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0203	SB-343	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0506	SB-343	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-343-0809	SB-343	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0203	SB-344	2	3	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0506	SB-344	5	6	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-344-0809	SB-344	8	9	20071101	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-65-05	SB-065	5	5	20040917	--	--	--	--	--	NA	--	--	NA
SB-65-10	SB-065	10	10	20040917	--	--	--	--	--	NA	--	--	NA
SB-65-15	SB-065	15	15	20040917	--	--	--	--	--	NA	--	--	NA
SB-65-20	SB-065	20	20	20040917	--	--	--	--	--	NA	--	--	NA
SB-65-SS	SB-065	0	0	20040917	--	--	--	--	--	NA	--	--	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
D-SB-65RE-1	SB-065	1	1	20090916	NA
D-SB-65RE-10	SB-065	10	10	20090916	NA
D-SB-65RE-11	SB-065	11	11	20090916	NA
D-SB-65RE-12	SB-065	12	12	20090916	NA
D-SB-65RE-13	SB-065	13	13	20090916	NA
D-SB-65RE-14	SB-065	14	14	20090916	NA
D-SB-65RE-15	SB-065	15	15	20090916	NA
D-SB-65RE-2	SB-065	2	2	20090916	NA
D-SB-65RE-3	SB-065	3	3	20090916	NA
D-SB-65RE-5	SB-065	5	5	20090916	NA
D-SB-65RE-5-AVG	SB-065	5	5	20090916	NA
D-SB-65RE-5-D	SB-065	5	5	20090916	NA
D-SB-65RE-6	SB-065	6	6	20090916	NA
D-SB-65RE-7	SB-065	7	7	20090916	NA
D-SB-65RE-8	SB-065	8	8	20090916	NA
D-SB-65RE-9	SB-065	9	9	20090916	NA
D-SB-782-03	SB-782	3	3	20100902	--
D-SB-782-05	SB-782	5	5	20100902	--
D-SB-782-07	SB-782	7	7	20100902	--
D-SB-782-09	SB-782	9	9	20100902	--
D-SB-782-11	SB-782	11	11	20100902	--
D-SB-782-13	SB-782	13	13	20100902	--
D-SB-782-15	SB-782	15	15	20100902	--
D-SB-783-03	SB-783	3	3	20100902	--
D-SB-783-05	SB-783	5	5	20100902	--
D-SB-783-07	SB-783	7	7	20100902	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
D-SB-783-09	SB-783	9	9	20100902	--
D-SB-783-11	SB-783	11	11	20100902	--
D-SB-783-13	SB-783	13	13	20100902	--
D-SB-783-15	SB-783	15	15	20100902	--
D-SB-784-03	SB-784	3	3	20100902	--
D-SB-784-05	SB-784	5	5	20100902	--
D-SB-784-07	SB-784	7	7	20100902	--
D-SB-784-09	SB-784	9	9	20100902	--
D-SB-784-11	SB-784	11	11	20100902	--
D-SB-784-13	SB-784	13	13	20100902	--
D-SB-784-15	SB-784	15	15	20100902	--
D-SB-785-03	SB-785	3	3	20100903	--
D-SB-785-05	SB-785	5	5	20100903	--
D-SB-785-07	SB-785	7	7	20100903	--
D-SB-785-09	SB-785	9	9	20100908	--
D-SB-785-11	SB-785	11	11	20100908	--
D-SB-785-13	SB-785	13	13	20100908	--
D-SB-785-15	SB-785	15	15	20100908	--
D-SB-786-03	SB-786	3	3	20100903	--
D-SB-786-05	SB-786	5	5	20100903	--
D-SB-786-07	SB-786	7	7	20100903	--
D-SB-786-09	SB-786	9	9	20100903	--
D-SB-786-11	SB-786	11	11	20100903	--
D-SB-786-13	SB-786	13	13	20100903	--
D-SB-786-15	SB-786	15	15	20100908	--
D-SB-787-03	SB-787	3	3	20100908	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
D-SB-787-05	SB-787	5	5	20100908	--
D-SB-787-07	SB-787	7	7	20100903	--
D-SB-787-09	SB-787	9	9	20100908	--
D-SB-787-11	SB-787	11	11	20100908	--
D-SB-787-13	SB-787	13	13	20100908	--
D-SB-787-15	SB-787	15	15	20100908	--
D-SB-788-03	SB-788	3	3	20100908	--
D-SB-788-05	SB-788	5	5	20100908	--
D-SB-788-07	SB-788	7	7	20100908	--
D-SB-788-09	SB-788	9	9	20100908	--
D-SB-788-11	SB-788	11	11	20100908	--
D-SB-788-13	SB-788	13	13	20100908	--
D-SB-788-15	SB-788	15	15	20100908	--
D-SB-788-SS	SB-788	0	1	20100908	--
D-SB-789-03	SB-789	3	3	20100908	--
D-SB-789-05	SB-789	5	5	20100908	--
D-SB-789-07	SB-789	7	7	20100908	--
D-SB-789-09	SB-789	9	9	20100908	--
D-SB-789-11	SB-789	11	11	20100908	--
D-SB-789-13	SB-789	13	13	20100908	--
D-SB-789-15	SB-789	15	15	20100908	--
D-SB-789-SS	SB-789	0	1	20100908	--
D-SB-790-03	SB-790	3	3	20100908	--
D-SB-790-05	SB-790	5	5	20100908	--
D-SB-790-07	SB-790	7	7	20100908	--
D-SB-790-09	SB-790	9	9	20100908	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
D-SB-790-11	SB-790	11	11	20100908	--
D-SB-790-13	SB-790	13	13	20100908	--
D-SB-790-15	SB-790	15	15	20100908	--
D-SB-790-SS	SB-790	0	1	20100908	--
D-SB-791-03	SB-791	3	3	20100909	--
D-SB-791-05	SB-791	5	5	20100909	--
D-SB-791-07	SB-791	7	7	20100909	--
D-SB-791-09	SB-791	9	9	20100909	--
D-SB-791-11	SB-791	11	11	20100909	--
D-SB-791-13	SB-791	13	13	20100909	--
D-SB-791-15	SB-791	15	15	20100909	--
D-SB-791-SS	SB-791	0	1	20100909	--
D-SB-792-03	SB-792	3	3	20100909	--
D-SB-792-05	SB-792	5	5	20100909	--
D-SB-792-07	SB-792	7	7	20100909	--
D-SB-792-09	SB-792	9	9	20100909	--
D-SB-792-11	SB-792	11	11	20100909	--
D-SB-792-13	SB-792	13	13	20100909	--
D-SB-792-15	SB-792	15	15	20100909	--
D-SB-792-SS	SB-792	0	1	20100909	--
D-SB-793-03	SB-793	3	3	20100909	--
D-SB-793-05	SB-793	5	5	20100909	--
D-SB-793-07	SB-793	7	7	20100909	--
D-SB-793-09	SB-793	9	9	20100909	--
D-SB-793-11	SB-793	11	11	20100909	0.35 J
D-SB-793-13	SB-793	13	13	20100909	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
D-SB-793-15	SB-793	15	15	20100909	--
D-SB-793-SS	SB-793	0	1	20100909	--
D-SB-794-03	SB-794	3	3	20100909	--
D-SB-794-05	SB-794	5	5	20100909	--
D-SB-794-07	SB-794	7	7	20100909	--
D-SB-794-09	SB-794	9	9	20100909	--
D-SB-794-11	SB-794	11	11	20100909	--
D-SB-794-13	SB-794	13	13	20100909	--
D-SB-794-15	SB-794	15	15	20100909	--
D-SB-794-SS	SB-794	0	1	20100909	0.85 J
D-SB-795-03	SB-795	3	3	20100909	--
D-SB-795-05	SB-795	5	5	20100909	--
D-SB-795-07	SB-795	7	7	20100909	--
D-SB-795-09	SB-795	9	9	20100909	--
D-SB-795-11	SB-795	11	11	20100909	--
D-SB-795-13	SB-795	13	13	20100909	--
D-SB-795-15	SB-795	15	15	20100909	--
D-SB-795-SS	SB-795	0	1	20100909	--
D-SB-796-03	SB-796	3	3	20100910	--
D-SB-796-05	SB-796	5	5	20100910	--
D-SB-796-07	SB-796	7	7	20100910	--
D-SB-796-09	SB-796	9	9	20100910	--
D-SB-796-11	SB-796	11	11	20100910	--
D-SB-796-13	SB-796	13	13	20100910	--
D-SB-796-15	SB-796	15	15	20100910	--
D-SB-796-SS	SB-796	0	1	20100910	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
D-SB-872-0-1	SB-872	0	1	20120424	--
D-SB-872-1-2	SB-872	1	2	20120424	--
D-SB-872-2-4	SB-872	2	4	20120424	--
D-SB-872-4-6	SB-872	4	6	20120424	--
D-SB-872-6-8	SB-872	6	8	20120424	--
D-SB-873-0-1	SB-873	0	1	20120423	--
D-SB-873-1-2	SB-873	1	2	20120423	--
D-SB-873-2-4	SB-873	2	4	20120423	--
D-SB-873-4-6	SB-873	4	6	20120423	--
D-SB-873-6-8	SB-873	6	8	20120423	--
D-SB-874-0-1	SB-874	0	1	20120424	--
D-SB-874-1-2	SB-874	1	2	20120424	--
D-SB-874-2-4	SB-874	2	4	20120424	--
D-SB-874-4-6	SB-874	4	6	20120424	--
D-SB-874-6-8	SB-874	6	8	20120424	--
D-SB-875-0-1	SB-875	0	1	20120423	--
D-SB-875-1-2	SB-875	1	2	20120423	--
D-SB-875-2-4	SB-875	2	4	20120423	--
D-SB-875-4-6	SB-875	4	6	20120423	--
D-SB-875-6-8	SB-875	6	8	20120423	--
D-SB-876-0-1	SB-876	0	1	20120423	--
D-SB-876-1-2	SB-876	1	2	20120423	--
D-SB-876-2-4	SB-876	2	4	20120423	--
D-SB-876-4-6	SB-876	4	6	20120423	--
D-SB-876-6-8	SB-876	6	8	20120423	--
D-SB-877-0-1	SB-877	0	1	20120425	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
D-SB-877-1-2	SB-877	1	2	20120425	--
D-SB-877-2-4	SB-877	2	4	20120425	--
D-SB-877-4-6	SB-877	4	6	20120425	--
D-SB-877-6-8	SB-877	6	8	20120425	--
D-SB-878-0-1	SB-878	0	1	20120424	--
D-SB-878-1-2	SB-878	1	2	20120424	--
D-SB-878-2-4	SB-878	2	4	20120424	--
D-SB-878-4-6	SB-878	4	6	20120424	--
D-SB-878-6-8	SB-878	6	8	20120424	--
D-SB-879-0-1	SB-879	0	1	20120425	--
D-SB-879-1-2	SB-879	1	2	20120425	--
D-SB-879-2-4	SB-879	2	4	20120425	--
D-SB-879-4-6	SB-879	4	6	20120425	--
D-SB-879-6-8	SB-879	6	8	20120425	--
D-SB-880-0-1	SB-880	0	1	20120424	--
D-SB-880-1-2	SB-880	1	2	20120424	--
D-SB-880-2-4	SB-880	2	4	20120424	--
D-SB-880-4-6	SB-880	4	6	20120424	--
D-SB-880-6-8	SB-880	6	8	20120424	--
D-SB-881-0-1	SB-881	0	1	20120425	--
D-SB-881-1-2	SB-881	1	2	20120425	--
D-SB-881-2-4	SB-881	2	4	20120425	--
D-SB-881-4-6	SB-881	4	6	20120425	--
D-SB-881-6-8	SB-881	6	8	20120425	--
D-SS-782-01	SB-782	0	1	20100902	--
D-SS-783-01	SB-783	0	1	20100902	--

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
D-SS-784-01	SB-784	0	1	20100902	--
D-SS-785-01	SB-785	0	1	20100903	--
D-SS-786-01	SB-786	0	1	20100903	--
D-SS-787-01	SB-787	0	1	20100903	--
SB-247-05	SB-247	5	5	20050607	NA
SB-247-10	SB-247	10	10	20050607	NA
SB-247-15	SB-247	15	15	20050607	NA
SB-248-05	SB-248	5	5	20050607	NA
SB-248-10	SB-248	10	10	20050607	NA
SB-248-15	SB-248	15	15	20050607	NA
SB-249-05	SB-249	5	5	20050607	NA
SB-249-10	SB-249	10	10	20050607	NA
SB-249-15	SB-249	15	15	20050607	NA
SB-33-05	SB-033	5	5	20031121	--
SB-336-0203	SB-336	2	3	20071101	NA
SB-336-0506	SB-336	5	6	20071101	NA
SB-336-0809	SB-336	8	9	20071101	NA
SB-337-0203	SB-337	2	3	20071101	NA
SB-337-0506	SB-337	5	6	20071101	NA
SB-337-0809	SB-337	8	9	20071101	NA
SB-338-0203	SB-338	2	3	20071101	NA
SB-338-0506	SB-338	5	6	20071101	NA
SB-338-0809	SB-338	8	9	20071101	NA
SB-339-0203	SB-339	2	3	20071101	NA
SB-339-0506	SB-339	5	6	20071101	NA
SB-339-0809	SB-339	8	9	20071101	NA

SAMPLE ID	LOCATION ID	TOP DEPTH	BOTTOM DEPTH	SAMPLE DATE	TRICHLOROFLUOROMETHANE
				Units	UG/KG
				Risk Based IND Cleanup	NA
SB-33A-SS	SB-033	0	0	20040917	--
SB-340-0203	SB-340	2	3	20071101	NA
SB-340-0506	SB-340	5	6	20071101	NA
SB-340-0809	SB-340	8	9	20071101	NA
SB-341-0203	SB-341	2	3	20071101	NA
SB-341-0506	SB-341	5	6	20071101	NA
SB-341-0809	SB-341	8	9	20071101	NA
SB-342-0203	SB-342	2	3	20071101	NA
SB-342-0506	SB-342	5	6	20071101	NA
SB-342-0809	SB-342	8	9	20071101	NA
SB-343-0203	SB-343	2	3	20071101	NA
SB-343-0506	SB-343	5	6	20071101	NA
SB-343-0809	SB-343	8	9	20071101	NA
SB-344-0203	SB-344	2	3	20071101	NA
SB-344-0506	SB-344	5	6	20071101	NA
SB-344-0809	SB-344	8	9	20071101	NA
SB-65-05	SB-065	5	5	20040917	--
SB-65-10	SB-065	10	10	20040917	--
SB-65-15	SB-065	15	15	20040917	--
SB-65-20	SB-065	20	20	20040917	--
SB-65-SS	SB-065	0	0	20040917	--

APPENDIX C—PREVIOUS INVESTIGATIONS' SOIL DATA (table)

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-033	SB-033	SB-065	SB-065	SB-065	SB-065	SB-065
SAMPLE ID	SB-33-05	SB-33A-SS	SB-65-05	SB-65-10	SB-65-15	SB-65-20	SB-65-SS
SAMPLE DATE	11/21/2003	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004
METALS (MG/KG)							
ANTIMONY	3.4 UL [--]	2.4 UR [--]	3.1 UR [--]	2.9 UR [--]	2.8 UR [--]	2.8 U [--]	2.6 UR [--]
ARSENIC	4.9 L [--]	1 L [--]	2 L [--]	0.58 UL [--]	0.57 UL [--]	0.57 U [--]	0.54 L [--]
BARIUM	--	--	--	--	--	--	--
BERYLLIUM	3.4 U [--]	2.4 UL [--]	3.1 UL [--]	2.9 UL [--]	2.8 UL [--]	2.8 U [--]	2.6 UL [--]
CADMIUM	3.4 U [--]	2.4 UL [--]	3.1 UL [--]	2.9 UL [--]	2.8 UL [--]	2.8 U [--]	2.6 UL [--]
CHROMIUM	23 J [--]	7.1 K [--]	35 [--]	16 [--]	2.8 U [--]	2.8 U [--]	3.1 K [--]
COBALT	--	--	--	--	--	--	--
COPPER	54 [--]	34 L [--]	23 L [--]	17 L [--]	5 L [--]	3.4 L [--]	2.6 UL [--]
IRON	--	--	--	--	--	--	--
LEAD	120 [--]	12 L [--]	6.5 L [--]	3 L [--]	2.8 UL [--]	2.8 UJ [--]	2.8 L [--]
MANGANESE	--	--	--	--	--	--	--
MERCURY	3.3 [--]	0.098 U [--]	0.12 U [--]	0.12 U [--]	0.11 U [--]	0.11 U [--]	0.11 U [--]
MOLYBDENUM	--	--	--	--	--	--	--
NICKEL	23 [--]	25 [--]	23 [--]	14 [--]	6.6 [--]	3.5 K [--]	9.6 [--]
SELENIUM	3.4 U [--]	2.4 UL [--]	3.1 UL [--]	2.9 UL [--]	2.8 UL [--]	2.8 U [--]	2.6 UL [--]
SILVER	3.4 UR [--]	2.4 UR [--]	3.1 UR [--]	2.9 UR [--]	2.8 UR [--]	2.8 UL [--]	2.6 UR [--]
THALLIUM	2.7 U [--]	2 UL [--]	2.5 UL [--]	2.3 UL [--]	2.3 UL [--]	2.3 UL [--]	2.1 UL [--]
VANADIUM	--	--	--	--	--	--	--
ZINC	180 [--]	24 U [--]	31 U [--]	29 U [--]	28 U [--]	28 UL [--]	26 U [--]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	73 [--]	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	--	--	--	--	--	--	--
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
1,4-DIOXANE	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE)	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2,4,5-TRICHLOROPHENOL	1100 U [--]	9100 U [--]	1100 U [--]	1000 U [--]	950 U [--]	970 U [--]	9000 U [--]
2,4,6-TRICHLOROPHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2,4-DICHLOROPHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2,4-DIMETHYLPHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2,4-DINITROPHENOL	1100 U [--]	9100 U [--]	1100 U [--]	1000 U [--]	950 U [--]	970 U [--]	9000 U [--]
2,4-DINITROTOLUENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2,6-DINITROTOLUENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2-CHLORONAPHTHALENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2-CHLOROPHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
2-NITROANILINE	1100 U [--]	9100 U [--]	1100 U [--]	1000 U [--]	950 U [--]	970 U [--]	9000 U [--]
2-NITROPHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
3&4-METHYLPHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
3,3'-DICHLOROBENZIDINE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
3-NITROANILINE	1100 U [--]	9100 U [--]	1100 U [--]	1000 U [--]	950 U [--]	970 U [--]	9000 U [--]
4,6-DINITRO-2-METHYLPHENOL	1000 U [--]	8400 U [--]	970 U [--]	920 U [--]	880 U [--]	890 U [--]	8300 U [--]
4-BROMOPHENYL PHENYL ETHER	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
4-CHLORO-3-METHYLPHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
4-CHLOROANILINE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
4-CHLOROPHENYL PHENYL ETHER	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	1100 U [--]	9100 U [--]	1100 U [--]	1000 U [--]	950 U [--]	970 U [--]	9000 U [--]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-033	SB-033	SB-065	SB-065	SB-065	SB-065	SB-065
SAMPLE ID	SB-33-05	SB-33A-SS	SB-65-05	SB-65-10	SB-65-15	SB-65-20	SB-65-SS
SAMPLE DATE	11/21/2003	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004
4-NITROPHENOL	1100 U [--]	9100 U [--]	1100 U [--]	1000 U [--]	950 U [--]	970 U [--]	9000 U [--]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
BIS(2-CHLOROETHYL)ETHER	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
BIS(2-ETHYLHEXYL)PHTHALATE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
BUTYL BENZYL PHTHALATE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
CAPROLACTAM	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
CARBAZOLE	120 J [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	65 J [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
DIETHYL PHTHALATE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
DIMETHYL PHTHALATE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
DI-N-BUTYL PHTHALATE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
DI-N-OCTYL PHTHALATE	450 U [--]	3600 UJ [--]	420 UJ [--]	400 UJ [--]	380 U [--]	390 U [--]	3600 UJ [--]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
HEXACHLOROBUTADIENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
HEXACHLOROCYCLOPENTADIENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
HEXACHLOROETHANE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
N-NITROSODIMETHYLAMINE	--	--	--	--	--	--	--
N-NITROSO-DI-N-PROPYLAMINE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
N-NITROSODIPHENYLAMINE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
PENTACHLOROPHENOL	1100 U [--]	9100 U [--]	1100 U [--]	1000 U [--]	950 U [--]	970 U [--]	9000 U [--]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,1,1-TRICHLOROETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,1,2,2-TETRACHLOROETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,1,2-TRICHLOROETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,1,2-TRICHLOROTRIFLUOROETHANE	--	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-033	SB-033	SB-065	SB-065	SB-065	SB-065	SB-065
SAMPLE ID	SB-33-05	SB-33A-SS	SB-65-05	SB-65-10	SB-65-15	SB-65-20	SB-65-SS
SAMPLE DATE	11/21/2003	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004
1,1-DICHLOROETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,1-DICHLOROETHENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,1-DICHLOROPROPENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2,3-TRICHLOROBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2,3-TRICHLOROPROPANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2,3-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2,4-TRIMETHYLBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2-DIBROMO-3-CHLOROPROPANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2-DIBROMOETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2-DICHLOROBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2-DICHLOROETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,2-DICHLOROPROPANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,3,5-TRIMETHYLBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,3-DICHLOROBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,3-DICHLOROPROPANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,4-DICHLOROBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
2-BUTANONE	6 J [--]	54 U [--]	62 U [--]	60 U [--]	56 U [--]	57 U [--]	53 U [--]
2-CHLOROETHYL VINYL ETHER	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
2-CHLOROTOLUENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
2-HEXANONE	68 U [--]	54 U [--]	62 U [--]	60 U [--]	56 U [--]	57 U [--]	53 U [--]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
4-ISOPROPYLTOLUENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
4-METHYL-2-PENTANONE	68 U [--]	54 U [--]	62 U [--]	60 U [--]	56 U [--]	57 U [--]	53 U [--]
ACETONE	59 J [--]	54 U [--]	62 U [--]	60 U [--]	56 U [--]	57 U [--]	53 U [--]
BENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
BROMOCHLOROMETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
BROMODICHLOROMETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
BROMOFORM	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
BROMOMETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CARBON DISULFIDE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CARBON TETRACHLORIDE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CHLOROBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CHLORODIBROMOMETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CHLOROETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CHLOROFORM	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CHLOROMETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CIS-1,2-DICHLOROETHENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CIS-1,3-DICHLOROPROPENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
DICHLORODIFLUOROMETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
DIISOPROPYL ETHER	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-033	SB-033	SB-065	SB-065	SB-065	SB-065	SB-065
SAMPLE ID	SB-33-05	SB-33A-SS	SB-65-05	SB-65-10	SB-65-15	SB-65-20	SB-65-SS
SAMPLE DATE	11/21/2003	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
ETHYLBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
HEXACHLOROBUTADIENE	7 U [--]	--	--	--	--	--	--
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
M+P-XYLENES	20 U [--]	10 J [--]	12 U [--]	12 U [--]	11 U [--]	11 U [--]	11 U [--]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
METHYLENE CHLORIDE	11 J [--]	8 J [--]	8 J [--]	8 J [--]	8 J [--]	9 J [--]	7 J [--]
NAPHTHALENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
N-BUTYLBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
N-PROPYLBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
O-XYLENE	20 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
SEC-BUTYLBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
STYRENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
TERT-AMYL METHYL ETHER	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TETRACHLOROETHENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
TOLUENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
TOTAL XYLENES	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
TRANS-1,3-DICHLOROPROPENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
TRICHLOROETHENE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
TRICHLOROFLUOROMETHANE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
VINYL ACETATE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]
VINYL CHLORIDE	7 U [--]	5 U [--]	6 U [--]	6 U [--]	6 U [--]	6 U [--]	5 U [--]

POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)

2-METHYLNAPHTHALENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
ACENAPHTHENE	110 J [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
ACENAPHTHYLENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
ANTHRACENE	260 J [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
BAP EQUIVALENT-HALFND	943.91 [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
BAP EQUIVALENT-POS	696.41 [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
BAP EQUIVALENT-UCL	731.131966 [--]	25.443671 [--]	328.429541 [--]	177.682883 [--]	335.928295 [--]	234.986344 [--]	239.811192 [--]
BENZO(A)ANTHRACENE	640 [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
BENZO(A)PYRENE	570 [--]	3600 UJ [--]	420 UJ [--]	400 UJ [--]	380 U [--]	390 U [--]	3600 UJ [--]
BENZO(B)FLUORANTHENE	560 [--]	3600 UJ [--]	420 UJ [--]	400 UJ [--]	380 U [--]	390 U [--]	3600 UJ [--]
BENZO(G,H,I)PERYLENE	220 J [--]	3600 UJ [--]	420 UJ [--]	400 UJ [--]	380 U [--]	390 U [--]	3600 UJ [--]
BENZO(K)FLUORANTHENE	580 [--]	3600 UJ [--]	420 UJ [--]	400 UJ [--]	380 U [--]	390 U [--]	3600 UJ [--]
CHRYSENE	610 [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
DIBENZO(A,H)ANTHRACENE	450 U [--]	3600 UJ [--]	420 UJ [--]	400 UJ [--]	380 U [--]	390 U [--]	3600 UJ [--]
FLUORANTHENE	1000 [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
FLUORENE	150 J [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
INDENO(1,2,3-CD)PYRENE	450 U [--]	3600 UJ [--]	420 UJ [--]	400 UJ [--]	380 U [--]	390 U [--]	3600 UJ [--]
NAPHTHALENE	450 U [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
PHENANTHRENE	910 [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]
PYRENE	1000 [--]	3600 U [--]	420 U [--]	400 U [--]	380 U [--]	390 U [--]	3600 U [--]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	**SB-033**	**SB-033**	**SB-065**	**SB-065**	**SB-065**	**SB-065**	**SB-065**
SAMPLE ID	**SB-33-05**	**SB-33A-SS**	**SB-65-05**	**SB-65-10**	**SB-65-15**	**SB-65-20**	**SB-65-SS**
SAMPLE DATE	**11/21/2003**	**9/17/2004**	**9/17/2004**	**9/17/2004**	**9/17/2004**	**9/17/2004**	**9/17/2004**
TOTAL PAHS	6610 [--]	0 U [--]	0 U [--]	0 U [--]	0 U [--]	0 U [--]	0 U [--]
PCBS (UG/KG)							
AROCLOR-1016	68 U [--]	270 U [--]	310 U [--]	290 U [--]	280 U [--]	290 U [--]	270 U [--]
AROCLOR-1221	68 U [--]	270 U [--]	310 U [--]	290 U [--]	280 U [--]	290 U [--]	270 U [--]
AROCLOR-1232	68 U [--]	270 U [--]	310 U [--]	290 U [--]	280 U [--]	290 U [--]	270 U [--]
AROCLOR-1242	68 U [--]	270 U [--]	310 U [--]	290 U [--]	280 U [--]	290 U [--]	270 U [--]
AROCLOR-1248	68 U [--]	270 U [--]	310 U [--]	290 U [--]	280 U [--]	290 U [--]	270 U [--]
AROCLOR-1254	68 U [--]	270 U [--]	310 U [--]	290 U [--]	280 U [--]	290 U [--]	270 U [--]
AROCLOR-1260	68 U [--]	270 U [--]	310 U [--]	290 U [--]	280 U [--]	290 U [--]	270 U [--]
TOTAL AROCLOR	0 U [--]	0 U [--]	0 U [--]	0 U [--]	0 U [--]	0 U [--]	0 U [--]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	**SB-033**	**SB-033**	**SB-065**	**SB-065**	**SB-065**	**SB-065**	**SB-065**
SAMPLE ID	**SB-33-05**	**SB-33A-SS**	**SB-65-05**	**SB-65-10**	**SB-65-15**	**SB-65-20**	**SB-65-SS**
SAMPLE DATE	**11/21/2003**	**9/17/2004**	**9/17/2004**	**9/17/2004**	**9/17/2004**	**9/17/2004**	**9/17/2004**
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	27000 U [--]	11000 U [--]	13000 U [--]	12000 [--]	11000 U [--]	12000 U [--]	11000 U [--]
GASOLINE RANGE ORGANICS	140 U [--]	3200 [--]	130 U [--]	120 U [--]	110 U [--]	110 U [--]	250 [--]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-065	SB-065	SB-065	SB-065	SB-065	SB-065	SB-065
SAMPLE ID	D-SB-65RE-1	D-SB-65RE-10	D-SB-65RE-11	D-SB-65RE-12	D-SB-65RE-13	D-SB-65RE-14	D-SB-65RE-15
SAMPLE DATE	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009
METALS (MG/KG)							
ANTIMONY	--	--	--	--	--	--	--
ARSENIC	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--
CADMIUM	--	--	--	--	--	--	--
CHROMIUM	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--
COPPER	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--
LEAD	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--
MOLYBDENUM	--	--	--	--	--	--	--
NICKEL	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--
ZINC	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	--	--	--	--	--	--	--
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	--	--	--	--	--	--	--
1,4-DIOXANE	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE)	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	--	--	--	--	--	--	--
2,4-DINITROPHENOL	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	--	--	--	--	--	--	--
2-CHLOROPHENOL	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	--	--	--	--	--	--	--
2-NITROANILINE	--	--	--	--	--	--	--
2-NITROPHENOL	--	--	--	--	--	--	--
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	--	--	--	--	--	--	--
3-NITROANILINE	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	--	--	--	--	--	--	--
4-CHLOROANILINE	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-1 9/16/2009	SB-065 D-SB-65RE-10 9/16/2009	SB-065 D-SB-65RE-11 9/16/2009	SB-065 D-SB-65RE-12 9/16/2009	SB-065 D-SB-65RE-13 9/16/2009	SB-065 D-SB-65RE-14 9/16/2009	SB-065 D-SB-65RE-15 9/16/2009
4-NITROPHENOL	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--
CAPROLACTAM	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--	--	--
DIETHYL PHTHALATE	--	--	--	--	--	--	--
DIMETHYL PHTHALATE	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	--	--	--	--	--	--	--
HEXACHLOROETHANE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE	--	--	--	--	--	--	--
N-NITROSO-DI-N-PROPYLAMINE	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	--	--	--	--	--	--	--
PENTACHLOROPHENOL	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-1 9/16/2009	SB-065 D-SB-65RE-10 9/16/2009	SB-065 D-SB-65RE-11 9/16/2009	SB-065 D-SB-65RE-12 9/16/2009	SB-065 D-SB-65RE-13 9/16/2009	SB-065 D-SB-65RE-14 9/16/2009	SB-065 D-SB-65RE-15 9/16/2009
1,1-DICHLOROETHANE	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--
1,1-DICHLOROPROPENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2-DIBROMO-3-CHLOROPROPANE	--	--	--	--	--	--	--
1,2-DIBROMOETHANE	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROPROPANE	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	--	--	--	--	--	--	--
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--
2-CHLOROTOLUENE	--	--	--	--	--	--	--
2-HEXANONE	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	--	--	--	--	--	--	--
BROMODICHLOROMETHANE	--	--	--	--	--	--	--
BROMOFORM	--	--	--	--	--	--	--
BROMOMETHANE	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--
CHLORODIBROMOMETHANE	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	--	--	--	--	--	--	--
DIISOPROPYL ETHER	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-1 9/16/2009	SB-065 D-SB-65RE-10 9/16/2009	SB-065 D-SB-65RE-11 9/16/2009	SB-065 D-SB-65RE-12 9/16/2009	SB-065 D-SB-65RE-13 9/16/2009	SB-065 D-SB-65RE-14 9/16/2009	SB-065 D-SB-65RE-15 9/16/2009
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	--	--	--	--	--	--	--
M+P-XYLENES	--	--	--	--	--	--	--
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
N-BUTYLBENZENE	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	--	--	--	--	--
O-XYLENE	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	--	--	--	--	--
STYRENE	--	--	--	--	--	--	--
TERT-AMYL METHYL ETHER	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--
VINYL ACETATE	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.6 U [MDL=1.6]	1.5 U [MDL=1.5]	1.6 U [MDL=1.6]
BAP EQUIVALENT-POS	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.6 U [MDL=1.6]	1.5 U [MDL=1.5]	1.6 U [MDL=1.6]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	1.00 U [MDL=1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]
BENZO(A)PYRENE	1.40 U [MDL=1.4]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]	1.60 U [MDL=1.6]	1.50 U [MDL=1.5]	1.60 U [MDL=1.6]
BENZO(B)FLUORANTHENE	1.30 U [MDL=1.3]	1.40 U [MDL=1.4]	1.40 U [MDL=1.4]	1.40 U [MDL=1.4]	1.40 U [MDL=1.4]	1.40 U [MDL=1.4]	1.40 U [MDL=1.4]
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	1.80 U [MDL=1.8]	2.00 U [MDL=2]	2.00 U [MDL=2]	2.00 U [MDL=2]	2.10 U [MDL=2.1]	2.00 U [MDL=2]	2.00 U [MDL=2]
CHRYSENE	0.96 U [MDL=0.96]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.00 U [MDL=1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]
DIBENZO(A,H)ANTHRACENE	1.40 U [MDL=1.4]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]	1.60 U [MDL=1.6]	1.50 U [MDL=1.5]	1.60 U [MDL=1.6]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	1.60 U [MDL=1.6]	1.80 U [MDL=1.8]	1.80 U [MDL=1.8]	1.70 U [MDL=1.7]	1.80 U [MDL=1.8]	1.80 U [MDL=1.8]	1.80 U [MDL=1.8]
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-1 9/16/2009	SB-065 D-SB-65RE-10 9/16/2009	SB-065 D-SB-65RE-11 9/16/2009	SB-065 D-SB-65RE-12 9/16/2009	SB-065 D-SB-65RE-13 9/16/2009	SB-065 D-SB-65RE-14 9/16/2009	SB-065 D-SB-65RE-15 9/16/2009
TOTAL PAHS	0 U [MDL=1.4]	0 U [MDL=1.5]	0 U [MDL=1.5]	0 U [MDL=1.5]	0 U [MDL=1.6]	0 U [MDL=1.5]	0 U [MDL=1.6]
PCBS (UG/KG)							
AROCLOR-1016	--	--	--	--	--	--	--
AROCLOR-1221	--	--	--	--	--	--	--
AROCLOR-1232	--	--	--	--	--	--	--
AROCLOR-1242	--	--	--	--	--	--	--
AROCLOR-1248	--	--	--	--	--	--	--
AROCLOR-1254	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-1 9/16/2009	SB-065 D-SB-65RE-10 9/16/2009	SB-065 D-SB-65RE-11 9/16/2009	SB-065 D-SB-65RE-12 9/16/2009	SB-065 D-SB-65RE-13 9/16/2009	SB-065 D-SB-65RE-14 9/16/2009	SB-065 D-SB-65RE-15 9/16/2009
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-065	SB-065	SB-065	SB-065	SB-065	SB-065	SB-065
SAMPLE ID	D-SB-65RE-2	D-SB-65RE-3	D-SB-65RE-5	D-SB-65RE-5-D	D-SB-65RE-6	D-SB-65RE-7	D-SB-65RE-8
SAMPLE DATE	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009
METALS (MG/KG)							
ANTIMONY	--	--	--	--	--	--	--
ARSENIC	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--
CADMIUM	--	--	--	--	--	--	--
CHROMIUM	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--
COPPER	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--
LEAD	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--
MOLYBDENUM	--	--	--	--	--	--	--
NICKEL	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--
ZINC	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	--	--	--	--	--	--	--
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	--	--	--	--	--	--	--
1,4-DIOXANE	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE)	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	--	--	--	--	--	--	--
2,4-DINITROPHENOL	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	--	--	--	--	--	--	--
2-CHLOROPHENOL	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	--	--	--	--	--	--	--
2-NITROANILINE	--	--	--	--	--	--	--
2-NITROPHENOL	--	--	--	--	--	--	--
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	--	--	--	--	--	--	--
3-NITROANILINE	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	--	--	--	--	--	--	--
4-CHLOROANILINE	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-2 9/16/2009	SB-065 D-SB-65RE-3 9/16/2009	SB-065 D-SB-65RE-5 9/16/2009	SB-065 D-SB-65RE-5-D 9/16/2009	SB-065 D-SB-65RE-6 9/16/2009	SB-065 D-SB-65RE-7 9/16/2009	SB-065 D-SB-65RE-8 9/16/2009
4-NITROPHENOL	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--
CAPROLACTAM	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--	--	--
DIETHYL PHTHALATE	--	--	--	--	--	--	--
DIMETHYL PHTHALATE	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	--	--	--	--	--	--	--
HEXACHLOROETHANE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE	--	--	--	--	--	--	--
N-NITROSO-DI-N-PROPYLAMINE	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	--	--	--	--	--	--	--
PENTACHLOROPHENOL	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-2 9/16/2009	SB-065 D-SB-65RE-3 9/16/2009	SB-065 D-SB-65RE-5 9/16/2009	SB-065 D-SB-65RE-5-D 9/16/2009	SB-065 D-SB-65RE-6 9/16/2009	SB-065 D-SB-65RE-7 9/16/2009	SB-065 D-SB-65RE-8 9/16/2009
1,1-DICHLOROETHANE	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--
1,1-DICHLOROPROPENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2-DIBROMO-3-CHLOROPROPANE	--	--	--	--	--	--	--
1,2-DIBROMOETHANE	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROPROPANE	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	--	--	--	--	--	--	--
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--
2-CHLOROTOLUENE	--	--	--	--	--	--	--
2-HEXANONE	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	--	--	--	--	--	--	--
BROMODICHLOROMETHANE	--	--	--	--	--	--	--
BROMOFORM	--	--	--	--	--	--	--
BROMOMETHANE	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--
CHLORODIBROMOMETHANE	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	--	--	--	--	--	--	--
DIISOPROPYL ETHER	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-2 9/16/2009	SB-065 D-SB-65RE-3 9/16/2009	SB-065 D-SB-65RE-5 9/16/2009	SB-065 D-SB-65RE-5-D 9/16/2009	SB-065 D-SB-65RE-6 9/16/2009	SB-065 D-SB-65RE-7 9/16/2009	SB-065 D-SB-65RE-8 9/16/2009
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	--	--	--	--	--	--	--
M+P-XYLENES	--	--	--	--	--	--	--
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
N-BUTYLBENZENE	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	--	--	--	--	--
O-XYLENE	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	--	--	--	--	--
STYRENE	--	--	--	--	--	--	--
TERT-AMYL METHYL ETHER	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--
VINYL ACETATE	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--

POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)

2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	18.506 [MDL=1.5]	15.111 [MDL=1.6]	1.6 U [MDL=1.6]	1.6 U [MDL=1.6]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]
BAP EQUIVALENT-POS	17.756 [MDL=1.5]	14.301 [MDL=1.6]	1.6 U [MDL=1.6]	1.6 U [MDL=1.6]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	13 [MDL=1.1]	9.1 [MDL=1.1]	1.20 U [MDL=1.2]	1.20 U [MDL=1.2]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]
BENZO(A)PYRENE	13 [MDL=1.5]	11 [MDL=1.6]	1.60 U [MDL=1.6]	1.60 U [MDL=1.6]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]
BENZO(B)FLUORANTHENE	24 [MDL=1.3]	14 [MDL=1.4]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]	1.40 U [MDL=1.4]	1.40 U [MDL=1.4]	1.40 U [MDL=1.4]
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	9.4 [MDL=1.9]	2.00 U [MDL=2]	2.10 U [MDL=2.1]	2.10 U [MDL=2.1]	2.00 U [MDL=2]	2.00 U [MDL=2]	2.00 U [MDL=2]
CHRYSENE	22 [MDL=1]	11 [MDL=1.1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.10 U [MDL=1.1]	1.00 U [MDL=1]	1.00 U [MDL=1]
DIBENZO(A,H)ANTHRACENE	1.50 U [MDL=1.5]	1.60 U [MDL=1.6]	1.60 U [MDL=1.6]	1.60 U [MDL=1.6]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]	1.50 U [MDL=1.5]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	9.4 [MDL=1.7]	9.8 [MDL=1.8]	1.90 U [MDL=1.9]	1.90 U [MDL=1.9]	1.80 U [MDL=1.8]	1.70 U [MDL=1.7]	1.70 U [MDL=1.7]
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-2 9/16/2009	SB-065 D-SB-65RE-3 9/16/2009	SB-065 D-SB-65RE-5 9/16/2009	SB-065 D-SB-65RE-5-D 9/16/2009	SB-065 D-SB-65RE-6 9/16/2009	SB-065 D-SB-65RE-7 9/16/2009	SB-065 D-SB-65RE-8 9/16/2009
TOTAL PAHS	90.8 [MDL=1.5]	54.9 [MDL=1.6]	0 U [MDL=1.6]	0 U [MDL=1.6]	0 U [MDL=1.5]	0 U [MDL=1.5]	0 U [MDL=1.5]
PCBS (UG/KG)							
AROCLOR-1016	--	--	--	--	--	--	--
AROCLOR-1221	--	--	--	--	--	--	--
AROCLOR-1232	--	--	--	--	--	--	--
AROCLOR-1242	--	--	--	--	--	--	--
AROCLOR-1248	--	--	--	--	--	--	--
AROCLOR-1254	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-2 9/16/2009	SB-065 D-SB-65RE-3 9/16/2009	SB-065 D-SB-65RE-5 9/16/2009	SB-065 D-SB-65RE-5-D 9/16/2009	SB-065 D-SB-65RE-6 9/16/2009	SB-065 D-SB-65RE-7 9/16/2009	SB-065 D-SB-65RE-8 9/16/2009
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-065	SB-247	SB-247	SB-247	SB-248	SB-248	SB-248
SAMPLE ID	D-SB-65RE-9	SB-247-05	SB-247-10	SB-247-15	SB-248-05	SB-248-10	SB-248-15
SAMPLE DATE	9/16/2009	6/7/2005	6/7/2005	6/7/2005	6/7/2005	6/7/2005	6/7/2005
METALS (MG/KG)							
ANTIMONY	--	0.7 [MDL=0.3]	1 [MDL=0.4]	--	0.8 [MDL=0.3]	0.3 U [MDL=0.3]	0.4 [MDL=0.2]
ARSENIC	--	4 [MDL=0.6]	0.8 U [MDL=0.8]	--	6 [MDL=0.7]	8 [MDL=0.6]	2 B [MDL=0.5]
BARIUM	--	30 [MDL=0.3]	24 [MDL=0.4]	--	31 [MDL=0.3]	13 [MDL=0.3]	5 [MDL=0.2]
BERYLLIUM	--	2.5 [MDL=0.04]	1.3 [MDL=0.05]	--	1.8 [MDL=0.05]	2.5 [MDL=0.04]	2.2 [MDL=0.03]
CADMIUM	--	0.2 [MDL=0.05]	0.4 [MDL=0.06]	--	0.1 [MDL=0.06]	0.1 [MDL=0.05]	0.09 [MDL=0.04]
CHROMIUM	--	22.1 [MDL=0.2]	20.4 [MDL=0.3]	--	24.6 [MDL=0.2]	37.2 [MDL=0.2]	28.2 [MDL=0.2]
COBALT	--	10.7 [MDL=0.08]	6.2 [MDL=0.1]	--	11.4 [MDL=0.09]	30.1 [MDL=0.09]	8.5 [MDL=0.06]
COPPER	--	21 [MDL=0.3]	34 [MDL=0.4]	--	21 [MDL=0.3]	16 [MDL=0.3]	36 [MDL=0.2]
IRON	--	--	--	--	--	--	--
LEAD	--	18 [MDL=0.3]	7 [MDL=0.4]	--	9 [MDL=0.3]	6 [MDL=0.3]	3 [MDL=0.2]
MANGANESE	--	--	--	--	--	--	--
MERCURY	--	0.1 K [MDL=0.002]	0.002 U [MDL=0.002]	--	0.06 K [MDL=0.002]	0.002 U [MDL=0.002]	0.002 U [MDL=0.002]
MOLYBDENUM	--	0.5 U [MDL=0.5]	0.6 U [MDL=0.6]	--	0.6 B [MDL=0.6]	0.5 B [MDL=0.5]	0.6 B [MDL=0.4]
NICKEL	--	30 [MDL=0.1]	12 [MDL=0.1]	--	13 [MDL=0.1]	52 [MDL=0.1]	36 [MDL=0.08]
SELENIUM	--	2 [MDL=2]	4 [MDL=3]	--	5 [MDL=2]	4 [MDL=2]	5 [MDL=2]
SILVER	--	0.05 U [MDL=0.05]	0.06 U [MDL=0.06]	--	0.06 U [MDL=0.06]	0.05 U [MDL=0.05]	0.04 U [MDL=0.04]
THALLIUM	--	1 U [MDL=1]	1 U [MDL=1]	--	1 U [MDL=1]	1 U [MDL=1]	0.8 B [MDL=0.8]
VANADIUM	--	33 [MDL=0.2]	28.4 [MDL=0.3]	--	40.3 [MDL=0.2]	51 [MDL=0.2]	61.4 [MDL=0.2]
ZINC	--	57 [MDL=0.2]	83 [MDL=0.3]	--	65 [MDL=0.2]	39 [MDL=0.2]	30 [MDL=0.2]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	--	0.37 UL [MDL=0.4]	--	--	0.36 UL [MDL=0.4]	0.35 UL [MDL=0.4]	0.35 UL [MDL=0.4]
MERCURY (METHYL) (UG/KG)	--	0.31 K [MDL=0.019]	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	--	--	--	--	--	--	--
1,4-DIOXANE	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE)	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	--	--	--	--	--	--	--
2,4-DINITROPHENOL	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	--	--	--	--	--	--	--
2-CHLOROPHENOL	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	--	--	--	--	--	--	--
2-NITROANILINE	--	--	--	--	--	--	--
2-NITROPHENOL	--	--	--	--	--	--	--
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	--	--	--	--	--	--	--
3-NITROANILINE	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	--	--	--	--	--	--	--
4-CHLOROANILINE	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-9 9/16/2009	SB-247 SB-247-05 6/7/2005	SB-247 SB-247-10 6/7/2005	SB-247 SB-247-15 6/7/2005	SB-248 SB-248-05 6/7/2005	SB-248 SB-248-10 6/7/2005	SB-248 SB-248-15 6/7/2005
4-NITROPHENOL	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--
CAPROLACTAM	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--	--	--
DIETHYL PHTHALATE	--	--	--	--	--	--	--
DIMETHYL PHTHALATE	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	--	--	--	--	--	--	--
HEXACHLOROETHANE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE	--	--	--	--	--	--	--
N-NITROSO-DI-N-PROPYLAMINE	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	--	--	--	--	--	--	--
PENTACHLOROPHENOL	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-9 9/16/2009	SB-247 SB-247-05 6/7/2005	SB-247 SB-247-10 6/7/2005	SB-247 SB-247-15 6/7/2005	SB-248 SB-248-05 6/7/2005	SB-248 SB-248-10 6/7/2005	SB-248 SB-248-15 6/7/2005
1,1-DICHLOROETHANE	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--
1,1-DICHLOROPROPENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2-DIBROMO-3-CHLOROPROPANE	--	--	--	--	--	--	--
1,2-DIBROMOETHANE	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROPROPANE	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	--	--	--	--	--	--	--
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--
2-CHLOROTOLUENE	--	--	--	--	--	--	--
2-HEXANONE	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	--	--	--	--	--	--	--
BROMODICHLOROMETHANE	--	--	--	--	--	--	--
BROMOFORM	--	--	--	--	--	--	--
BROMOMETHANE	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--
CHLORODIBROMOMETHANE	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	--	--	--	--	--	--	--
DIISOPROPYL ETHER	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-9 9/16/2009	SB-247 SB-247-05 6/7/2005	SB-247 SB-247-10 6/7/2005	SB-247 SB-247-15 6/7/2005	SB-248 SB-248-05 6/7/2005	SB-248 SB-248-10 6/7/2005	SB-248 SB-248-15 6/7/2005
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	--	--	--	--	--	--	--
M+P-XYLENES	--	--	--	--	--	--	--
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
N-BUTYLBENZENE	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	--	--	--	--	--
O-XYLENE	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	--	--	--	--	--
STYRENE	--	--	--	--	--	--	--
TERT-AMYL METHYL ETHER	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--
VINYL ACETATE	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--

POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)

2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	1.6 U [MDL=1.6]	--	--	--	--	--	--
BAP EQUIVALENT-POS	1.6 U [MDL=1.6]	--	--	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	1.20 U [MDL=1.2]	--	--	--	--	--	--
BENZO(A)PYRENE	1.60 U [MDL=1.6]	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	1.50 U [MDL=1.5]	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	2.10 U [MDL=2.1]	--	--	--	--	--	--
CHRYSENE	1.10 U [MDL=1.1]	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	1.60 U [MDL=1.6]	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	1.90 U [MDL=1.9]	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-065 D-SB-65RE-9 9/16/2009	SB-247 SB-247-05 6/7/2005	SB-247 SB-247-10 6/7/2005	SB-247 SB-247-15 6/7/2005	SB-248 SB-248-05 6/7/2005	SB-248 SB-248-10 6/7/2005	SB-248 SB-248-15 6/7/2005
TOTAL PAHS	0 U [MDL=1.6]	--	--	--	--	--	--
PCBS (UG/KG)							
AROCLOR-1016	--	40 U [MDL=0.01]	42 U [MDL=0.01]	38 U [MDL=0.01]	40 U [MDL=0.01]	38 U [MDL=0.01]	38 U [MDL=0.01]
AROCLOR-1221	--	40 U [MDL=0.007]	42 U [MDL=0.008]	38 U [MDL=0.007]	40 U [MDL=0.007]	38 U [MDL=0.007]	38 U [MDL=0.007]
AROCLOR-1232	--	40 U [MDL=0.01]	42 U [MDL=0.01]	38 U [MDL=0.01]	40 U [MDL=0.01]	38 U [MDL=0.01]	38 U [MDL=0.01]
AROCLOR-1242	--	40 U [MDL=0.007]	42 U [MDL=0.008]	38 U [MDL=0.007]	40 U [MDL=0.007]	38 U [MDL=0.007]	38 U [MDL=0.007]
AROCLOR-1248	--	40 U [MDL=0.01]	42 U [MDL=0.01]	38 U [MDL=0.009]	40 U [MDL=0.01]	38 U [MDL=0.009]	38 U [MDL=0.009]
AROCLOR-1254	--	40 U [MDL=0.01]	42 U [MDL=0.01]	38 U [MDL=0.009]	40 U [MDL=0.01]	38 U [MDL=0.009]	38 U [MDL=0.009]
AROCLOR-1260	--	40 U [MDL=0.007]	42 U [MDL=0.008]	38 U [MDL=0.007]	40 U [MDL=0.007]	38 U [MDL=0.007]	38 U [MDL=0.007]
TOTAL AROCLOR	--	0 U [MDL=0.01]	0 U [MDL=0.01]	0 U [MDL=0.01]	0 U [MDL=0.01]	0 U [MDL=0.01]	0 U [MDL=0.01]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-065	SB-247	SB-247	SB-247	SB-248	SB-248	SB-248
SAMPLE ID	D-SB-65RE-9	SB-247-05	SB-247-10	SB-247-15	SB-248-05	SB-248-10	SB-248-15
SAMPLE DATE	9/16/2009	6/7/2005	6/7/2005	6/7/2005	6/7/2005	6/7/2005	6/7/2005
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-249	SB-249	SB-249	SB-336	SB-336	SB-336	SB-337
SAMPLE ID	SB-249-05	SB-249-10	SB-249-15	SB-336-0203	SB-336-0506	SB-336-0809	SB-337-0203
SAMPLE DATE	6/7/2005	6/7/2005	6/7/2005	11/1/2007	11/1/2007	11/1/2007	11/1/2007
METALS (MG/KG)							
ANTIMONY	0.4 [MDL=0.3]	0.4 U [MDL=0.4]	--	--	--	--	--
ARSENIC	3 B [MDL=0.7]	7 [MDL=0.7]	--	--	--	--	--
BARIUM	42 [MDL=0.3]	17 [MDL=0.4]	--	--	--	--	--
BERYLLIUM	2.7 [MDL=0.04]	2.7 [MDL=0.05]	--	--	--	--	--
CADMIUM	0.3 [MDL=0.06]	0.2 [MDL=0.06]	--	--	--	--	--
CHROMIUM	18 [MDL=0.2]	49.3 [MDL=0.2]	--	--	--	--	--
COBALT	19.6 [MDL=0.09]	3.4 [MDL=0.09]	--	--	--	--	--
COPPER	20 [MDL=0.3]	7 [MDL=0.4]	--	--	--	--	--
IRON	--	--	--	--	--	--	--
LEAD	13 [MDL=0.3]	18 [MDL=0.4]	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.4 K [MDL=0.005]	0.002 U [MDL=0.002]	--	0.066 B [MDL=0.015]	0.04 B [MDL=0.015]	0.35 [MDL=0.015]	0.4 [MDL=0.015]
MOLYBDENUM	0.6 U [MDL=0.6]	0.9 B [MDL=0.6]	--	--	--	--	--
NICKEL	37 [MDL=0.1]	12 [MDL=0.1]	--	--	--	--	--
SELENIUM	4 [MDL=2]	5 [MDL=2]	--	--	--	--	--
SILVER	0.06 U [MDL=0.06]	0.06 U [MDL=0.06]	--	--	--	--	--
THALLIUM	1 U [MDL=1]	1 U [MDL=1]	--	--	--	--	--
VANADIUM	24.5 [MDL=0.2]	90.5 [MDL=0.2]	--	--	--	--	--
ZINC	137 [MDL=0.2]	10 [MDL=0.2]	--	--	--	--	--
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	87.3 [MDL=10]	79.2 [MDL=10]	81.7 [MDL=10]	84.8 [MDL=10]
HEXAVALENT CHROMIUM (MG/KG)	--	0.35 UL [MDL=0.4]	--	--	--	--	--
MERCURY (METHYL) (UG/KG)	0.474 K [MDL=0.019]	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	--	--	--	--	--	--	--
1,4-DIOXANE	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE)	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	--	--	--	--	--	--	--
2,4-DINITROPHENOL	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	--	--	--	--	--	--	--
2-CHLOROPHENOL	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	--	--	--	--	--	--	--
2-NITROANILINE	--	--	--	--	--	--	--
2-NITROPHENOL	--	--	--	--	--	--	--
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	--	--	--	--	--	--	--
3-NITROANILINE	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	--	--	--	--	--	--	--
4-CHLOROANILINE	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-249	SB-249	SB-249	SB-336	SB-336	SB-336	SB-337
SAMPLE ID	SB-249-05	SB-249-10	SB-249-15	SB-336-0203	SB-336-0506	SB-336-0809	SB-337-0203
SAMPLE DATE	6/7/2005	6/7/2005	6/7/2005	11/1/2007	11/1/2007	11/1/2007	11/1/2007
4-NITROPHENOL	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--
CAPROLACTAM	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--	--	--
DIETHYL PHTHALATE	--	--	--	--	--	--	--
DIMETHYL PHTHALATE	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	--	--	--	--	--	--	--
HEXACHLOROETHANE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE	--	--	--	--	--	--	--
N-NITROSO-DI-N-PROPYLAMINE	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	--	--	--	--	--	--	--
PENTACHLOROPHENOL	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-249	SB-249	SB-249	SB-336	SB-336	SB-336	SB-337
SAMPLE ID	SB-249-05	SB-249-10	SB-249-15	SB-336-0203	SB-336-0506	SB-336-0809	SB-337-0203
SAMPLE DATE	6/7/2005	6/7/2005	6/7/2005	11/1/2007	11/1/2007	11/1/2007	11/1/2007
1,1-DICHLOROETHANE	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--
1,1-DICHLOROPROPENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2-DIBROMO-3-CHLOROPROPANE	--	--	--	--	--	--	--
1,2-DIBROMOETHANE	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROPROPANE	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	--	--	--	--	--	--	--
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--
2-CHLOROTOLUENE	--	--	--	--	--	--	--
2-HEXANONE	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	--	--	--	--	--	--	--
BROMODICHLOROMETHANE	--	--	--	--	--	--	--
BROMOFORM	--	--	--	--	--	--	--
BROMOMETHANE	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--
CHLORODIBROMOMETHANE	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	--	--	--	--	--	--	--
DIISOPROPYL ETHER	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-249	SB-249	SB-249	SB-336	SB-336	SB-336	SB-337
SAMPLE ID	SB-249-05	SB-249-10	SB-249-15	SB-336-0203	SB-336-0506	SB-336-0809	SB-337-0203
SAMPLE DATE	6/7/2005	6/7/2005	6/7/2005	11/1/2007	11/1/2007	11/1/2007	11/1/2007
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	--	--	--	--	--	--	--
M+P-XYLENES	--	--	--	--	--	--	--
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
N-BUTYLBENZENE	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	--	--	--	--	--
O-XYLENE	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	--	--	--	--	--
STYRENE	--	--	--	--	--	--	--
TERT-AMYL METHYL ETHER	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--
VINYL ACETATE	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--

POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)

2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	380 U [MDL=1.5]	420 U [MDL=1.6]	24 [MDL=1.6]	13 [MDL=1.5]
BAP EQUIVALENT-POS	--	--	--	380 U [MDL=1.5]	420 U [MDL=1.6]	24 [MDL=1.6]	13 [MDL=1.5]
BAP EQUIVALENT-UCL	--	--	--	1.517154 [MDL=1.5]	0.26918 [MDL=1.6]	24 [MDL=1.6]	13 [MDL=1.5]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	380 U [MDL=1.5]	420 U [MDL=1.6]	24 J [MDL=1.6]	13 J [MDL=1.5]
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-249	SB-249	SB-249	SB-336	SB-336	SB-336	SB-337
SAMPLE ID	SB-249-05	SB-249-10	SB-249-15	SB-336-0203	SB-336-0506	SB-336-0809	SB-337-0203
SAMPLE DATE	6/7/2005	6/7/2005	6/7/2005	11/1/2007	11/1/2007	11/1/2007	11/1/2007
TOTAL PAHS	--	--	--	0 U [MDL=1.5]	0 U [MDL=1.6]	24 [MDL=1.6]	13 [MDL=1.5]
PCBS (UG/KG)							
AROCLOR-1016	40 U [MDL=0.01]	39 U [MDL=0.01]	37 U [MDL=0.01]	--	--	--	--
AROCLOR-1221	40 U [MDL=0.007]	39 U [MDL=0.007]	37 U [MDL=0.007]	--	--	--	--
AROCLOR-1232	40 U [MDL=0.01]	39 U [MDL=0.01]	37 U [MDL=0.01]	--	--	--	--
AROCLOR-1242	40 U [MDL=0.007]	39 U [MDL=0.007]	37 U [MDL=0.007]	--	--	--	--
AROCLOR-1248	40 U [MDL=0.01]	39 U [MDL=0.009]	37 U [MDL=0.009]	--	--	--	--
AROCLOR-1254	40 U [MDL=0.01]	39 U [MDL=0.009]	37 U [MDL=0.009]	--	--	--	--
AROCLOR-1260	40 U [MDL=0.007]	39 U [MDL=0.007]	37 U [MDL=0.007]	--	--	--	--
TOTAL AROCLOR	0 U [MDL=0.01]	0 U [MDL=0.01]	0 U [MDL=0.01]	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-249	SB-249	SB-249	SB-336	SB-336	SB-336	SB-337
SAMPLE ID	SB-249-05	SB-249-10	SB-249-15	SB-336-0203	SB-336-0506	SB-336-0809	SB-337-0203
SAMPLE DATE	6/7/2005	6/7/2005	6/7/2005	11/1/2007	11/1/2007	11/1/2007	11/1/2007
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-337	SB-337	SB-338	SB-338	SB-338	SB-339	SB-339
SAMPLE ID	SB-337-0506	SB-337-0809	SB-338-0203	SB-338-0506	SB-338-0809	SB-339-0203	SB-339-0506
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
METALS (MG/KG)							
ANTIMONY	--	--	--	--	--	--	--
ARSENIC	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--
CADMIUM	--	--	--	--	--	--	--
CHROMIUM	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--
COPPER	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--
LEAD	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.093 B [MDL=0.015]	0.82 [MDL=0.015]	0.42 [MDL=0.015]	0.042 B [MDL=0.015]	0.055 B [MDL=0.015]	0.13 B [MDL=0.015]	0.22 J [MDL=0.015]
MOLYBDENUM	--	--	--	--	--	--	--
NICKEL	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--
ZINC	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	80.3 [MDL=10]	79.4 [MDL=10]	82.4 [MDL=10]	81.7 [MDL=10]	81.8 [MDL=10]	88.4 [MDL=10]	80.2 [MDL=10]
HEXAVALENT CHROMIUM (MG/KG)	--	--	--	--	--	--	--
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	--	--	--	--	--	--	--
1,4-DIOXANE	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE)	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	--	--	--	--	--	--	--
2,4-DINITROPHENOL	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	--	--	--	--	--	--	--
2-CHLOROPHENOL	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	--	--	--	--	--	--	--
2-NITROANILINE	--	--	--	--	--	--	--
2-NITROPHENOL	--	--	--	--	--	--	--
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	--	--	--	--	--	--	--
3-NITROANILINE	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	--	--	--	--	--	--	--
4-CHLOROANILINE	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-337	SB-337	SB-338	SB-338	SB-338	SB-339	SB-339
SAMPLE ID	SB-337-0506	SB-337-0809	SB-338-0203	SB-338-0506	SB-338-0809	SB-339-0203	SB-339-0506
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
4-NITROPHENOL	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--
CAPROLACTAM	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--	--	--
DIETHYL PHTHALATE	--	--	--	--	--	--	--
DIMETHYL PHTHALATE	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	--	--	--	--	--	--	--
HEXACHLOROETHANE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE	--	--	--	--	--	--	--
N-NITROSO-DI-N-PROPYLAMINE	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	--	--	--	--	--	--	--
PENTACHLOROPHENOL	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-337	SB-337	SB-338	SB-338	SB-338	SB-339	SB-339
SAMPLE ID	SB-337-0506	SB-337-0809	SB-338-0203	SB-338-0506	SB-338-0809	SB-339-0203	SB-339-0506
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
1,1-DICHLOROETHANE	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--
1,1-DICHLOROPROPENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2-DIBROMO-3-CHLOROPROPANE	--	--	--	--	--	--	--
1,2-DIBROMOETHANE	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROPROPANE	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	--	--	--	--	--	--	--
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--
2-CHLOROTOLUENE	--	--	--	--	--	--	--
2-HEXANONE	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	--	--	--	--	--	--	--
BROMODICHLOROMETHANE	--	--	--	--	--	--	--
BROMOFORM	--	--	--	--	--	--	--
BROMOMETHANE	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--
CHLORODIBROMOMETHANE	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	--	--	--	--	--	--	--
DIISOPROPYL ETHER	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-337	SB-337	SB-338	SB-338	SB-338	SB-339	SB-339
SAMPLE ID	SB-337-0506	SB-337-0809	SB-338-0203	SB-338-0506	SB-338-0809	SB-339-0203	SB-339-0506
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	--	--	--	--	--	--	--
M+P-XYLENES	--	--	--	--	--	--	--
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
N-BUTYLBENZENE	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	--	--	--	--	--
O-XYLENE	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	--	--	--	--	--
STYRENE	--	--	--	--	--	--	--
TERT-AMYL METHYL ETHER	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--
VINYL ACETATE	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--

POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)

2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	700 [MDL=16]	4200 U [MDL=16]	40 [MDL=1.6]	50 [MDL=1.6]	400 U [MDL=1.6]	14 [MDL=1.5]	1.6 U [MDL=1.6]
BAP EQUIVALENT-POS	700 [MDL=16]	4200 U [MDL=16]	40 [MDL=1.6]	50 [MDL=1.6]	400 U [MDL=1.6]	14 [MDL=1.5]	1.6 U [MDL=1.6]
BAP EQUIVALENT-UCL	700 [MDL=16]	1.782775 [MDL=16]	40 [MDL=1.6]	50 [MDL=1.6]	1.913443 [MDL=1.6]	14 [MDL=1.5]	0.008761 [MDL=1.6]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	700 J [MDL=16]	4200 U [MDL=16]	40 J [MDL=1.6]	50 J [MDL=1.6]	400 U [MDL=1.6]	14 J [MDL=1.5]	1.6 U [MDL=1.6]
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-337	SB-337	SB-338	SB-338	SB-338	SB-339	SB-339
SAMPLE ID	SB-337-0506	SB-337-0809	SB-338-0203	SB-338-0506	SB-338-0809	SB-339-0203	SB-339-0506
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
TOTAL PAHS	700 [MDL=16]	0 U [MDL=16]	40 [MDL=1.6]	50 [MDL=1.6]	0 U [MDL=1.6]	14 [MDL=1.5]	0 U [MDL=1.6]
PCBS (UG/KG)							
AROCLOR-1016	--	--	--	--	--	--	--
AROCLOR-1221	--	--	--	--	--	--	--
AROCLOR-1232	--	--	--	--	--	--	--
AROCLOR-1242	--	--	--	--	--	--	--
AROCLOR-1248	--	--	--	--	--	--	--
AROCLOR-1254	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-337	SB-337	SB-338	SB-338	SB-338	SB-339	SB-339
SAMPLE ID	SB-337-0506	SB-337-0809	SB-338-0203	SB-338-0506	SB-338-0809	SB-339-0203	SB-339-0506
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-339	SB-340	SB-340	SB-340	SB-341	SB-341	SB-341
SAMPLE ID	SB-339-0809	SB-340-0203	SB-340-0506	SB-340-0809	SB-341-0203	SB-341-0506	SB-341-0809
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
METALS (MG/KG)							
ANTIMONY	--	--	--	--	--	--	--
ARSENIC	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--
CADMIUM	--	--	--	--	--	--	--
CHROMIUM	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--
COPPER	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--
LEAD	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.025 B [MDL=0.015]	0.11 B [MDL=0.015]	0.39 L [MDL=0.015]	0.042 B [MDL=0.015]	0.073 B [MDL=0.015]	0.29 L [MDL=0.015]	0.31 L [MDL=0.015]
MOLYBDENUM	--	--	--	--	--	--	--
NICKEL	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--
ZINC	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	86.7 [MDL=10]	87.3 [MDL=10]	82.3 [MDL=10]	77.7 [MDL=10]	85.3 [MDL=10]	77.8 [MDL=10]	66.1 [MDL=10]
HEXAVALENT CHROMIUM (MG/KG)	--	--	--	--	--	--	--
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	--	--	--	--	--	--	--
1,4-DIOXANE	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE)	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	--	--	--	--	--	--	--
2,4-DINITROPHENOL	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	--	--	--	--	--	--	--
2-CHLOROPHENOL	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	--	--	--	--	--	--	--
2-NITROANILINE	--	--	--	--	--	--	--
2-NITROPHENOL	--	--	--	--	--	--	--
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	--	--	--	--	--	--	--
3-NITROANILINE	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	--	--	--	--	--	--	--
4-CHLOROANILINE	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-339	SB-340	SB-340	SB-340	SB-341	SB-341	SB-341
SAMPLE ID	SB-339-0809	SB-340-0203	SB-340-0506	SB-340-0809	SB-341-0203	SB-341-0506	SB-341-0809
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
4-NITROPHENOL	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--
CAPROLACTAM	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--	--	--
DIETHYL PHTHALATE	--	--	--	--	--	--	--
DIMETHYL PHTHALATE	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	--	--	--	--	--	--	--
HEXACHLOROETHANE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE	--	--	--	--	--	--	--
N-NITROSO-DI-N-PROPYLAMINE	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	--	--	--	--	--	--	--
PENTACHLOROPHENOL	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-339	SB-340	SB-340	SB-340	SB-341	SB-341	SB-341
SAMPLE ID	SB-339-0809	SB-340-0203	SB-340-0506	SB-340-0809	SB-341-0203	SB-341-0506	SB-341-0809
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
1,1-DICHLOROETHANE	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--
1,1-DICHLOROPROPENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2-DIBROMO-3-CHLOROPROPANE	--	--	--	--	--	--	--
1,2-DIBROMOETHANE	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROPROPANE	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	--	--	--	--	--	--	--
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--
2-CHLOROTOLUENE	--	--	--	--	--	--	--
2-HEXANONE	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	--	--	--	--	--	--	--
BROMODICHLOROMETHANE	--	--	--	--	--	--	--
BROMOFORM	--	--	--	--	--	--	--
BROMOMETHANE	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--
CHLORODIBROMOMETHANE	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	--	--	--	--	--	--	--
DIISOPROPYL ETHER	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-339	SB-340	SB-340	SB-340	SB-341	SB-341	SB-341
SAMPLE ID	SB-339-0809	SB-340-0203	SB-340-0506	SB-340-0809	SB-341-0203	SB-341-0506	SB-341-0809
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	--	--	--	--	--	--	--
M+P-XYLENES	--	--	--	--	--	--	--
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
N-BUTYLBENZENE	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	--	--	--	--	--
O-XYLENE	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	--	--	--	--	--
STYRENE	--	--	--	--	--	--	--
TERT-AMYL METHYL ETHER	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--
VINYL ACETATE	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--

POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)

2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	1.5 U [MDL=1.5]	110 [MDL=1.5]	30 [MDL=1.6]	1.7 U [MDL=1.7]	23 [MDL=1.5]	25 [MDL=1.7]	38 [MDL=2]
BAP EQUIVALENT-POS	1.5 U [MDL=1.5]	110 [MDL=1.5]	30 [MDL=1.6]	1.7 U [MDL=1.7]	23 [MDL=1.5]	25 [MDL=1.7]	38 [MDL=2]
BAP EQUIVALENT-UCL	0.080459 [MDL=1.5]	110 [MDL=1.5]	30 [MDL=1.6]	0.055148 [MDL=1.7]	23 [MDL=1.5]	25 [MDL=1.7]	38 [MDL=2]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	1.5 U [MDL=1.5]	110 J [MDL=1.5]	30 J [MDL=1.6]	1.7 U [MDL=1.7]	23 J [MDL=1.5]	25 J [MDL=1.7]	38 J [MDL=2]
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	**SB-339**	**SB-340**	**SB-340**	**SB-340**	**SB-341**	**SB-341**	**SB-341**
SAMPLE ID	**SB-339-0809**	**SB-340-0203**	**SB-340-0506**	**SB-340-0809**	**SB-341-0203**	**SB-341-0506**	**SB-341-0809**
SAMPLE DATE	**11/1/2007**	**11/1/2007**	**11/1/2007**	**11/1/2007**	**11/1/2007**	**11/1/2007**	**11/1/2007**
TOTAL PAHS	0 U [MDL=1.5]	110 [MDL=1.5]	30 [MDL=1.6]	0 U [MDL=1.7]	23 [MDL=1.5]	25 [MDL=1.7]	38 [MDL=2]
PCBS (UG/KG)							
AROCLOR-1016	--	--	--	--	--	--	--
AROCLOR-1221	--	--	--	--	--	--	--
AROCLOR-1232	--	--	--	--	--	--	--
AROCLOR-1242	--	--	--	--	--	--	--
AROCLOR-1248	--	--	--	--	--	--	--
AROCLOR-1254	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-339	SB-340	SB-340	SB-340	SB-341	SB-341	SB-341
SAMPLE ID	SB-339-0809	SB-340-0203	SB-340-0506	SB-340-0809	SB-341-0203	SB-341-0506	SB-341-0809
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-342	SB-342	SB-342	SB-343	SB-343	SB-343	SB-344
SAMPLE ID	SB-342-0203	SB-342-0506	SB-342-0809	SB-343-0203	SB-343-0506	SB-343-0809	SB-344-0203
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
METALS (MG/KG)							
ANTIMONY	--	--	--	--	--	--	--
ARSENIC	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--
CADMIUM	--	--	--	--	--	--	--
CHROMIUM	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--
COPPER	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--
LEAD	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.19 J [MDL=0.015]	0.84 L [MDL=0.015]	0.043 B [MDL=0.015]	0.15 B [MDL=0.015]	0.19 J [MDL=0.015]	0.034 B [MDL=0.015]	0.14 B [MDL=0.015]
MOLYBDENUM	--	--	--	--	--	--	--
NICKEL	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--
ZINC	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	84.1 [MDL=10]	73.7 [MDL=10]	62.5 [MDL=10]	79.6 [MDL=10]	75.4 [MDL=10]	79.4 [MDL=10]	81.3 [MDL=10]
HEXAVALENT CHROMIUM (MG/KG)	--	--	--	--	--	--	--
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	--	--	--	--	--	--	--
1,4-DIOXANE	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE)	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	--	--	--	--	--	--	--
2,4-DINITROPHENOL	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	--	--	--	--	--	--	--
2-CHLOROPHENOL	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	--	--	--	--	--	--	--
2-NITROANILINE	--	--	--	--	--	--	--
2-NITROPHENOL	--	--	--	--	--	--	--
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	--	--	--	--	--	--	--
3-NITROANILINE	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	--	--	--	--	--	--	--
4-CHLOROANILINE	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--	--	--
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-342	SB-342	SB-342	SB-343	SB-343	SB-343	SB-344
SAMPLE ID	SB-342-0203	SB-342-0506	SB-342-0809	SB-343-0203	SB-343-0506	SB-343-0809	SB-344-0203
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
4-NITROPHENOL	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--
CAPROLACTAM	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--	--	--
DIETHYL PHTHALATE	--	--	--	--	--	--	--
DIMETHYL PHTHALATE	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	--	--	--	--	--	--	--
HEXACHLOROETHANE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE	--	--	--	--	--	--	--
N-NITROSO-DI-N-PROPYLAMINE	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	--	--	--	--	--	--	--
PENTACHLOROPHENOL	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-342	SB-342	SB-342	SB-343	SB-343	SB-343	SB-344
SAMPLE ID	SB-342-0203	SB-342-0506	SB-342-0809	SB-343-0203	SB-343-0506	SB-343-0809	SB-344-0203
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
1,1-DICHLOROETHANE	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--
1,1-DICHLOROPROPENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	--	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,2-DIBROMO-3-CHLOROPROPANE	--	--	--	--	--	--	--
1,2-DIBROMOETHANE	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROPROPANE	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	--	--	--	--	--	--	--
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--
2-CHLOROTOLUENE	--	--	--	--	--	--	--
2-HEXANONE	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	--	--	--	--	--	--	--
BROMODICHLOROMETHANE	--	--	--	--	--	--	--
BROMOFORM	--	--	--	--	--	--	--
BROMOMETHANE	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--
CHLORODIBROMOMETHANE	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	--	--	--	--	--	--	--
DIISOPROPYL ETHER	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-342	SB-342	SB-342	SB-343	SB-343	SB-343	SB-344
SAMPLE ID	SB-342-0203	SB-342-0506	SB-342-0809	SB-343-0203	SB-343-0506	SB-343-0809	SB-344-0203
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE	--	--	--	--	--	--	--
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	--	--	--	--	--	--	--
M+P-XYLENES	--	--	--	--	--	--	--
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
N-BUTYLBENZENE	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	--	--	--	--	--
O-XYLENE	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	--	--	--	--	--
STYRENE	--	--	--	--	--	--	--
TERT-AMYL METHYL ETHER	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROPROPENE	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--
VINYL ACETATE	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--

POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)

2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	78 [MDL=1.5]	17 [MDL=1.8]	2.1 U [MDL=2.1]	11 [MDL=1.6]	1.7 U [MDL=1.7]	1.6 U [MDL=1.6]	1.6 U [MDL=1.6]
BAP EQUIVALENT-POS	78 [MDL=1.5]	17 [MDL=1.8]	2.1 U [MDL=2.1]	11 [MDL=1.6]	1.7 U [MDL=1.7]	1.6 U [MDL=1.6]	1.6 U [MDL=1.6]
BAP EQUIVALENT-UCL	78 [MDL=1.5]	17 [MDL=1.8]	1.222189 [MDL=2.1]	11 [MDL=1.6]	0.151472 [MDL=1.7]	0.01361 [MDL=1.6]	0.018893 [MDL=1.6]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	78 J [MDL=1.5]	17 J [MDL=1.8]	2.1 U [MDL=2.1]	11 J [MDL=1.6]	1.7 U [MDL=1.7]	1.6 U [MDL=1.6]	1.6 U [MDL=1.6]
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-342	SB-342	SB-342	SB-343	SB-343	SB-343	SB-344
SAMPLE ID	SB-342-0203	SB-342-0506	SB-342-0809	SB-343-0203	SB-343-0506	SB-343-0809	SB-344-0203
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
TOTAL PAHS	78 [MDL=1.5]	17 [MDL=1.8]	0 U [MDL=2.1]	11 [MDL=1.6]	0 U [MDL=1.7]	0 U [MDL=1.6]	0 U [MDL=1.6]
PCBS (UG/KG)							
AROCLOR-1016	--	--	--	--	--	--	--
AROCLOR-1221	--	--	--	--	--	--	--
AROCLOR-1232	--	--	--	--	--	--	--
AROCLOR-1242	--	--	--	--	--	--	--
AROCLOR-1248	--	--	--	--	--	--	--
AROCLOR-1254	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-342	SB-342	SB-342	SB-343	SB-343	SB-343	SB-344
SAMPLE ID	SB-342-0203	SB-342-0506	SB-342-0809	SB-343-0203	SB-343-0506	SB-343-0809	SB-344-0203
SAMPLE DATE	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-344	SB-344	SB-782	SB-782	SB-782	SB-782	SB-782
SAMPLE ID	SB-344-0506	SB-344-0809	D-SB-782-03	D-SB-782-05	D-SB-782-07	D-SB-782-09	D-SB-782-11
SAMPLE DATE	11/1/2007	11/1/2007	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
METALS (MG/KG)							
ANTIMONY	--	--	0.14 UL [MDL=0.14]	0.15 UL [MDL=0.15]	0.3 J [MDL=0.15]	0.25 B [MDL=0.029]	0.22 B [MDL=0.028]
ARSENIC	--	--	2.1 J [MDL=0.071]	2.5 J [MDL=0.075]	7.5 J [MDL=0.075]	5 J [MDL=0.075]	3.9 J [MDL=0.072]
BARIUM	--	--	18.6 [MDL=0.26]	30.3 [MDL=0.28]	14.5 [MDL=0.28]	13.9 [MDL=0.055]	11.2 [MDL=0.053]
BERYLLIUM	--	--	0.69 [MDL=0.054]	1.6 [MDL=0.057]	4 [MDL=0.057]	3.2 [MDL=0.057]	3.4 [MDL=0.054]
CADMIUM	--	--	0.13 K [MDL=0.009]	0.017 J [MDL=0.0095]	0.025 J [MDL=0.0095]	0.019 B [MDL=0.0094]	0.077 J [MDL=0.009]
CHROMIUM	--	--	9.7 J [MDL=0.046]	12.7 J [MDL=0.049]	30.7 J [MDL=0.049]	24.3 J [MDL=0.048]	20 J [MDL=0.046]
COBALT	--	--	6.6 J [MDL=0.0044]	4 J [MDL=0.0046]	8.1 J [MDL=0.0046]	6.5 J [MDL=0.0046]	10.9 J [MDL=0.0044]
COPPER	--	--	12.2 J [MDL=0.049]	13.9 J [MDL=0.052]	20.3 J [MDL=0.052]	15.9 J [MDL=0.052]	17.9 J [MDL=0.05]
IRON	--	--	9290 J [MDL=1.1]	11300 J [MDL=1.2]	37500 J [MDL=1.2]	30600 J [MDL=1.2]	31000 J [MDL=1.2]
LEAD	--	--	20.4 [MDL=0.075]	7.3 [MDL=0.079]	7.9 [MDL=0.079]	7.1 [MDL=0.016]	4.9 [MDL=0.015]
MANGANESE	--	--	34.2 [MDL=0.27]	11.1 [MDL=0.29]	81 [MDL=0.29]	42.8 [MDL=0.057]	33.6 [MDL=0.054]
MERCURY	0.034 B [MDL=0.015]	0.052 B [MDL=0.015]	0.53 [MDL=0.017]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]
MOLYBDENUM	--	--	0.24 [MDL=0.072]	0.35 [MDL=0.077]	0.57 [MDL=0.077]	0.45 [MDL=0.076]	0.43 [MDL=0.073]
NICKEL	--	--	11 J [MDL=0.024]	8.9 J [MDL=0.026]	28.5 J [MDL=0.026]	19.3 J [MDL=0.025]	31.6 J [MDL=0.024]
SELENIUM	--	--	1.2 [MDL=0.1]	1.3 [MDL=0.11]	2.1 [MDL=0.11]	1.7 [MDL=0.11]	2.3 [MDL=0.1]
SILVER	--	--	0.27 [MDL=0.018]	0.019 U [MDL=0.019]	0.019 U [MDL=0.019]	0.019 UL [MDL=0.019]	0.019 UL [MDL=0.019]
THALLIUM	--	--	0.12 B [MDL=0.075]	0.15 J [MDL=0.079]	0.17 J [MDL=0.079]	0.14 B [MDL=0.016]	0.11 B [MDL=0.015]
VANADIUM	--	--	16.8 J [MDL=0.047]	17.7 J [MDL=0.05]	53.2 J [MDL=0.05]	44.1 J [MDL=0.049]	41 J [MDL=0.047]
ZINC	--	--	52 J [MDL=0.23]	51 J [MDL=0.24]	45.8 J [MDL=0.24]	37.1 J [MDL=0.24]	47.9 J [MDL=0.23]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	80.1 [MDL=10]	73.4 [MDL=10]	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	--	--	0.36 J [MDL=0.31]	0.33 U [MDL=0.33]	0.4 J [MDL=0.33]	0.32 U [MDL=0.32]	0.83 J [MDL=0.31]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
1,4-DIOXANE	--	--	25 U [MDL=25]	27 U [MDL=27]	27 U [MDL=27]	26 U [MDL=26]	25 U [MDL=25]
2,2'-OXYBIS(1-CHLOROPROPANE)	--	--	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	--	--	29 U [MDL=29]	30 U [MDL=30]	30 U [MDL=30]	30 U [MDL=30]	29 U [MDL=29]
2,4,6-TRICHLOROPHENOL	--	--	92 U [MDL=92]	97 U [MDL=97]	97 U [MDL=97]	96 U [MDL=96]	93 U [MDL=93]
2,4-DICHLOROPHENOL	--	--	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	--	--	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	23 U [MDL=23]
2,4-DINITROPHENOL	--	--	92 U [MDL=92]	97 U [MDL=97]	97 U [MDL=97]	96 U [MDL=96]	93 U [MDL=93]
2,4-DINITROTOLUENE	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
2,6-DINITROTOLUENE	--	--	24 U [MDL=24]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]
2-CHLORONAPHTHALENE	--	--	3.8 U [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
2-CHLOROPHENOL	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	--	--	92 U [MDL=92]	97 U [MDL=97]	97 U [MDL=97]	96 U [MDL=96]	93 U [MDL=93]
2-NITROANILINE	--	--	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	--	--	21 U [MDL=21]	22 U [MDL=22]	22 U [MDL=22]	22 U [MDL=22]	21 U [MDL=21]
3-NITROANILINE	--	--	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	--	--	92 U [MDL=92]	97 U [MDL=97]	97 U [MDL=97]	96 U [MDL=96]	93 U [MDL=93]
4-BROMOPHENYL PHENYL ETHER	--	--	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	--	--	24 U [MDL=24]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]
4-CHLOROANILINE	--	--	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	--	--	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]
4-METHYLPHENOL	--	--	92 U [MDL=92]	97 U [MDL=97]	97 U [MDL=97]	96 U [MDL=96]	93 U [MDL=93]
4-NITROANILINE	--	--	30 U [MDL=30]	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	30 U [MDL=30]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-344 SB-344-0506 11/1/2007	SB-344 SB-344-0809 11/1/2007	SB-782 D-SB-782-03 9/2/2010	SB-782 D-SB-782-05 9/2/2010	SB-782 D-SB-782-07 9/2/2010	SB-782 D-SB-782-09 9/2/2010	SB-782 D-SB-782-11 9/2/2010
4-NITROPHENOL	--	--	92 U [MDL=92]	97 U [MDL=97]	97 U [MDL=97]	96 U [MDL=96]	93 U [MDL=93]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	--	--	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	--	--	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	--	--	14 U [MDL=14]	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	--	--	25 U [MDL=25]	27 U [MDL=27]	27 U [MDL=27]	26 U [MDL=26]	25 U [MDL=25]
BIS(2-CHLOROETHYL)ETHER	--	--	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	59 [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]	22 U [MDL=22]
BUTYL BENZYL PHTHALATE	--	--	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	--	--	43 U [MDL=43]	45 U [MDL=45]	45 U [MDL=45]	45 U [MDL=45]	43 U [MDL=43]
CARBAZOLE	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	--	--	3.8 U [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
DIETHYL PHTHALATE	--	--	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
DIMETHYL PHTHALATE	--	--	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	--	--	17 U [MDL=17]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	17 U [MDL=17]
DI-N-OCTYL PHTHALATE	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	--	--	2.4 U [MDL=2.4]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]
HEXACHLOROBUTADIENE	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
HEXACHLOROCYCLOPENTADIENE	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
HEXACHLOROETHANE	--	--	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	--	--	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	--	--	2.5 U [MDL=2.5]	2.7 U [MDL=2.7]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]
N-NITROSODIMETHYLAMINE	--	--	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
N-NITROSODIPHENYLAMINE	--	--	24 U [MDL=24]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]
PENTACHLOROPHENOL	--	--	92 U [MDL=92]	97 U [MDL=97]	97 U [MDL=97]	96 U [MDL=96]	93 U [MDL=93]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	--	--	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	--	--	0.53 U [MDL=0.53]	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]	0.51 U [MDL=0.51]	0.52 U [MDL=0.52]
1,1,1-TRICHLOROETHANE	--	--	0.48 U [MDL=0.48]	0.52 U [MDL=0.52]	0.55 U [MDL=0.55]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]
1,1,2,2-TETRACHLOROETHANE	--	--	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	--	--	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-344	SB-344	SB-782	SB-782	SB-782	SB-782	SB-782
SAMPLE ID	SB-344-0506	SB-344-0809	D-SB-782-03	D-SB-782-05	D-SB-782-07	D-SB-782-09	D-SB-782-11
SAMPLE DATE	11/1/2007	11/1/2007	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
1,1-DICHLOROETHANE	--	--	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,1-DICHLOROETHENE	--	--	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.51 U [MDL=0.51]	0.43 U [MDL=0.43]	0.43 U [MDL=0.43]
1,1-DICHLOROPROPENE	--	--	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]
1,2,3-TRICHLOROBENZENE	--	--	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]
1,2,3-TRICHLOROPROPANE	--	--	0.78 U [MDL=0.78]	0.83 U [MDL=0.83]	0.89 U [MDL=0.89]	0.74 U [MDL=0.74]	0.75 U [MDL=0.75]
1,2,3-TRIMETHYLBENZENE	--	--	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]
1,2,4-TRICHLOROBENZENE	--	--	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]
1,2,4-TRIMETHYLBENZENE	--	--	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]	0.64 U [MDL=0.64]	0.53 U [MDL=0.53]	0.54 U [MDL=0.54]
1,2-DIBROMO-3-CHLOROPROPANE	--	--	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
1,2-DIBROMOETHANE	--	--	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.41 U [MDL=0.41]	0.42 U [MDL=0.42]
1,2-DICHLOROBENZENE	--	--	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,2-DICHLOROETHANE	--	--	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]
1,2-DICHLOROPROPANE	--	--	0.59 U [MDL=0.59]	0.64 U [MDL=0.64]	0.68 U [MDL=0.68]	0.56 U [MDL=0.56]	0.58 U [MDL=0.58]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	--	--	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]
1,3-DICHLOROPROPANE	--	--	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]
1,4-DICHLOROBENZENE	--	--	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]	0.65 U [MDL=0.65]	0.54 U [MDL=0.54]	0.55 U [MDL=0.55]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	--	--	0.81 U [MDL=0.81]	0.87 U [MDL=0.87]	0.93 U [MDL=0.93]	0.77 U [MDL=0.77]	0.78 U [MDL=0.78]
2-BUTANONE	--	--	1.2 U [MDL=1.2]	3.5 J [MDL=1.3]	1.4 U [MDL=1.4]	2.2 J [MDL=1.1]	1.2 U [MDL=1.2]
2-CHLOROETHYL VINYL ETHER	--	--	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
2-CHLOROTOLUENE	--	--	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]
2-HEXANONE	--	--	0.54 U [MDL=0.54]	0.58 U [MDL=0.58]	0.62 U [MDL=0.62]	0.52 U [MDL=0.52]	0.53 U [MDL=0.53]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	--	--	0.35 U [MDL=0.35]	0.38 U [MDL=0.38]	0.4 U [MDL=0.4]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]
4-ISOPROPYLTOLUENE	--	--	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]
4-METHYL-2-PENTANONE	--	--	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.53 U [MDL=0.53]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]
ACETONE	--	--	5.4 U [MDL=5.4]	42 B [MDL=5.8]	6.2 U [MDL=6.2]	21 B [MDL=5.2]	5.3 U [MDL=5.3]
BENZENE	--	--	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	--	--	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]
BROMOCHLOROMETHANE	--	--	0.61 U [MDL=0.61]	0.66 U [MDL=0.66]	0.7 U [MDL=0.7]	0.58 U [MDL=0.58]	0.59 U [MDL=0.59]
BROMODICHLOROMETHANE	--	--	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]
BROMOFORM	--	--	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]
BROMOMETHANE	--	--	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.53 U [MDL=0.53]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]
CARBON DISULFIDE	--	--	0.38 U [MDL=0.38]	0.41 U [MDL=0.41]	0.43 U [MDL=0.43]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]
CARBON TETRACHLORIDE	--	--	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]
CHLOROBENZENE	--	--	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]
CHLORODIBROMOMETHANE	--	--	0.47 U [MDL=0.47]	0.51 U [MDL=0.51]	0.54 U [MDL=0.54]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]
CHLOROETHANE	--	--	0.74 U [MDL=0.74]	0.79 U [MDL=0.79]	0.85 U [MDL=0.85]	0.7 U [MDL=0.7]	0.72 U [MDL=0.72]
CHLOROFORM	--	--	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]
CHLOROMETHANE	--	--	0.35 U [MDL=0.35]	0.38 U [MDL=0.38]	0.4 U [MDL=0.4]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]
CIS-1,2-DICHLOROETHENE	--	--	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
CIS-1,3-DICHLOROPROPENE	--	--	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	--	--	0.54 U [MDL=0.54]	0.58 U [MDL=0.58]	0.62 U [MDL=0.62]	0.52 U [MDL=0.52]	0.53 U [MDL=0.53]
DICHLORODIFLUOROMETHANE	--	--	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.41 U [MDL=0.41]	0.42 U [MDL=0.42]
DIISOPROPYL ETHER	--	--	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-344 SB-344-0506 11/1/2007	SB-344 SB-344-0809 11/1/2007	SB-782 D-SB-782-03 9/2/2010	SB-782 D-SB-782-05 9/2/2010	SB-782 D-SB-782-07 9/2/2010	SB-782 D-SB-782-09 9/2/2010	SB-782 D-SB-782-11 9/2/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	--	--	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.22 U [MDL=0.22]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]
ETHYLBENZENE	--	--	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]
HEXACHLOROBUTADIENE	--	--	1 U [MDL=1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	0.98 U [MDL=0.98]	1 U [MDL=1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	--	--	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]
M+P-XYLENES	--	--	1 U [MDL=1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	0.98 U [MDL=0.98]	1 U [MDL=1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	--	--	0.37 U [MDL=0.37]	0.4 U [MDL=0.4]	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]
METHYLENE CHLORIDE	--	--	0.58 U [MDL=0.58]	0.62 U [MDL=0.62]	0.66 U [MDL=0.66]	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]
NAPHTHALENE	--	--	0.16 U [MDL=0.16]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]
N-BUTYLBENZENE	--	--	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]
N-PROPYLBENZENE	--	--	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]
O-XYLENE	--	--	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]
SEC-BUTYLBENZENE	--	--	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]
STYRENE	--	--	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.12 U [MDL=0.12]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	--	--	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]
TERT-BUTYLBENZENE	--	--	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]
TERTIARY-BUTYL ALCOHOL	--	--	6.6 UR [MDL=6.6]	7 UR [MDL=7]	7.5 UR [MDL=7.5]	6.2 UR [MDL=6.2]	6.3 UR [MDL=6.3]
TETRACHLOROETHENE	--	--	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.51 U [MDL=0.51]	0.43 U [MDL=0.43]	0.43 U [MDL=0.43]
TOLUENE	--	--	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]
TOTAL XYLENES	--	--	0.58 U [MDL=0.58]	0.62 U [MDL=0.62]	0.66 U [MDL=0.66]	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]
TRANS-1,2-DICHLOROETHENE	--	--	0.35 U [MDL=0.35]	0.38 U [MDL=0.38]	0.4 U [MDL=0.4]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]
TRANS-1,3-DICHLOROPROPENE	--	--	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.53 U [MDL=0.53]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]
TRICHLOROETHENE	--	--	0.36 U [MDL=0.36]	0.39 U [MDL=0.39]	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]
TRICHLOROFLUOROMETHANE	--	--	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]
VINYL ACETATE	--	--	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]
VINYL CHLORIDE	--	--	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	--	--	3.8 U [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
ACENAPHTHENE	--	--	3.8 U [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
ACENAPHTHYLENE	--	--	3.8 U [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
ANTHRACENE	--	--	3.8 U [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
BAP EQUIVALENT-HALFND	1.6 U [MDL=1.6]	1.8 U [MDL=1.8]	59.721 [MDL=NaN]	4 U [MDL=NaN]	4 U [MDL=NaN]	4 U [MDL=NaN]	3.8 U [MDL=NaN]
BAP EQUIVALENT-POS	1.6 U [MDL=1.6]	1.8 U [MDL=1.8]	59.721 [MDL=NaN]	4 U [MDL=NaN]	4 U [MDL=NaN]	4 U [MDL=NaN]	3.8 U [MDL=NaN]
BAP EQUIVALENT-UCL	0.024611 [MDL=1.6]	0.203563 [MDL=1.8]	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	29 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
BENZO(A)PYRENE	1.6 U [MDL=1.6]	1.8 U [MDL=1.8]	30 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
BENZO(B)FLUORANTHENE	--	--	38 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
BENZO(G,H,I)PERYLENE	--	--	19 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
BENZO(K)FLUORANTHENE	--	--	19 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
CHRYSENE	--	--	31 [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	--	--	21 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
FLUORANTHENE	--	--	49 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
FLUORENE	--	--	3.8 U [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
INDENO(1,2,3-CD)PYRENE	--	--	18 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
NAPHTHALENE	--	--	3.8 U [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
PHENANTHRENE	--	--	24 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]
PYRENE	--	--	39 [MDL=3.8]	4 U [MDL=4]	4 U [MDL=4]	4 U [MDL=4]	3.8 U [MDL=3.8]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-344	SB-344	SB-782	SB-782	SB-782	SB-782	SB-782
SAMPLE ID	SB-344-0506	SB-344-0809	D-SB-782-03	D-SB-782-05	D-SB-782-07	D-SB-782-09	D-SB-782-11
SAMPLE DATE	11/1/2007	11/1/2007	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
TOTAL PAHS	0 U [MDL=1.6]	0 U [MDL=1.8]	317 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	--	--	24 U [MDL=24]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]
AROCLOR-1221	--	--	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1232	--	--	16 U [MDL=16]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]
AROCLOR-1242	--	--	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]
AROCLOR-1248	--	--	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1254	--	--	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1260	--	--	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
TOTAL AROCLOR	--	--	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	0.71 U [MDL=0.71]	0.75 U [MDL=0.75]	0.75 U [MDL=0.75]	0.75 U [MDL=0.75]	0.72 U [MDL=0.72]
4,4'-DDE	--	--	0.45 U [MDL=0.45]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]
4,4'-DDT	--	--	0.72 U [MDL=0.72]	0.77 U [MDL=0.77]	0.77 U [MDL=0.77]	0.76 U [MDL=0.76]	0.73 U [MDL=0.73]
ALDRIN	--	--	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
ALPHA-BHC	--	--	0.84 U [MDL=0.84]	0.89 U [MDL=0.89]	0.89 U [MDL=0.89]	0.88 U [MDL=0.88]	0.85 U [MDL=0.85]
ALPHA-CHLORDANE	--	--	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
BETA-BHC	--	--	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DELTA-BHC	--	--	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
DIELDRIN	--	--	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]	0.57 U [MDL=0.57]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]
ENDOSULFAN I	--	--	0.6 U [MDL=0.6]	0.63 U [MDL=0.63]	0.63 U [MDL=0.63]	0.63 U [MDL=0.63]	0.6 U [MDL=0.6]
ENDOSULFAN II	--	--	0.94 U [MDL=0.94]	1 U [MDL=1]	1 U [MDL=1]	0.99 U [MDL=0.99]	0.95 U [MDL=0.95]
ENDOSULFAN SULFATE	--	--	1 U [MDL=1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1 U [MDL=1]
ENDRIN	--	--	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]	0.58 U [MDL=0.58]
ENDRIN ALDEHYDE	--	--	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	--	--	0.72 U [MDL=0.72]	0.77 U [MDL=0.77]	0.77 U [MDL=0.77]	0.76 U [MDL=0.76]	0.73 U [MDL=0.73]
GAMMA-BHC (LINDANE)	--	--	0.85 U [MDL=0.85]	0.9 U [MDL=0.9]	0.9 U [MDL=0.9]	0.89 U [MDL=0.89]	0.86 U [MDL=0.86]
GAMMA-CHLORDANE	--	--	0.48 U [MDL=0.48]	0.51 U [MDL=0.51]	0.51 U [MDL=0.51]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]
HEPTACHLOR	--	--	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-344	SB-344	SB-782	SB-782	SB-782	SB-782	SB-782
SAMPLE ID	SB-344-0506	SB-344-0809	D-SB-782-03	D-SB-782-05	D-SB-782-07	D-SB-782-09	D-SB-782-11
SAMPLE DATE	11/1/2007	11/1/2007	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
HEPTACHLOR EPOXIDE	--	--	0.92 U [MDL=0.92]	0.97 U [MDL=0.97]	0.97 U [MDL=0.97]	0.96 U [MDL=0.96]	0.93 U [MDL=0.93]
METHOXYCHLOR	--	--	1.7 U [MDL=1.7]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.7 U [MDL=1.7]
TOXAPHENE	--	--	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]	22 U [MDL=22]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	140000 [MDL=16]	9500 B [MDL=3.4]	6200 B [MDL=3.4]	5900 B [MDL=3.4]	3200 B [MDL=3.2]
GASOLINE RANGE ORGANICS	--	--	53 U [MDL=53]	56 U [MDL=56]	56 U [MDL=56]	55 U [MDL=55]	53 U [MDL=53]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-782	SB-782	SB-782	SB-783	SB-783	SB-783	SB-783
SAMPLE ID	D-SB-782-13	D-SB-782-15	D-SS-782-01	D-SB-783-03	D-SB-783-05	D-SB-783-07	D-SB-783-09
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
METALS (MG/KG)							
ANTIMONY	0.19 B [MDL=0.03]	0.072 B [MDL=0.028]	0.15 J [MDL=0.025]	0.35 J [MDL=0.13]	0.15 B [MDL=0.03]	0.31 J [MDL=0.028]	0.059 B [MDL=0.028]
ARSENIC	4.6 J [MDL=0.077]	2.6 J [MDL=0.071]	2.2 J [MDL=0.065]	5 J [MDL=0.069]	6.1 J [MDL=0.077]	9.2 J [MDL=0.074]	1.8 J [MDL=0.073]
BARIUM	20.7 [MDL=0.057]	19.2 [MDL=0.053]	40.7 [MDL=0.048]	48.1 [MDL=0.25]	8.1 [MDL=0.057]	7.8 [MDL=0.055]	8.4 [MDL=0.054]
BERYLLIUM	2.8 [MDL=0.059]	2.7 [MDL=0.054]	0.28 [MDL=0.049]	0.9 [MDL=0.052]	1.2 [MDL=0.058]	2.4 [MDL=0.056]	0.66 [MDL=0.056]
CADMIUM	0.054 J [MDL=0.0097]	0.096 J [MDL=0.009]	0.24 K [MDL=0.0081]	0.55 K [MDL=0.0086]	0.0097 UL [MDL=0.0097]	0.0093 UL [MDL=0.0093]	0.0092 UL [MDL=0.0092]
CHROMIUM	17.8 J [MDL=0.05]	13.4 J [MDL=0.046]	9 J [MDL=0.042]	14.6 J [MDL=0.044]	23.2 J [MDL=0.05]	29.5 J [MDL=0.047]	8.7 J [MDL=0.047]
COBALT	5.9 J [MDL=0.0047]	8.2 J [MDL=0.0044]	2 J [MDL=0.004]	11.8 J [MDL=0.0042]	4.3 J [MDL=0.0047]	5.1 J [MDL=0.0045]	2 J [MDL=0.0045]
COPPER	18.8 J [MDL=0.054]	6.4 J [MDL=0.05]	6 J [MDL=0.045]	17.3 J [MDL=0.048]	36.3 J [MDL=0.053]	37.6 J [MDL=0.051]	5.7 J [MDL=0.051]
IRON	19200 J [MDL=1.2]	5110 J [MDL=1.2]	7620 J [MDL=1]	19100 J [MDL=1.1]	34500 J [MDL=1.2]	45200 J [MDL=1.2]	4670 J [MDL=1.2]
LEAD	10.4 [MDL=0.016]	5.6 [MDL=0.015]	45.5 [MDL=0.014]	1010 [MDL=0.072]	4.5 [MDL=0.016]	6.2 [MDL=0.015]	3.2 [MDL=0.015]
MANGANESE	31.6 [MDL=0.059]	9.7 [MDL=0.054]	102 [MDL=0.24]	97.8 [MDL=0.052]	16.5 [MDL=0.058]	46.5 [MDL=0.056]	9.4 [MDL=0.056]
MERCURY	0.019 U [MDL=0.019]	0.017 U [MDL=0.017]	0.08 J [MDL=0.016]	0.47 [MDL=0.017]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]
MOLYBDENUM	0.67 [MDL=0.079]	0.073 U [MDL=0.073]	0.45 [MDL=0.066]	0.48 [MDL=0.07]	0.52 [MDL=0.078]	0.73 [MDL=0.075]	0.075 U [MDL=0.075]
NICKEL	15.7 J [MDL=0.026]	17.6 J [MDL=0.024]	5.1 J [MDL=0.022]	18.2 J [MDL=0.023]	14.7 J [MDL=0.026]	14.4 J [MDL=0.025]	4.5 J [MDL=0.025]
SELENIUM	2 [MDL=0.11]	4.5 [MDL=0.1]	0.4 J [MDL=0.094]	1 [MDL=0.1]	0.6 J [MDL=0.11]	0.93 [MDL=0.11]	1.5 [MDL=0.11]
SILVER	0.082 J [MDL=0.02]	0.018 UL [MDL=0.018]	0.099 J [MDL=0.017]	0.25 [MDL=0.018]	0.02 UL [MDL=0.02]	0.019 UL [MDL=0.019]	0.019 UL [MDL=0.019]
THALLIUM	0.13 B [MDL=0.016]	0.14 B [MDL=0.015]	0.042 B [MDL=0.014]	0.072 U [MDL=0.072]	0.067 B [MDL=0.016]	0.05 B [MDL=0.015]	0.07 B [MDL=0.015]
VANADIUM	29.7 J [MDL=0.051]	6.6 J [MDL=0.047]	14.2 J [MDL=0.043]	24.5 J [MDL=0.045]	46 J [MDL=0.051]	65.7 J [MDL=0.049]	10.4 J [MDL=0.049]
ZINC	47 J [MDL=0.25]	46.5 J [MDL=0.23]	23.4 J [MDL=0.21]	58 J [MDL=0.22]	50.9 J [MDL=0.25]	27.7 J [MDL=0.24]	13.4 J [MDL=0.24]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.34 U [MDL=0.34]	0.34 J [MDL=0.31]	0.28 U [MDL=0.28]	0.86 J [MDL=0.3]	0.34 U [MDL=0.34]	0.71 J [MDL=0.32]	0.32 U [MDL=0.32]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 UJ [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
1,4-DIOXANE	27 U [MDL=27]	25 U [MDL=25]	23 U [MDL=23]	24 UJ [MDL=24]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	11 U [MDL=11]	9.9 U [MDL=9.9]	11 UJ [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	31 U [MDL=31]	29 U [MDL=29]	26 U [MDL=26]	28 U [MDL=28]	31 U [MDL=31]	30 U [MDL=30]	30 U [MDL=30]
2,4,6-TRICHLOROPHENOL	100 U [MDL=100]	92 U [MDL=92]	83 U [MDL=83]	89 U [MDL=89]	100 U [MDL=100]	95 U [MDL=95]	95 U [MDL=95]
2,4-DICHLOROPHENOL	25 U [MDL=25]	23 U [MDL=23]	21 U [MDL=21]	22 U [MDL=22]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	25 U [MDL=25]	23 U [MDL=23]	21 U [MDL=21]	22 U [MDL=22]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]
2,4-DINITROPHENOL	100 U [MDL=100]	92 U [MDL=92]	83 U [MDL=83]	89 U [MDL=89]	100 U [MDL=100]	95 U [MDL=95]	95 U [MDL=95]
2,4-DINITROTOLUENE	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 UJ [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
2,6-DINITROTOLUENE	26 U [MDL=26]	24 U [MDL=24]	22 U [MDL=22]	23 UJ [MDL=23]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
2-CHLORONAPHTHALENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.4 U [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
2-CHLOROPHENOL	34 U [MDL=34]	31 U [MDL=31]	28 UJ [MDL=28]	30 U [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	100 U [MDL=100]	92 U [MDL=92]	83 U [MDL=83]	89 U [MDL=89]	100 U [MDL=100]	95 U [MDL=95]	95 U [MDL=95]
2-NITROANILINE	11 U [MDL=11]	10 U [MDL=10]	9.5 U [MDL=9.5]	10 UJ [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 U [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	21 U [MDL=21]	19 U [MDL=19]	20 UJ [MDL=20]	22 U [MDL=22]	21 U [MDL=21]	21 U [MDL=21]
3-NITROANILINE	20 U [MDL=20]	18 U [MDL=18]	17 U [MDL=17]	18 UJ [MDL=18]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	100 U [MDL=100]	92 U [MDL=92]	83 U [MDL=83]	89 U [MDL=89]	100 U [MDL=100]	95 U [MDL=95]	95 U [MDL=95]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	14 UJ [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
4-CHLOROANILINE	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	19 UJ [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	14 UJ [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
4-METHYLPHENOL	100 U [MDL=100]	92 U [MDL=92]	83 U [MDL=83]	89 U [MDL=89]	100 U [MDL=100]	95 U [MDL=95]	95 U [MDL=95]
4-NITROANILINE	32 U [MDL=32]	30 U [MDL=30]	27 U [MDL=27]	29 UJ [MDL=29]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-782	SB-782	SB-782	SB-783	SB-783	SB-783	SB-783
SAMPLE ID	D-SB-782-13	D-SB-782-15	D-SS-782-01	D-SB-783-03	D-SB-783-05	D-SB-783-07	D-SB-783-09
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
4-NITROPHENOL	100 U [MDL=100]	92 U [MDL=92]	83 U [MDL=83]	89 U [MDL=89]	100 U [MDL=100]	95 U [MDL=95]	95 U [MDL=95]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	9.6 U [MDL=9.6]	10 UJ [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	10 U [MDL=10]	9.5 U [MDL=9.5]	10 UJ [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	15 U [MDL=15]	14 U [MDL=14]	12 U [MDL=12]	13 UJ [MDL=13]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	25 U [MDL=25]	23 U [MDL=23]	24 UJ [MDL=24]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]
BIS(2-CHLOROETHYL)ETHER	2.5 U [MDL=2.5]	2.3 U [MDL=2.3]	2.1 U [MDL=2.1]	2.2 UJ [MDL=2.2]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	24 U [MDL=24]	22 U [MDL=22]	20 U [MDL=20]	21 UJ [MDL=21]	24 U [MDL=24]	23 U [MDL=23]	22 U [MDL=22]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	12 U [MDL=12]	10 U [MDL=10]	11 UJ [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	46 U [MDL=46]	43 U [MDL=43]	39 U [MDL=39]	41 UJ [MDL=41]	46 U [MDL=46]	44 U [MDL=44]	44 U [MDL=44]
CARBAZOLE	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 UJ [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.4 U [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
DIETHYL PHTHALATE	20 U [MDL=20]	18 U [MDL=18]	17 U [MDL=17]	18 UJ [MDL=18]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
DIMETHYL PHTHALATE	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	19 UJ [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	19 U [MDL=19]	17 U [MDL=17]	16 U [MDL=16]	17 UJ [MDL=17]	19 U [MDL=19]	18 U [MDL=18]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 UJ [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	2.2 U [MDL=2.2]	2.3 UJ [MDL=2.3]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 UJ [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
HEXACHLOROCYCLOPENTADIENE	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 UJ [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
HEXACHLOROETHANE	11 U [MDL=11]	10 U [MDL=10]	9.4 U [MDL=9.4]	10 UJ [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	14 UJ [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.7 U [MDL=2.7]	2.5 U [MDL=2.5]	2.3 U [MDL=2.3]	2.4 UJ [MDL=2.4]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	18 U [MDL=18]	17 U [MDL=17]	18 UJ [MDL=18]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 UJ [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	24 U [MDL=24]	22 U [MDL=22]	23 UJ [MDL=23]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
PENTACHLOROPHENOL	100 U [MDL=100]	92 U [MDL=92]	83 U [MDL=83]	89 U [MDL=89]	100 U [MDL=100]	95 U [MDL=95]	95 U [MDL=95]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	34 U [MDL=34]	31 U [MDL=31]	28 U [MDL=28]	30 U [MDL=30]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.59 U [MDL=0.59]	0.5 U [MDL=0.5]	0.63 U [MDL=0.63]	0.43 U [MDL=0.43]	0.59 U [MDL=0.59]	0.57 U [MDL=0.57]	0.56 U [MDL=0.56]
1,1,1-TRICHLOROETHANE	0.53 U [MDL=0.53]	0.45 U [MDL=0.45]	0.57 U [MDL=0.57]	0.39 U [MDL=0.39]	0.53 U [MDL=0.53]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]
1,1,2,2-TETRACHLOROETHANE	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.35 U [MDL=0.35]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.2 U [MDL=1.2]	1 U [MDL=1]	1.3 U [MDL=1.3]	0.91 U [MDL=0.91]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-782	SB-782	SB-782	SB-783	SB-783	SB-783	SB-783
SAMPLE ID	D-SB-782-13	D-SB-782-15	D-SS-782-01	D-SB-783-03	D-SB-783-05	D-SB-783-07	D-SB-783-09
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
1,1-DICHLOROETHANE	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.37 U [MDL=0.37]	0.25 U [MDL=0.25]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]
1,1-DICHLOROETHENE	0.49 U [MDL=0.49]	0.42 U [MDL=0.42]	0.53 U [MDL=0.53]	0.36 U [MDL=0.36]	0.49 U [MDL=0.49]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]
1,1-DICHLOROPROPENE	0.28 U [MDL=0.28]	0.24 U [MDL=0.24]	0.31 U [MDL=0.31]	0.21 U [MDL=0.21]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]
1,2,3-TRICHLOROBENZENE	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]	0.26 U [MDL=0.26]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]
1,2,3-TRICHLOROPROPANE	0.85 U [MDL=0.85]	0.73 U [MDL=0.73]	0.92 U [MDL=0.92]	0.63 U [MDL=0.63]	0.85 U [MDL=0.85]	0.82 U [MDL=0.82]	0.81 U [MDL=0.81]
1,2,3-TRIMETHYLBENZENE	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.12 U [MDL=0.12]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]
1,2,4-TRICHLOROBENZENE	0.26 U [MDL=0.26]	0.22 U [MDL=0.22]	0.28 U [MDL=0.28]	0.19 U [MDL=0.19]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]
1,2,4-TRIMETHYLBENZENE	0.62 U [MDL=0.62]	0.52 U [MDL=0.52]	0.66 U [MDL=0.66]	0.45 U [MDL=0.45]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	0.58 U [MDL=0.58]
1,2-DIBROMO-3-CHLOROPROPANE	1.2 U [MDL=1.2]	1 U [MDL=1]	1.3 U [MDL=1.3]	0.91 U [MDL=0.91]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
1,2-DIBROMOETHANE	0.47 U [MDL=0.47]	0.4 U [MDL=0.4]	0.51 U [MDL=0.51]	0.35 U [MDL=0.35]	0.47 U [MDL=0.47]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]
1,2-DICHLOROBENZENE	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.37 U [MDL=0.37]	0.25 U [MDL=0.25]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]
1,2-DICHLOROETHANE	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.35 U [MDL=0.35]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
1,2-DICHLOROPROPANE	0.65 U [MDL=0.65]	0.56 U [MDL=0.56]	0.7 U [MDL=0.7]	0.48 U [MDL=0.48]	0.65 U [MDL=0.65]	0.63 U [MDL=0.63]	0.62 U [MDL=0.62]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.36 U [MDL=0.36]	0.24 U [MDL=0.24]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]
1,3-DICHLOROPROPANE	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.35 U [MDL=0.35]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
1,4-DICHLOROBENZENE	0.63 U [MDL=0.63]	0.53 U [MDL=0.53]	0.67 U [MDL=0.67]	0.46 U [MDL=0.46]	0.62 U [MDL=0.62]	0.6 U [MDL=0.6]	0.59 U [MDL=0.59]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.89 U [MDL=0.89]	0.76 U [MDL=0.76]	0.96 U [MDL=0.96]	0.66 U [MDL=0.66]	0.89 U [MDL=0.89]	0.86 U [MDL=0.86]	0.85 U [MDL=0.85]
2-BUTANONE	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	0.98 U [MDL=0.98]	1.3 U [MDL=1.3]	2.7 J [MDL=1.3]	1.3 U [MDL=1.3]
2-CHLOROETHYL VINYL ETHER	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	0.98 U [MDL=0.98]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
2-CHLOROTOLUENE	0.38 U [MDL=0.38]	0.32 U [MDL=0.32]	0.41 U [MDL=0.41]	0.28 U [MDL=0.28]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]
2-HEXANONE	0.6 U [MDL=0.6]	0.51 U [MDL=0.51]	0.64 U [MDL=0.64]	0.44 U [MDL=0.44]	0.6 U [MDL=0.6]	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.39 U [MDL=0.39]	0.33 U [MDL=0.33]	0.42 U [MDL=0.42]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]
4-ISOPROPYLTOLUENE	0.2 U [MDL=0.2]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.15 U [MDL=0.15]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]
4-METHYL-2-PENTANONE	0.51 U [MDL=0.51]	0.44 U [MDL=0.44]	0.55 U [MDL=0.55]	0.38 U [MDL=0.38]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.49 U [MDL=0.49]
ACETONE	6 U [MDL=6]	5.1 U [MDL=5.1]	6.4 U [MDL=6.4]	4.4 U [MDL=4.4]	6 U [MDL=6]	59 B [MDL=5.8]	5.7 U [MDL=5.7]
BENZENE	0.22 U [MDL=0.22]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.16 U [MDL=0.16]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.34 U [MDL=0.34]	0.23 U [MDL=0.23]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
BROMOCHLOROMETHANE	0.67 U [MDL=0.67]	0.57 U [MDL=0.57]	0.72 U [MDL=0.72]	0.49 U [MDL=0.49]	0.67 U [MDL=0.67]	0.65 U [MDL=0.65]	0.64 U [MDL=0.64]
BROMODICHLOROMETHANE	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.29 U [MDL=0.29]	0.2 U [MDL=0.2]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]
BROMOFORM	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.34 U [MDL=0.34]	0.23 U [MDL=0.23]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
BROMOMETHANE	0.51 U [MDL=0.51]	0.44 U [MDL=0.44]	0.55 U [MDL=0.55]	0.38 U [MDL=0.38]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.49 [MDL=0.49]
CARBON DISULFIDE	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.45 U [MDL=0.45]	0.31 U [MDL=0.31]	0.42 U [MDL=0.42]	0.4 U [MDL=0.4]	0.4 U [MDL=0.4]
CARBON TETRACHLORIDE	0.35 U [MDL=0.35]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]	0.26 U [MDL=0.26]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]
CHLOROBENZENE	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.34 U [MDL=0.34]	0.23 U [MDL=0.23]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
CHLORODIBROMOMETHANE	0.52 U [MDL=0.52]	0.44 U [MDL=0.44]	0.56 U [MDL=0.56]	0.38 U [MDL=0.38]	0.52 U [MDL=0.52]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]
CHLOROETHANE	0.81 U [MDL=0.81]	0.69 U [MDL=0.69]	0.88 U [MDL=0.88]	0.6 U [MDL=0.6]	0.81 U [MDL=0.81]	0.79 U [MDL=0.79]	0.77 U [MDL=0.77]
CHLOROFORM	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.3 U [MDL=0.3]	0.2 U [MDL=0.2]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]
CHLOROMETHANE	0.39 U [MDL=0.39]	0.33 U [MDL=0.33]	0.42 U [MDL=0.42]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]
CIS-1,2-DICHLOROETHENE	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.37 U [MDL=0.37]	0.25 U [MDL=0.25]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]
CIS-1,3-DICHLOROPROPENE	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.35 U [MDL=0.35]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.6 U [MDL=0.6]	0.51 U [MDL=0.51]	0.64 U [MDL=0.64]	0.44 U [MDL=0.44]	0.6 U [MDL=0.6]	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]
DICHLORODIFLUOROMETHANE	0.47 U [MDL=0.47]	0.4 U [MDL=0.4]	0.51 U [MDL=0.51]	0.35 U [MDL=0.35]	0.47 U [MDL=0.47]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]
DIISOPROPYL ETHER	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1 U [MDL=1]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-782 D-SB-782-13 9/2/2010	SB-782 D-SB-782-15 9/2/2010	SB-782 D-SS-782-01 9/2/2010	SB-783 D-SB-783-03 9/2/2010	SB-783 D-SB-783-05 9/2/2010	SB-783 D-SB-783-07 9/2/2010	SB-783 D-SB-783-09 9/2/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.21 U [MDL=0.21]	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.15 U [MDL=0.15]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]
ETHYLBENZENE	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]	0.18 U [MDL=0.18]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]
HEXACHLOROBUTADIENE	1.1 U [MDL=1.1]	0.97 U [MDL=0.97]	1.2 U [MDL=1.2]	0.84 U [MDL=0.84]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.15 U [MDL=0.15]	0.13 U [MDL=0.13]	0.16 U [MDL=0.16]	0.11 U [MDL=0.11]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]
M+P-XYLENES	1.1 U [MDL=1.1]	0.97 U [MDL=0.97]	1.2 U [MDL=1.2]	0.84 U [MDL=0.84]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.41 U [MDL=0.41]	0.35 U [MDL=0.35]	0.44 U [MDL=0.44]	0.3 U [MDL=0.3]	0.41 U [MDL=0.41]	0.39 U [MDL=0.39]	0.39 U [MDL=0.39]
METHYLENE CHLORIDE	0.63 U [MDL=0.63]	0.54 U [MDL=0.54]	0.68 U [MDL=0.68]	0.47 U [MDL=0.47]	0.63 U [MDL=0.63]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]
NAPHTHALENE	0.18 U [MDL=0.18]	0.15 U [MDL=0.15]	0.19 U [MDL=0.19]	0.13 U [MDL=0.13]	0.18 U [MDL=0.18]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]
N-BUTYLBENZENE	0.22 U [MDL=0.22]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.16 U [MDL=0.16]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]
N-PROPYLBENZENE	0.38 U [MDL=0.38]	0.32 U [MDL=0.32]	0.41 U [MDL=0.41]	0.28 U [MDL=0.28]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]
O-XYLENE	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.36 U [MDL=0.36]	0.24 U [MDL=0.24]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]
SEC-BUTYLBENZENE	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.18 U [MDL=0.18]	0.13 U [MDL=0.13]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]
STYRENE	0.14 U [MDL=0.14]	0.12 U [MDL=0.12]	0.15 U [MDL=0.15]	0.1 U [MDL=0.1]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	0.35 U [MDL=0.35]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]	0.26 U [MDL=0.26]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]
TERT-BUTYLBENZENE	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.3 U [MDL=0.3]	0.2 U [MDL=0.2]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]
TERTIARY-BUTYL ALCOHOL	7.2 UR [MDL=7.2]	6.1 UR [MDL=6.1]	7.8 UR [MDL=7.8]	5.3 UR [MDL=5.3]	7.2 UR [MDL=7.2]	6.9 UR [MDL=6.9]	6.8 UR [MDL=6.8]
TETRACHLOROETHENE	0.49 U [MDL=0.49]	0.42 U [MDL=0.42]	0.53 U [MDL=0.53]	0.36 U [MDL=0.36]	0.49 U [MDL=0.49]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]
TOLUENE	0.26 U [MDL=0.26]	0.22 U [MDL=0.22]	0.28 U [MDL=0.28]	0.19 U [MDL=0.19]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]
TOTAL XYLENES	0.63 U [MDL=0.63]	0.54 U [MDL=0.54]	0.68 U [MDL=0.68]	0.47 U [MDL=0.47]	0.63 U [MDL=0.63]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]
TRANS-1,2-DICHLOROETHENE	0.39 U [MDL=0.39]	0.33 U [MDL=0.33]	0.42 U [MDL=0.42]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]
TRANS-1,3-DICHLOROPROPENE	0.51 U [MDL=0.51]	0.44 U [MDL=0.44]	0.55 U [MDL=0.55]	0.38 U [MDL=0.38]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.49 U [MDL=0.49]
TRICHLOROETHENE	0.4 U [MDL=0.4]	0.34 U [MDL=0.34]	0.43 U [MDL=0.43]	0.29 U [MDL=0.29]	0.4 U [MDL=0.4]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]
TRICHLOROFLUOROMETHANE	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.35 U [MDL=0.35]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
VINYL ACETATE	0.24 U [MDL=0.24]	0.2 U [MDL=0.2]	0.26 U [MDL=0.26]	0.17 U [MDL=0.17]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]
VINYL CHLORIDE	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.4 U [MDL=0.4]	0.27 U [MDL=0.27]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.4 U [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
ACENAPHTHENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	11 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
ACENAPHTHYLENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	12 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
ANTHRACENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	26 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BAP EQUIVALENT-HALFND	5.8392 [MDL=NaN]	3.8 U [MDL=NaN]	130.051 [MDL=NaN]	3.7 U [MDL=NaN]	4.1 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-POS	1.3087 [MDL=NaN]	3.8 U [MDL=NaN]	130.051 [MDL=NaN]	3.7 U [MDL=NaN]	4.1 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	86 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BENZO(A)PYRENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	77 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BENZO(B)FLUORANTHENE	13 [MDL=4.1]	3.8 U [MDL=3.8]	110 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BENZO(G,H,I)PERYLENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	60 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BENZO(K)FLUORANTHENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	46 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
CHRYSENE	8.7 [MDL=1.4]	1.3 U [MDL=1.3]	91 [MDL=1.1]	1.2 UJ [MDL=1.2]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	28 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
FLUORANTHENE	15 [MDL=4.1]	3.8 U [MDL=3.8]	180 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
FLUORENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	10 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
INDENO(1,2,3-CD)PYRENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	49 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
NAPHTHALENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.4 U [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
PHENANTHRENE	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	96 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
PYRENE	15 [MDL=4.1]	3.8 U [MDL=3.8]	150 [MDL=3.4]	3.7 UJ [MDL=3.7]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-782 D-SB-782-13 9/2/2010	SB-782 D-SB-782-15 9/2/2010	SB-782 D-SS-782-01 9/2/2010	SB-783 D-SB-783-03 9/2/2010	SB-783 D-SB-783-05 9/2/2010	SB-783 D-SB-783-07 9/2/2010	SB-783 D-SB-783-09 9/2/2010
TOTAL PAHS	51.7 [MDL=NaN]	0 U [MDL=NaN]	1032 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
AROCLOR-1221	20 U [MDL=20]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]
AROCLOR-1242	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1254	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1260	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.77 U [MDL=0.77]	0.71 U [MDL=0.71]	3.2 U [MDL=3.2]	0.69 U [MDL=0.69]	0.77 UJ [MDL=0.77]	0.74 UJ [MDL=0.74]	0.73 UJ [MDL=0.73]
4,4'-DDE	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	2 U [MDL=2]	0.43 U [MDL=0.43]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]
4,4'-DDT	0.79 U [MDL=0.79]	0.73 U [MDL=0.73]	3.3 U [MDL=3.3]	0.7 U [MDL=0.7]	0.78 U [MDL=0.78]	0.75 U [MDL=0.75]	0.75 U [MDL=0.75]
ALDRIN	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	6.2 U [MDL=6.2]	1.3 U [MDL=1.3]	1.5 UJ [MDL=1.5]	1.4 UJ [MDL=1.4]	1.4 UJ [MDL=1.4]
ALPHA-BHC	0.91 U [MDL=0.91]	0.84 U [MDL=0.84]	3.8 U [MDL=3.8]	0.81 U [MDL=0.81]	0.91 UJ [MDL=0.91]	0.87 UJ [MDL=0.87]	0.86 UJ [MDL=0.86]
ALPHA-CHLORDANE	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	4.9 U [MDL=4.9]	1 U [MDL=1]	1.2 UJ [MDL=1.2]	1.1 UJ [MDL=1.1]	1.1 UJ [MDL=1.1]
BETA-BHC	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	5.7 U [MDL=5.7]	1.2 U [MDL=1.2]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]
DELTA-BHC	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	6.2 U [MDL=6.2]	1.3 U [MDL=1.3]	1.5 UJ [MDL=1.5]	1.4 UJ [MDL=1.4]	1.4 UJ [MDL=1.4]
DIELDRIN	0.59 U [MDL=0.59]	0.54 U [MDL=0.54]	2.4 U [MDL=2.4]	0.52 U [MDL=0.52]	0.58 UJ [MDL=0.58]	0.56 UJ [MDL=0.56]	0.56 UJ [MDL=0.56]
ENDOSULFAN I	0.65 U [MDL=0.65]	0.6 U [MDL=0.6]	2.7 U [MDL=2.7]	0.58 U [MDL=0.58]	0.65 UJ [MDL=0.65]	0.62 UJ [MDL=0.62]	0.62 UJ [MDL=0.62]
ENDOSULFAN II	1 U [MDL=1]	0.94 U [MDL=0.94]	4.3 U [MDL=4.3]	0.91 U [MDL=0.91]	1 UJ [MDL=1]	0.97 UJ [MDL=0.97]	0.97 UJ [MDL=0.97]
ENDOSULFAN SULFATE	1.1 U [MDL=1.1]	1 U [MDL=1]	4.5 U [MDL=4.5]	0.96 U [MDL=0.96]	1.1 UJ [MDL=1.1]	1 UJ [MDL=1]	1 UJ [MDL=1]
ENDRIN	0.62 U [MDL=0.62]	0.58 U [MDL=0.58]	2.6 U [MDL=2.6]	0.55 U [MDL=0.55]	0.62 UJ [MDL=0.62]	0.59 UJ [MDL=0.59]	0.59 UJ [MDL=0.59]
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	5.2 U [MDL=5.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.79 U [MDL=0.79]	0.73 U [MDL=0.73]	3.3 U [MDL=3.3]	0.7 U [MDL=0.7]	0.78 U [MDL=0.78]	0.75 U [MDL=0.75]	0.75 U [MDL=0.75]
GAMMA-BHC (LINDANE)	0.92 U [MDL=0.92]	0.85 U [MDL=0.85]	3.9 U [MDL=3.9]	0.82 U [MDL=0.82]	0.92 UJ [MDL=0.92]	0.88 UJ [MDL=0.88]	0.88 UJ [MDL=0.88]
GAMMA-CHLORDANE	0.52 U [MDL=0.52]	0.48 U [MDL=0.48]	2.2 U [MDL=2.2]	0.46 U [MDL=0.46]	0.52 UJ [MDL=0.52]	0.5 UJ [MDL=0.5]	0.5 UJ [MDL=0.5]
HEPTACHLOR	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	5.7 U [MDL=5.7]	1.2 U [MDL=1.2]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-782	SB-782	SB-782	SB-783	SB-783	SB-783	SB-783
SAMPLE ID	D-SB-782-13	D-SB-782-15	D-SS-782-01	D-SB-783-03	D-SB-783-05	D-SB-783-07	D-SB-783-09
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
HEPTACHLOR EPOXIDE	1 U [MDL=1]	0.92 U [MDL=0.92]	4.2 U [MDL=4.2]	0.89 U [MDL=0.89]	1 UJ [MDL=1]	0.95 UJ [MDL=0.95]	0.95 UJ [MDL=0.95]
METHOXYCHLOR	1.9 U [MDL=1.9]	1.7 U [MDL=1.7]	7.8 U [MDL=7.8]	1.7 U [MDL=1.7]	1.9 U [MDL=1.9]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]
TOXAPHENE	24 U [MDL=24]	22 U [MDL=22]	99 U [MDL=99]	21 U [MDL=21]	24 U [MDL=24]	23 U [MDL=23]	22 U [MDL=22]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	6600 B [MDL=3.5]	6500 B [MDL=3.2]	26000 [MDL=2.9]	33000 [MDL=3.1]	10000 J [MDL=3.5]	6100 J [MDL=3.3]	3300 U [MDL=3.3]
GASOLINE RANGE ORGANICS	57 U [MDL=57]	53 U [MDL=53]	48 U [MDL=48]	51 U [MDL=51]	57 U [MDL=57]	55 U [MDL=55]	54 U [MDL=54]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-783	SB-783	SB-783	SB-783	SB-784	SB-784	SB-784
SAMPLE ID	D-SB-783-11	D-SB-783-13	D-SB-783-15	D-SS-783-01	D-SB-784-03	D-SB-784-05	D-SB-784-07
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
METALS (MG/KG)							
ANTIMONY	0.11 B [MDL=0.028]	0.084 B [MDL=0.029]	0.36 J [MDL=0.029]	0.25 B [MDL=0.027]	0.19 B [MDL=0.028]	0.34 J [MDL=0.03]	0.31 J [MDL=0.029]
ARSENIC	2.1 J [MDL=0.073]	2.4 J [MDL=0.075]	4.3 J [MDL=0.075]	2.4 J [MDL=0.069]	3 J [MDL=0.073]	8 J [MDL=0.077]	5.8 J [MDL=0.074]
BARIUM	12.6 [MDL=0.054]	14.2 [MDL=0.056]	18 [MDL=0.056]	17.3 [MDL=0.051]	14.8 [MDL=0.054]	13.4 [MDL=0.057]	16.4 [MDL=0.055]
BERYLLIUM	1.1 [MDL=0.056]	1.1 [MDL=0.057]	3 [MDL=0.057]	0.28 [MDL=0.052]	1.5 [MDL=0.055]	2.2 [MDL=0.058]	2.8 [MDL=0.056]
CADMIUM	0.011 B [MDL=0.0092]	0.012 B [MDL=0.0095]	0.019 B [MDL=0.0095]	0.11 K [MDL=0.0087]	0.024 B [MDL=0.0091]	0.023 B [MDL=0.0096]	0.036 J [MDL=0.0093]
CHROMIUM	10.1 J [MDL=0.047]	11.4 J [MDL=0.049]	21.6 J [MDL=0.049]	9.1 J [MDL=0.045]	14.7 J [MDL=0.047]	23.9 J [MDL=0.049]	21.9 J [MDL=0.048]
COBALT	4.3 J [MDL=0.0045]	3 J [MDL=0.0046]	8.1 J [MDL=0.0046]	3.2 J [MDL=0.0042]	7.7 J [MDL=0.0045]	6.5 J [MDL=0.0047]	5.6 J [MDL=0.0045]
COPPER	8.6 J [MDL=0.051]	23.1 J [MDL=0.052]	21.9 J [MDL=0.052]	9 J [MDL=0.048]	15.7 J [MDL=0.05]	36.2 J [MDL=0.053]	110 J [MDL=0.051]
IRON	8650 J [MDL=1.2]	6580 J [MDL=1.2]	32800 J [MDL=1.2]	6110 J [MDL=1.1]	17600 J [MDL=1.2]	45800 J [MDL=1.2]	35400 J [MDL=1.2]
LEAD	4.8 [MDL=0.015]	6 [MDL=0.016]	6.7 [MDL=0.016]	25.1 [MDL=0.014]	9.4 [MDL=0.015]	7.7 [MDL=0.016]	7.4 [MDL=0.015]
MANGANESE	30.9 [MDL=0.056]	14.9 [MDL=0.057]	64.2 [MDL=0.057]	30.8 [MDL=0.052]	67.3 [MDL=0.055]	118 [MDL=0.058]	61.5 [MDL=0.056]
MERCURY	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.077 J [MDL=0.017]	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]
MOLYBDENUM	0.12 J [MDL=0.075]	0.17 J [MDL=0.077]	0.51 [MDL=0.077]	0.38 [MDL=0.07]	0.29 [MDL=0.074]	0.89 [MDL=0.078]	0.54 [MDL=0.075]
NICKEL	9.1 J [MDL=0.025]	6.3 J [MDL=0.026]	24.4 J [MDL=0.026]	5.2 J [MDL=0.023]	21.4 J [MDL=0.025]	16.6 J [MDL=0.026]	24.8 J [MDL=0.025]
SELENIUM	1.3 [MDL=0.11]	1.5 [MDL=0.11]	1.8 [MDL=0.11]	0.46 J [MDL=0.1]	2.5 [MDL=0.11]	0.86 [MDL=0.11]	2.7 [MDL=0.11]
SILVER	0.019 UL [MDL=0.019]	0.019 UL [MDL=0.019]	0.019 UL [MDL=0.019]	0.097 J [MDL=0.018]	0.019 UL [MDL=0.019]	0.02 UL [MDL=0.02]	0.019 UL [MDL=0.019]
THALLIUM	0.077 B [MDL=0.015]	0.1 B [MDL=0.016]	0.089 B [MDL=0.016]	0.069 B [MDL=0.014]	0.081 B [MDL=0.015]	0.038 B [MDL=0.016]	0.12 B [MDL=0.015]
VANADIUM	13.8 J [MDL=0.048]	17.7 J [MDL=0.05]	36.3 J [MDL=0.05]	15.7 J [MDL=0.046]	25.3 J [MDL=0.048]	57.7 J [MDL=0.051]	38.3 J [MDL=0.049]
ZINC	25 J [MDL=0.24]	21.9 J [MDL=0.24]	48.5 J [MDL=0.24]	27.8 J [MDL=0.22]	35 J [MDL=0.23]	31.2 J [MDL=0.25]	71.3 J [MDL=0.24]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.73 J [MDL=0.32]	0.94 J [MDL=0.33]	0.5 J [MDL=0.32]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
1,4-DIOXANE	26 U [MDL=26]	27 U [MDL=27]	27 U [MDL=27]	25 U [MDL=25]	26 U [MDL=26]	27 U [MDL=27]	26 U [MDL=26]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	30 U [MDL=30]	30 U [MDL=30]	30 U [MDL=30]	28 U [MDL=28]	29 U [MDL=29]	31 U [MDL=31]	30 U [MDL=30]
2,4,6-TRICHLOROPHENOL	95 U [MDL=95]	97 U [MDL=97]	97 U [MDL=97]	89 U [MDL=89]	94 U [MDL=94]	99 U [MDL=99]	95 U [MDL=95]
2,4-DICHLOROPHENOL	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	24 U [MDL=24]
2,4-DINITROPHENOL	95 U [MDL=95]	97 U [MDL=97]	97 U [MDL=97]	89 U [MDL=89]	94 U [MDL=94]	99 U [MDL=99]	95 U [MDL=95]
2,4-DINITROTOLUENE	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
2,6-DINITROTOLUENE	25 U [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	23 U [MDL=23]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]
2-CHLORONAPHTHALENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	3.7 U [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
2-CHLOROPHENOL	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	95 U [MDL=95]	97 U [MDL=97]	97 U [MDL=97]	89 U [MDL=89]	94 U [MDL=94]	99 U [MDL=99]	95 U [MDL=95]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	21 U [MDL=21]	22 U [MDL=22]	22 U [MDL=22]	20 U [MDL=20]	21 U [MDL=21]	22 U [MDL=22]	21 U [MDL=21]
3-NITROANILINE	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	95 U [MDL=95]	97 U [MDL=97]	97 U [MDL=97]	89 U [MDL=89]	94 U [MDL=94]	99 U [MDL=99]	95 U [MDL=95]
4-BROMOPHENYL PHENYL ETHER	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	14 U [MDL=14]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	25 U [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	23 U [MDL=23]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]
4-CHLOROANILINE	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	14 U [MDL=14]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
4-METHYLPHENOL	95 U [MDL=95]	97 U [MDL=97]	97 U [MDL=97]	89 U [MDL=89]	94 U [MDL=94]	99 U [MDL=99]	95 U [MDL=95]
4-NITROANILINE	31 U [MDL=31]	32 U [MDL=32]	32 U [MDL=32]	29 U [MDL=29]	30 U [MDL=30]	32 U [MDL=32]	31 U [MDL=31]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-783	SB-783	SB-783	SB-783	SB-784	SB-784	SB-784
SAMPLE ID	D-SB-783-11	D-SB-783-13	D-SB-783-15	D-SS-783-01	D-SB-784-03	D-SB-784-05	D-SB-784-07
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
4-NITROPHENOL	95 U [MDL=95]	97 U [MDL=97]	97 U [MDL=97]	89 U [MDL=89]	94 U [MDL=94]	99 U [MDL=99]	95 U [MDL=95]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	14 U [MDL=14]	15 U [MDL=15]	15 U [MDL=15]	13 U [MDL=13]	14 U [MDL=14]	15 U [MDL=15]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	26 U [MDL=26]	27 U [MDL=27]	27 U [MDL=27]	25 U [MDL=25]	26 U [MDL=26]	27 U [MDL=27]	26 U [MDL=26]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.2 U [MDL=2.2]	2.3 U [MDL=2.3]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	21 U [MDL=21]	35 J [MDL=22]	24 U [MDL=24]	23 U [MDL=23]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	44 U [MDL=44]	45 U [MDL=45]	45 U [MDL=45]	41 U [MDL=41]	43 U [MDL=43]	46 U [MDL=46]	44 U [MDL=44]
CARBAZOLE	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	15 J [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
DIETHYL PHTHALATE	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]
DIMETHYL PHTHALATE	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.3 U [MDL=2.3]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
HEXACHLOROCYCLOPENTADIENE	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
HEXACHLOROETHANE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	14 U [MDL=14]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]	2.7 U [MDL=2.7]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]
N-NITROSODIMETHYLAMINE	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
N-NITROSODIPHENYLAMINE	25 U [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	23 U [MDL=23]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]
PENTACHLOROPHENOL	95 U [MDL=95]	97 U [MDL=97]	97 U [MDL=97]	89 U [MDL=89]	94 U [MDL=94]	99 U [MDL=99]	95 U [MDL=95]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	32 U [MDL=32]	33 U [MDL=33]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.52 U [MDL=0.52]	0.57 U [MDL=0.57]	0.71 U [MDL=0.71]	0.46 U [MDL=0.46]	0.56 U [MDL=0.56]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]
1,1,1-TRICHLOROETHANE	0.47 U [MDL=0.47]	0.52 U [MDL=0.52]	0.64 U [MDL=0.64]	0.42 U [MDL=0.42]	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.51 U [MDL=0.51]
1,1,2,2-TETRACHLOROETHANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	0.97 U [MDL=0.97]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-783	SB-783	SB-783	SB-783	SB-784	SB-784	SB-784
SAMPLE ID	D-SB-783-11	D-SB-783-13	D-SB-783-15	D-SS-783-01	D-SB-784-03	D-SB-784-05	D-SB-784-07
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
1,1-DICHLOROETHANE	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.41 U [MDL=0.41]	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]
1,1-DICHLOROETHENE	0.44 U [MDL=0.44]	0.48 U [MDL=0.48]	0.59 U [MDL=0.59]	0.39 U [MDL=0.39]	0.47 U [MDL=0.47]	0.44 U [MDL=0.44]	0.47 U [MDL=0.47]
1,1-DICHLOROPROPENE	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.22 U [MDL=0.22]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]
1,2,3-TRICHLOROBENZENE	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.43 U [MDL=0.43]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]
1,2,3-TRICHLOROPROPANE	0.76 U [MDL=0.76]	0.83 U [MDL=0.83]	1 U [MDL=1]	0.67 U [MDL=0.67]	0.81 U [MDL=0.81]	0.77 U [MDL=0.77]	0.81 U [MDL=0.81]
1,2,3-TRIMETHYLBENZENE	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.19 U [MDL=0.19]	0.13 U [MDL=0.13]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]
1,2,4-TRICHLOROBENZENE	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
1,2,4-TRIMETHYLBENZENE	0.55 U [MDL=0.55]	0.6 U [MDL=0.6]	0.74 U [MDL=0.74]	0.49 U [MDL=0.49]	0.59 U [MDL=0.59]	0.55 U [MDL=0.55]	0.59 U [MDL=0.59]
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	0.97 U [MDL=0.97]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
1,2-DIBROMOETHANE	0.42 U [MDL=0.42]	0.46 U [MDL=0.46]	0.57 U [MDL=0.57]	0.37 U [MDL=0.37]	0.45 U [MDL=0.45]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]
1,2-DICHLOROBENZENE	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.41 U [MDL=0.41]	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]
1,2-DICHLOROETHANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
1,2-DICHLOROPROPANE	0.58 U [MDL=0.58]	0.64 U [MDL=0.64]	0.79 U [MDL=0.79]	0.51 U [MDL=0.51]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.62 U [MDL=0.62]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.29 U [MDL=0.29]	0.32 U [MDL=0.32]	0.4 U [MDL=0.4]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]
1,3-DICHLOROPROPANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
1,4-DICHLOROBENZENE	0.55 U [MDL=0.55]	0.61 U [MDL=0.61]	0.75 U [MDL=0.75]	0.49 U [MDL=0.49]	0.6 U [MDL=0.6]	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.79 U [MDL=0.79]	0.87 U [MDL=0.87]	1.1 U [MDL=1.1]	0.7 U [MDL=0.7]	0.85 U [MDL=0.85]	0.8 U [MDL=0.8]	0.85 U [MDL=0.85]
2-BUTANONE	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	1 U [MDL=1]	1.3 U [MDL=1.3]	5.5 J [MDL=1.2]	1.3 U [MDL=1.3]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	1 U [MDL=1]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]
2-CHLOROTOLUENE	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]	0.3 U [MDL=0.3]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]
2-HEXANONE	0.53 U [MDL=0.53]	0.58 U [MDL=0.58]	0.72 U [MDL=0.72]	0.47 U [MDL=0.47]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.47 U [MDL=0.47]	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]
4-ISOPROPYLTOLUENE	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.24 U [MDL=0.24]	0.16 U [MDL=0.16]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]
4-METHYL-2-PENTANONE	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.62 U [MDL=0.62]	0.4 U [MDL=0.4]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]
ACETONE	5.3 U [MDL=5.3]	5.8 B [MDL=5.8]	7.2 U [MDL=7.2]	4.7 U [MDL=4.7]	6.1 B [MDL=5.7]	71 [MDL=5.4]	13 B [MDL=5.7]
BENZENE	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.26 U [MDL=0.26]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]	0.25 U [MDL=0.25]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]
BROMOCHLOROMETHANE	0.6 U [MDL=0.6]	0.66 U [MDL=0.66]	0.81 U [MDL=0.81]	0.53 U [MDL=0.53]	0.64 U [MDL=0.64]	0.61 U [MDL=0.61]	0.64 U [MDL=0.64]
BROMODICHLOROMETHANE	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.21 U [MDL=0.21]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]
BROMOFORM	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]	0.25 U [MDL=0.25]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]
BROMOMETHANE	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.62 U [MDL=0.62]	0.4 U [MDL=0.4]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]
CARBON DISULFIDE	0.37 U [MDL=0.37]	0.41 U [MDL=0.41]	0.5 U [MDL=0.5]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	1.4 J [MDL=0.38]	0.4 U [MDL=0.4]
CARBON TETRACHLORIDE	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.42 U [MDL=0.42]	0.28 U [MDL=0.28]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]
CHLOROBENZENE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]	0.25 U [MDL=0.25]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]
CHLORODIBROMOMETHANE	0.46 U [MDL=0.46]	0.51 U [MDL=0.51]	0.63 U [MDL=0.63]	0.41 U [MDL=0.41]	0.5 U [MDL=0.5]	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]
CHLOROETHANE	0.72 U [MDL=0.72]	0.79 U [MDL=0.79]	0.98 U [MDL=0.98]	0.64 U [MDL=0.64]	0.78 U [MDL=0.78]	0.73 U [MDL=0.73]	0.78 U [MDL=0.78]
CHLOROFORM	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]
CHLOROMETHANE	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.47 U [MDL=0.47]	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]
CIS-1,2-DICHLOROETHENE	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.41 U [MDL=0.41]	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]
CIS-1,3-DICHLOROPROPENE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.53 U [MDL=0.53]	0.58 U [MDL=0.58]	0.72 U [MDL=0.72]	0.47 U [MDL=0.47]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]
DICHLORODIFLUOROMETHANE	0.42 U [MDL=0.42]	0.46 U [MDL=0.46]	0.57 U [MDL=0.57]	0.37 U [MDL=0.37]	0.45 U [MDL=0.45]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]
DIISOPROPYL ETHER	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.7 U [MDL=1.7]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-783	SB-783	SB-783	SB-783	SB-784	SB-784	SB-784
SAMPLE ID	D-SB-783-11	D-SB-783-13	D-SB-783-15	D-SS-783-01	D-SB-784-03	D-SB-784-05	D-SB-784-07
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.25 U [MDL=0.25]	0.16 U [MDL=0.16]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]
ETHYLBENZENE	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.3 U [MDL=0.3]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]
HEXACHLOROBUTADIENE	1 U [MDL=1]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	0.9 U [MDL=0.9]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.13 U [MDL=0.13]	0.15 U [MDL=0.15]	0.18 U [MDL=0.18]	0.12 U [MDL=0.12]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]
M+P-XYLENES	1 U [MDL=1]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	0.9 U [MDL=0.9]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.36 U [MDL=0.36]	0.4 U [MDL=0.4]	0.49 U [MDL=0.49]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]
METHYLENE CHLORIDE	0.56 U [MDL=0.56]	0.62 U [MDL=0.62]	0.77 U [MDL=0.77]	0.5 U [MDL=0.5]	0.6 U [MDL=0.6]	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]
NAPHTHALENE	0.16 U [MDL=0.16]	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]
N-BUTYLBENZENE	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.26 U [MDL=0.26]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]
N-PROPYLBENZENE	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]	0.3 U [MDL=0.3]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]
O-XYLENE	0.29 U [MDL=0.29]	0.32 U [MDL=0.32]	0.4 U [MDL=0.4]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]
SEC-BUTYLBENZENE	0.15 U [MDL=0.15]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.13 U [MDL=0.13]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]
STYRENE	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.11 U [MDL=0.11]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]
TERT-AMYL METHYL ETHER	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.42 U [MDL=0.42]	0.28 U [MDL=0.28]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]
TERT-BUTYLBENZENE	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]
TERTIARY-BUTYL ALCOHOL	6.4 UR [MDL=6.4]	7 UR [MDL=7]	8.7 UR [MDL=8.7]	5.7 UR [MDL=5.7]	6.9 UR [MDL=6.9]	6.5 UR [MDL=6.5]	6.9 UR [MDL=6.9]
TETRACHLOROETHENE	0.44 U [MDL=0.44]	0.48 U [MDL=0.48]	0.59 U [MDL=0.59]	0.39 U [MDL=0.39]	0.47 U [MDL=0.47]	0.44 U [MDL=0.44]	0.47 U [MDL=0.47]
TOLUENE	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
TOTAL XYLENES	0.56 U [MDL=0.56]	0.62 U [MDL=0.62]	0.77 U [MDL=0.77]	0.5 U [MDL=0.5]	0.6 U [MDL=0.6]	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]
TRANS-1,2-DICHLOROETHENE	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.47 U [MDL=0.47]	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]
TRANS-1,3-DICHLOROPROPENE	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.62 U [MDL=0.62]	0.4 U [MDL=0.4]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]
TRICHLOROETHENE	0.35 U [MDL=0.35]	0.39 U [MDL=0.39]	0.48 U [MDL=0.48]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]
TRICHLOROFLUOROMETHANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
VINYL ACETATE	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.29 U [MDL=0.29]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]
VINYL CHLORIDE	0.33 U [MDL=0.33]	0.36 U [MDL=0.36]	0.45 U [MDL=0.45]	0.29 U [MDL=0.29]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	8.9 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
ACENAPHTHENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	15 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
ACENAPHTHYLENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	12 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
ANTHRACENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	29 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
BAP EQUIVALENT-HALFND	3.9 U [MDL=NaN]	4 U [MDL=NaN]	4 U [MDL=NaN]	216.25 [MDL=NaN]	3.9 U [MDL=NaN]	4.1 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-POS	3.9 U [MDL=NaN]	4 U [MDL=NaN]	4 U [MDL=NaN]	216.25 [MDL=NaN]	3.9 U [MDL=NaN]	4.1 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	140 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
BENZO(A)PYRENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	140 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
BENZO(B)FLUORANTHENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	190 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
BENZO(G,H,I)PERYLENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	90 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
BENZO(K)FLUORANTHENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	60 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
CHRYSENE	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	150 [MDL=1.2]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	35 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
FLUORANTHENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	370 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
FLUORENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	16 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
INDENO(1,2,3-CD)PYRENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	75 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
NAPHTHALENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	11 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
PHENANTHRENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	290 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]
PYRENE	3.9 U [MDL=3.9]	4 U [MDL=4]	4 U [MDL=4]	320 [MDL=3.7]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-783	SB-783	SB-783	SB-783	SB-784	SB-784	SB-784
SAMPLE ID	D-SB-783-11	D-SB-783-13	D-SB-783-15	D-SS-783-01	D-SB-784-03	D-SB-784-05	D-SB-784-07
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
TOTAL PAHS	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	1951.9 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	25 U [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	23 U [MDL=23]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]
AROCLOR-1221	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]
AROCLOR-1232	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]	17 U [MDL=17]	17 U [MDL=17]
AROCLOR-1242	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	14 U [MDL=14]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
AROCLOR-1248	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
AROCLOR-1254	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
AROCLOR-1260	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.73 UJ [MDL=0.73]	0.75 UJ [MDL=0.75]	0.75 UJ [MDL=0.75]	3.5 U [MDL=3.5]	0.73 UJ [MDL=0.73]	3.8 UJ [MDL=3.8]	0.74 UJ [MDL=0.74]
4,4'-DDE	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	7.8 J [MDL=2.2]	0.46 U [MDL=0.46]	2.4 U [MDL=2.4]	0.46 U [MDL=0.46]
4,4'-DDT	0.75 U [MDL=0.75]	0.77 U [MDL=0.77]	0.77 U [MDL=0.77]	3.5 U [MDL=3.5]	0.74 U [MDL=0.74]	3.9 U [MDL=3.9]	0.75 U [MDL=0.75]
ALDRIN	1.4 UJ [MDL=1.4]	1.5 UJ [MDL=1.5]	1.5 UJ [MDL=1.5]	6.7 U [MDL=6.7]	1.4 UJ [MDL=1.4]	7.4 U [MDL=7.4]	1.4 UJ [MDL=1.4]
ALPHA-BHC	0.86 UJ [MDL=0.86]	0.89 UJ [MDL=0.89]	0.89 UJ [MDL=0.89]	4.1 U [MDL=4.1]	0.86 UJ [MDL=0.86]	4.5 U [MDL=4.5]	0.87 UJ [MDL=0.87]
ALPHA-CHLORDANE	1.1 UJ [MDL=1.1]	1.1 UJ [MDL=1.1]	1.1 UJ [MDL=1.1]	5.2 U [MDL=5.2]	1.1 UJ [MDL=1.1]	5.8 U [MDL=5.8]	1.1 UJ [MDL=1.1]
BETA-BHC	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	9.1 J [MDL=6.1]	1.3 UJ [MDL=1.3]	6.8 U [MDL=6.8]	1.3 UJ [MDL=1.3]
DELTA-BHC	1.4 UJ [MDL=1.4]	1.5 UJ [MDL=1.5]	1.5 UJ [MDL=1.5]	6.7 U [MDL=6.7]	1.4 UJ [MDL=1.4]	7.4 U [MDL=7.4]	1.4 UJ [MDL=1.4]
DIELDRIN	0.56 UJ [MDL=0.56]	0.57 UJ [MDL=0.57]	0.57 UJ [MDL=0.57]	2.6 U [MDL=2.6]	0.55 UJ [MDL=0.55]	2.9 U [MDL=2.9]	0.56 UJ [MDL=0.56]
ENDOSULFAN I	0.62 UJ [MDL=0.62]	0.63 UJ [MDL=0.63]	0.63 UJ [MDL=0.63]	2.9 U [MDL=2.9]	0.61 UJ [MDL=0.61]	3.2 U [MDL=3.2]	0.62 UJ [MDL=0.62]
ENDOSULFAN II	0.97 UJ [MDL=0.97]	1 UJ [MDL=1]	1 UJ [MDL=1]	4.6 U [MDL=4.6]	0.96 UJ [MDL=0.96]	5.1 U [MDL=5.1]	0.98 UJ [MDL=0.98]
ENDOSULFAN SULFATE	1 UJ [MDL=1]	1.1 UJ [MDL=1.1]	1.1 UJ [MDL=1.1]	4.8 U [MDL=4.8]	1 UJ [MDL=1]	5.4 U [MDL=5.4]	1 UJ [MDL=1]
ENDRIN	0.59 UJ [MDL=0.59]	0.61 UJ [MDL=0.61]	0.61 UJ [MDL=0.61]	2.8 U [MDL=2.8]	0.59 UJ [MDL=0.59]	3.1 U [MDL=3.1]	0.59 UJ [MDL=0.59]
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	5.6 U [MDL=5.6]	1.2 U [MDL=1.2]	6.2 U [MDL=6.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.75 U [MDL=0.75]	0.77 U [MDL=0.77]	0.77 U [MDL=0.77]	3.5 U [MDL=3.5]	0.74 U [MDL=0.74]	3.9 U [MDL=3.9]	0.75 U [MDL=0.75]
GAMMA-BHC (LINDANE)	0.88 UJ [MDL=0.88]	0.9 UJ [MDL=0.9]	0.9 UJ [MDL=0.9]	4.1 U [MDL=4.1]	0.87 UJ [MDL=0.87]	4.6 U [MDL=4.6]	0.88 UJ [MDL=0.88]
GAMMA-CHLORDANE	0.5 UJ [MDL=0.5]	0.51 UJ [MDL=0.51]	0.51 UJ [MDL=0.51]	2.3 U [MDL=2.3]	0.49 UJ [MDL=0.49]	2.6 U [MDL=2.6]	0.5 UJ [MDL=0.5]
HEPTACHLOR	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	6.1 U [MDL=6.1]	1.3 UJ [MDL=1.3]	6.8 U [MDL=6.8]	1.3 UJ [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-783	SB-783	SB-783	SB-783	SB-784	SB-784	SB-784
SAMPLE ID	D-SB-783-11	D-SB-783-13	D-SB-783-15	D-SS-783-01	D-SB-784-03	D-SB-784-05	D-SB-784-07
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010
HEPTACHLOR EPOXIDE	0.95 UJ [MDL=0.95]	0.97 UJ [MDL=0.97]	0.97 UJ [MDL=0.97]	4.5 U [MDL=4.5]	0.94 UJ [MDL=0.94]	4.9 U [MDL=4.9]	0.95 UJ [MDL=0.95]
METHOXYCHLOR	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	8.4 U [MDL=8.4]	1.8 U [MDL=1.8]	9.3 U [MDL=9.3]	1.8 U [MDL=1.8]
TOXAPHENE	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	110 U [MDL=110]	22 U [MDL=22]	120 U [MDL=120]	23 U [MDL=23]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	4400 J [MDL=3.3]	3400 U [MDL=3.4]	3400 U [MDL=3.4]	18000 B [MDL=3.1]	3400 J [MDL=3.3]	37000 [MDL=3.5]	6700 J [MDL=3.3]
GASOLINE RANGE ORGANICS	54 U [MDL=54]	56 U [MDL=56]	56 U [MDL=56]	51 U [MDL=51]	54 U [MDL=54]	57 U [MDL=57]	55 U [MDL=55]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-784	SB-784	SB-784	SB-784	SB-784	SB-785	SB-785
SAMPLE ID	D-SB-784-09	D-SB-784-11	D-SB-784-13	D-SB-784-15	D-SS-784-01	D-SB-785-03	D-SB-785-05
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/3/2010	9/3/2010
METALS (MG/KG)							
ANTIMONY	0.027 UJ [MDL=0.027]	0.12 B [MDL=0.028]	0.18 B [MDL=0.028]	0.39 J [MDL=0.03]	0.076 B [MDL=0.027]	0.21 J [MDL=0.029]	0.32 J [MDL=0.029]
ARSENIC	2.6 J [MDL=0.071]	1.3 J [MDL=0.073]	2.5 J [MDL=0.072]	7.2 J [MDL=0.076]	2.8 J [MDL=0.068]	4.6 [MDL=0.074]	5.8 [MDL=0.075]
BARIUM	7.5 [MDL=0.052]	7 [MDL=0.054]	13.1 [MDL=0.054]	20.6 [MDL=0.057]	17 [MDL=0.051]	24.8 J [MDL=0.055]	24.8 J [MDL=0.056]
BERYLLIUM	0.77 [MDL=0.054]	1.8 [MDL=0.055]	2.7 [MDL=0.055]	5 [MDL=0.058]	0.19 [MDL=0.052]	2.2 [MDL=0.056]	2.7 [MDL=0.057]
CADMIUM	0.0089 UL [MDL=0.0089]	0.012 B [MDL=0.0092]	0.014 B [MDL=0.0091]	0.023 B [MDL=0.0096]	0.046 B [MDL=0.0086]	0.037 J [MDL=0.0093]	0.26 L [MDL=0.0094]
CHROMIUM	6.8 J [MDL=0.046]	14.4 J [MDL=0.047]	25.7 J [MDL=0.047]	32.5 J [MDL=0.049]	8.5 J [MDL=0.044]	17 [MDL=0.048]	22.4 [MDL=0.048]
COBALT	3.1 J [MDL=0.0043]	7.2 J [MDL=0.0045]	9.2 J [MDL=0.0044]	14.3 J [MDL=0.0047]	6.4 J [MDL=0.0042]	9.8 [MDL=0.0045]	20 [MDL=0.0046]
COPPER	9.7 J [MDL=0.049]	39 J [MDL=0.051]	16.6 J [MDL=0.05]	37 J [MDL=0.053]	6.7 J [MDL=0.047]	25.8 J [MDL=0.051]	31.5 J [MDL=0.052]
IRON	2570 J [MDL=1.1]	23200 J [MDL=1.2]	31400 J [MDL=1.2]	60600 J [MDL=1.2]	5100 J [MDL=1.1]	20600 J [MDL=1.2]	29600 J [MDL=1.2]
LEAD	4.4 [MDL=0.015]	4.4 [MDL=0.015]	4.4 [MDL=0.015]	6.3 [MDL=0.016]	16.4 [MDL=0.014]	13.8 J [MDL=0.016]	21.7 J [MDL=0.016]
MANGANESE	14.9 [MDL=0.054]	52.5 [MDL=0.055]	55.4 [MDL=0.055]	142 [MDL=0.058]	24.9 [MDL=0.052]	94.3 J [MDL=0.056]	95.3 J [MDL=0.057]
MERCURY	0.017 U [MDL=0.017]	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.018 U [MDL=0.018]	0.05 J [MDL=0.017]	0.3 K [MDL=0.018]	0.4 K [MDL=0.018]
MOLYBDENUM	0.072 U [MDL=0.072]	0.15 J [MDL=0.074]	0.44 [MDL=0.073]	0.82 [MDL=0.078]	0.33 [MDL=0.07]	0.54 [MDL=0.075]	0.56 [MDL=0.076]
NICKEL	4.4 J [MDL=0.024]	18.1 J [MDL=0.025]	25.4 J [MDL=0.024]	37.6 J [MDL=0.026]	5.6 J [MDL=0.023]	14.6 J [MDL=0.025]	41 J [MDL=0.025]
SELENIUM	3.3 [MDL=0.1]	1 [MDL=0.11]	0.89 [MDL=0.1]	1.4 [MDL=0.11]	0.51 J [MDL=0.099]	2.6 L [MDL=0.11]	4 L [MDL=0.11]
SILVER	0.018 UL [MDL=0.018]	0.019 UL [MDL=0.019]	0.019 UL [MDL=0.019]	0.026 J [MDL=0.02]	0.023 J [MDL=0.018]	0.2 K [MDL=0.019]	0.33 K [MDL=0.019]
THALLIUM	0.1 B [MDL=0.015]	0.07 B [MDL=0.015]	0.074 B [MDL=0.015]	0.11 B [MDL=0.016]	0.07 B [MDL=0.014]	0.064 J [MDL=0.016]	0.063 J [MDL=0.016]
VANADIUM	9.7 J [MDL=0.047]	14.9 J [MDL=0.048]	42.2 J [MDL=0.048]	50.4 J [MDL=0.051]	15.1 J [MDL=0.045]	25.7 [MDL=0.049]	34.4 [MDL=0.049]
ZINC	10.8 J [MDL=0.23]	83.2 J [MDL=0.24]	45.7 J [MDL=0.23]	81.3 J [MDL=0.25]	15.5 J [MDL=0.22]	28.6 J [MDL=0.24]	141 J [MDL=0.24]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.31 U [MDL=0.31]	0.35 J [MDL=0.32]	0.63 J [MDL=0.31]	0.33 U [MDL=0.33]	1.3 [MDL=0.3]	0.91 J [MDL=0.32]	0.33 U [MDL=0.33]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
1,4-DIOXANE	25 U [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	27 U [MDL=27]	24 U [MDL=24]	26 U [MDL=26]	27 U [MDL=27]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	29 U [MDL=29]	29 U [MDL=29]	29 U [MDL=29]	31 U [MDL=31]	28 U [MDL=28]	30 U [MDL=30]	30 U [MDL=30]
2,4,6-TRICHLOROPHENOL	91 U [MDL=91]	94 U [MDL=94]	93 U [MDL=93]	99 U [MDL=99]	88 U [MDL=88]	96 U [MDL=96]	97 U [MDL=97]
2,4-DICHLOROPHENOL	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	25 U [MDL=25]	22 U [MDL=22]	24 U [MDL=24]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	25 U [MDL=25]	22 U [MDL=22]	24 U [MDL=24]	24 U [MDL=24]
2,4-DINITROPHENOL	91 U [MDL=91]	94 U [MDL=94]	93 U [MDL=93]	99 U [MDL=99]	88 U [MDL=88]	96 U [MDL=96]	97 U [MDL=97]
2,4-DINITROTOLUENE	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
2,6-DINITROTOLUENE	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	23 U [MDL=23]	25 U [MDL=25]	25 U [MDL=25]
2-CHLORONAPHTHALENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	3.9 U [MDL=3.9]	4 U [MDL=4]
2-CHLOROPHENOL	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	91 U [MDL=91]	94 U [MDL=94]	93 U [MDL=93]	99 U [MDL=99]	88 U [MDL=88]	96 U [MDL=96]	97 U [MDL=97]
2-NITROANILINE	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	22 U [MDL=22]	20 U [MDL=20]	22 U [MDL=22]	22 U [MDL=22]
3-NITROANILINE	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	91 U [MDL=91]	94 U [MDL=94]	93 U [MDL=93]	99 U [MDL=99]	88 U [MDL=88]	96 U [MDL=96]	97 U [MDL=97]
4-BROMOPHENYL PHENYL ETHER	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	14 U [MDL=14]	16 U [MDL=16]	16 U [MDL=16]
4-CHLORO-3-METHYLPHENOL	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	23 U [MDL=23]	25 U [MDL=25]	25 U [MDL=25]
4-CHLOROANILINE	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]
4-CHLOROPHENYL PHENYL ETHER	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	14 U [MDL=14]	16 U [MDL=16]	16 U [MDL=16]
4-METHYLPHENOL	91 U [MDL=91]	94 U [MDL=94]	93 U [MDL=93]	99 U [MDL=99]	88 U [MDL=88]	96 U [MDL=96]	97 U [MDL=97]
4-NITROANILINE	30 U [MDL=30]	31 U [MDL=31]	30 U [MDL=30]	32 U [MDL=32]	29 U [MDL=29]	31 U [MDL=31]	31 U [MDL=31]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-784 D-SB-784-09 9/2/2010	SB-784 D-SB-784-11 9/2/2010	SB-784 D-SB-784-13 9/2/2010	SB-784 D-SB-784-15 9/2/2010	SB-784 D-SS-784-01 9/2/2010	SB-785 D-SB-785-03 9/3/2010	SB-785 D-SB-785-05 9/3/2010
4-NITROPHENOL	91 U [MDL=91]	94 U [MDL=94]	93 U [MDL=93]	99 U [MDL=99]	88 U [MDL=88]	96 U [MDL=96]	97 U [MDL=97]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	15 U [MDL=15]	13 U [MDL=13]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	25 U [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	27 U [MDL=27]	24 U [MDL=24]	26 U [MDL=26]	27 U [MDL=27]
BIS(2-CHLOROETHYL)ETHER	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.5 U [MDL=2.5]	2.2 U [MDL=2.2]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	110 [MDL=22]	22 U [MDL=22]	78 [MDL=22]	23 U [MDL=23]	21 U [MDL=21]	23 U [MDL=23]	23 U [MDL=23]
BUTYL BENZYL PHTHALATE	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	22 J [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	42 U [MDL=42]	44 U [MDL=44]	43 U [MDL=43]	46 U [MDL=46]	41 U [MDL=41]	44 U [MDL=44]	45 U [MDL=45]
CARBAZOLE	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	3.9 U [MDL=3.9]	4 U [MDL=4]
DIETHYL PHTHALATE	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]
DIMETHYL PHTHALATE	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]
DI-N-BUTYL PHTHALATE	17 U [MDL=17]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.6 U [MDL=2.6]	2.3 U [MDL=2.3]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
HEXACHLOROCYCLOPENTADIENE	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
HEXACHLOROETHANE	10 U [MDL=10]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	9.9 U [MDL=9.9]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	14 U [MDL=14]	16 U [MDL=16]	16 U [MDL=16]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]	2.4 U [MDL=2.4]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]
N-NITROSODIMETHYLAMINE	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
N-NITROSODIPHENYLAMINE	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	23 U [MDL=23]	25 U [MDL=25]	25 U [MDL=25]
PENTACHLOROPHENOL	91 U [MDL=91]	94 U [MDL=94]	93 U [MDL=93]	99 U [MDL=99]	88 U [MDL=88]	96 U [MDL=96]	97 U [MDL=97]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	30 U [MDL=30]	32 U [MDL=32]	33 U [MDL=33]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]	0.53 U [MDL=0.53]	0.57 U [MDL=0.57]	0.57 U [MDL=0.57]	0.45 U [MDL=0.45]	0.57 U [MDL=0.57]
1,1,1-TRICHLOROETHANE	0.48 U [MDL=0.48]	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.51 U [MDL=0.51]	0.51 U [MDL=0.51]	0.41 U [MDL=0.41]	0.51 U [MDL=0.51]
1,1,2,2-TETRACHLOROETHANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	0.95 U [MDL=0.95]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-784	SB-784	SB-784	SB-784	SB-784	SB-785	SB-785
SAMPLE ID	D-SB-784-09	D-SB-784-11	D-SB-784-13	D-SB-784-15	D-SS-784-01	D-SB-785-03	D-SB-785-05
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/3/2010	9/3/2010
1,1-DICHLOROETHANE	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.26 U [MDL=0.26]	0.33 U [MDL=0.33]
1,1-DICHLOROETHENE	0.44 U [MDL=0.44]	0.47 U [MDL=0.47]	0.44 U [MDL=0.44]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]	0.38 U [MDL=0.38]	0.48 U [MDL=0.48]
1,1-DICHLOROPROPENE	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.22 U [MDL=0.22]	0.28 U [MDL=0.28]
1,2,3-TRICHLOROBENZENE	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.35 U [MDL=0.35]	0.28 U [MDL=0.28]	0.35 U [MDL=0.35]
1,2,3-TRICHLOROPROPANE	0.77 U [MDL=0.77]	0.82 U [MDL=0.82]	0.77 U [MDL=0.77]	0.82 U [MDL=0.82]	0.83 U [MDL=0.83]	0.66 U [MDL=0.66]	0.83 U [MDL=0.83]
1,2,3-TRIMETHYLBENZENE	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]	0.12 U [MDL=0.12]	0.16 U [MDL=0.16]
1,2,4-TRICHLOROBENZENE	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.2 U [MDL=0.2]	0.25 U [MDL=0.25]
1,2,4-TRIMETHYLBENZENE	0.56 U [MDL=0.56]	0.59 U [MDL=0.59]	0.55 U [MDL=0.55]	0.59 U [MDL=0.59]	0.6 U [MDL=0.6]	0.47 U [MDL=0.47]	0.6 U [MDL=0.6]
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	0.95 U [MDL=0.95]	1.2 U [MDL=1.2]
1,2-DIBROMOETHANE	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]
1,2-DICHLOROBENZENE	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.26 U [MDL=0.26]	0.33 U [MDL=0.33]
1,2-DICHLOROETHANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]
1,2-DICHLOROPROPANE	0.59 U [MDL=0.59]	0.63 U [MDL=0.63]	0.59 U [MDL=0.59]	0.63 U [MDL=0.63]	0.63 U [MDL=0.63]	0.5 U [MDL=0.5]	0.63 U [MDL=0.63]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]
1,3-DICHLOROPROPANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]
1,4-DICHLOROBENZENE	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]	0.61 U [MDL=0.61]	0.48 U [MDL=0.48]	0.61 U [MDL=0.61]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.8 U [MDL=0.8]	0.85 U [MDL=0.85]	0.8 U [MDL=0.8]	0.86 U [MDL=0.86]	0.86 U [MDL=0.86]	0.69 U [MDL=0.69]	0.86 U [MDL=0.86]
2-BUTANONE	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	4.3 B [MDL=1]	1.4 J [MDL=1.3]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1 U [MDL=1]	1.3 U [MDL=1.3]
2-CHLOROTOLUENE	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	0.37 U [MDL=0.37]
2-HEXANONE	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.46 U [MDL=0.46]	0.58 U [MDL=0.58]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]
4-ISOPROPYLTOLUENE	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.15 U [MDL=0.15]	0.19 U [MDL=0.19]
4-METHYL-2-PENTANONE	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.5 U [MDL=0.5]	0.39 U [MDL=0.39]	0.5 U [MDL=0.5]
ACETONE	5.4 U [MDL=5.4]	5.7 U [MDL=5.7]	5.4 U [MDL=5.4]	5.7 U [MDL=5.7]	5.8 U [MDL=5.8]	320 B [MDL=150]	11 B [MDL=5.8]
BENZENE	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.24 U [MDL=0.24]	0.3 U [MDL=0.3]
BROMOCHLOROMETHANE	0.61 U [MDL=0.61]	0.64 U [MDL=0.64]	0.6 U [MDL=0.6]	0.65 U [MDL=0.65]	0.65 U [MDL=0.65]	0.52 U [MDL=0.52]	0.65 U [MDL=0.65]
BROMODICHLOROMETHANE	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]	0.2 U [MDL=0.2]	0.26 U [MDL=0.26]
BROMOFORM	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.24 U [MDL=0.24]	0.3 U [MDL=0.3]
BROMOMETHANE	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.5 U [MDL=0.5]	0.39 U [MDL=0.39]	0.5 U [MDL=0.5]
CARBON DISULFIDE	0.38 U [MDL=0.38]	0.4 U [MDL=0.4]	0.37 U [MDL=0.37]	0.4 U [MDL=0.4]	0.4 U [MDL=0.4]	0.81 B [MDL=0.32]	0.9 B [MDL=0.4]
CARBON TETRACHLORIDE	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]	0.27 U [MDL=0.27]	0.34 U [MDL=0.34]
CHLOROBENZENE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.24 U [MDL=0.24]	0.3 U [MDL=0.3]
CHLORODIBROMOMETHANE	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.5 U [MDL=0.5]	0.4 U [MDL=0.4]	0.5 U [MDL=0.5]
CHLOROETHANE	0.74 U [MDL=0.74]	0.78 U [MDL=0.78]	0.73 U [MDL=0.73]	0.78 U [MDL=0.78]	0.79 U [MDL=0.79]	0.63 U [MDL=0.63]	0.79 U [MDL=0.79]
CHLOROFORM	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]
CHLOROMETHANE	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]
CIS-1,2-DICHLOROETHENE	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.26 U [MDL=0.26]	0.33 U [MDL=0.33]
CIS-1,3-DICHLOROPROPENE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.46 U [MDL=0.46]	0.58 U [MDL=0.58]
DICHLORODIFLUOROMETHANE	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]
DIISOPROPYL ETHER	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-784 D-SB-784-09 9/2/2010	SB-784 D-SB-784-11 9/2/2010	SB-784 D-SB-784-13 9/2/2010	SB-784 D-SB-784-15 9/2/2010	SB-784 D-SS-784-01 9/2/2010	SB-785 D-SB-785-03 9/3/2010	SB-785 D-SB-785-05 9/3/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.16 U [MDL=0.16]	0.2 U [MDL=0.2]
ETHYLBENZENE	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]	0.24 U [MDL=0.24]
HEXACHLOROBUTADIENE	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.88 U [MDL=0.88]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.12 U [MDL=0.12]	0.15 U [MDL=0.15]
M+P-XYLENES	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.88 U [MDL=0.88]	1.1 U [MDL=1.1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.39 U [MDL=0.39]	0.31 UJ [MDL=0.31]	0.39 U [MDL=0.39]
METHYLENE CHLORIDE	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]	0.61 U [MDL=0.61]	1 B [MDL=0.49]	1.3 B [MDL=0.61]
NAPHTHALENE	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]	0.75 B [MDL=0.14]	0.95 B [MDL=0.17]
N-BUTYLBENZENE	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]
N-PROPYLBENZENE	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	0.37 U [MDL=0.37]
O-XYLENE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]
SEC-BUTYLBENZENE	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.13 U [MDL=0.13]	0.17 U [MDL=0.17]
STYRENE	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.11 U [MDL=0.11]	0.14 U [MDL=0.14]
TERT-AMYL METHYL ETHER	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]	0.27 UJ [MDL=0.27]	0.34 U [MDL=0.34]
TERT-BUTYLBENZENE	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]
TERTIARY-BUTYL ALCOHOL	6.5 UR [MDL=6.5]	6.9 UR [MDL=6.9]	6.5 UR [MDL=6.5]	6.9 UR [MDL=6.9]	7 UR [MDL=7]	44 B [MDL=5.5]	49 B [MDL=7]
TETRACHLOROETHENE	0.44 U [MDL=0.44]	0.47 U [MDL=0.47]	0.44 U [MDL=0.44]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]	0.38 U [MDL=0.38]	0.48 U [MDL=0.48]
TOLUENE	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.2 U [MDL=0.2]	0.25 U [MDL=0.25]
TOTAL XYLENES	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]	0.61 U [MDL=0.61]	0.49 U [MDL=0.49]	0.61 U [MDL=0.61]
TRANS-1,2-DICHLOROETHENE	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]
TRANS-1,3-DICHLOROPROPENE	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.5 U [MDL=0.5]	0.39 U [MDL=0.39]	0.5 U [MDL=0.5]
TRICHLOROETHENE	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]
TRICHLOROFLUOROMETHANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]
VINYL ACETATE	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.18 U [MDL=0.18]	0.23 U [MDL=0.23]
VINYL CHLORIDE	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]	0.28 U [MDL=0.28]	0.36 U [MDL=0.36]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	3.9 U [MDL=3.9]	4 U [MDL=4]
ACENAPHTHENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	3.9 U [MDL=3.9]	4 U [MDL=4]
ACENAPHTHYLENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	3.9 U [MDL=3.9]	4 U [MDL=4]
ANTHRACENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	8.5 [MDL=3.9]	4 U [MDL=4]
BAP EQUIVALENT-HALFND	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	4.1 U [MDL=NaN]	40.362 [MDL=NaN]	38.6365 [MDL=NaN]	4 U [MDL=NaN]
BAP EQUIVALENT-POS	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	4.1 U [MDL=NaN]	38.562 [MDL=NaN]	38.617 [MDL=NaN]	4 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	27 [MDL=3.6]	21 [MDL=3.9]	4 U [MDL=4]
BENZO(A)PYRENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	30 [MDL=3.6]	17 [MDL=3.9]	4 U [MDL=4]
BENZO(B)FLUORANTHENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	40 [MDL=3.6]	25 [MDL=3.9]	4 U [MDL=4]
BENZO(G,H,I)PERYLENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	24 [MDL=3.6]	12 [MDL=3.9]	4 U [MDL=4]
BENZO(K)FLUORANTHENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	13 [MDL=3.6]	3.9 U [MDL=3.9]	4 U [MDL=4]
CHRYSENE	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	32 [MDL=1.2]	17 [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	16 [MDL=3.9]	4 U [MDL=4]
FLUORANTHENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	60 [MDL=3.6]	35 [MDL=3.9]	4 U [MDL=4]
FLUORENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	3.9 U [MDL=3.9]	4 U [MDL=4]
INDENO(1,2,3-CD)PYRENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	17 [MDL=3.6]	10 [MDL=3.9]	4 U [MDL=4]
NAPHTHALENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.6 U [MDL=3.6]	3.9 U [MDL=3.9]	4 U [MDL=4]
PHENANTHRENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	20 [MDL=3.6]	36 [MDL=3.9]	4 U [MDL=4]
PYRENE	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	65 [MDL=3.6]	28 [MDL=3.9]	4 U [MDL=4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-784 D-SB-784-09 9/2/2010	SB-784 D-SB-784-11 9/2/2010	SB-784 D-SB-784-13 9/2/2010	SB-784 D-SB-784-15 9/2/2010	SB-784 D-SS-784-01 9/2/2010	SB-785 D-SB-785-03 9/3/2010	SB-785 D-SB-785-05 9/3/2010
TOTAL PAHS	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	328 [MDL=NaN]	225.5 [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	23 U [MDL=23]	25 U [MDL=25]	25 U [MDL=25]
AROCLOR-1221	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1232	16 U [MDL=16]	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]	17 U [MDL=17]	17 U [MDL=17]
AROCLOR-1242	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	14 U [MDL=14]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1248	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]
AROCLOR-1254	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]
AROCLOR-1260	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	21 U [MDL=21]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.71 U [MDL=0.71]	0.73 U [MDL=0.73]	0.72 U [MDL=0.72]	0.76 U [MDL=0.76]	0.68 UJ [MDL=0.68]	37 U [MDL=37]	0.75 U [MDL=0.75]
4,4'-DDE	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	1.5 J [MDL=0.43]	23 UJ [MDL=23]	0.47 UJ [MDL=0.47]
4,4'-DDT	0.72 U [MDL=0.72]	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.78 U [MDL=0.78]	0.7 U [MDL=0.7]	38 U [MDL=38]	0.76 U [MDL=0.76]
ALDRIN	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.3 UJ [MDL=1.3]	72 U [MDL=72]	1.4 U [MDL=1.4]
ALPHA-BHC	0.83 U [MDL=0.83]	0.86 U [MDL=0.86]	0.85 U [MDL=0.85]	0.9 U [MDL=0.9]	0.81 UJ [MDL=0.81]	44 UJ [MDL=44]	0.88 UJ [MDL=0.88]
ALPHA-CHLORDANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1 UJ [MDL=1]	56 UJ [MDL=56]	1.1 UJ [MDL=1.1]
BETA-BHC	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.2 UJ [MDL=1.2]	66 UJ [MDL=66]	1.3 UJ [MDL=1.3]
DELTA-BHC	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.3 UJ [MDL=1.3]	72 UJ [MDL=72]	1.4 UJ [MDL=1.4]
DIELDRIN	0.54 U [MDL=0.54]	0.55 U [MDL=0.55]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.52 UJ [MDL=0.52]	28 UJ [MDL=28]	0.57 UJ [MDL=0.57]
ENDOSULFAN I	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]	0.61 U [MDL=0.61]	0.64 U [MDL=0.64]	0.57 UJ [MDL=0.57]	31 UJ [MDL=31]	0.63 UJ [MDL=0.63]
ENDOSULFAN II	0.93 U [MDL=0.93]	0.97 U [MDL=0.97]	0.96 U [MDL=0.96]	1 U [MDL=1]	0.91 UJ [MDL=0.91]	49 U [MDL=49]	0.99 U [MDL=0.99]
ENDOSULFAN SULFATE	0.99 U [MDL=0.99]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]	0.96 UJ [MDL=0.96]	52 U [MDL=52]	1 U [MDL=1]
ENDRIN	0.57 U [MDL=0.57]	0.59 U [MDL=0.59]	0.58 U [MDL=0.58]	0.62 U [MDL=0.62]	0.55 UJ [MDL=0.55]	30 UJ [MDL=30]	0.6 UJ [MDL=0.6]
ENDRIN ALDEHYDE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	60 U [MDL=60]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.72 U [MDL=0.72]	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.78 U [MDL=0.78]	0.7 U [MDL=0.7]	38 U [MDL=38]	0.76 U [MDL=0.76]
GAMMA-BHC (LINDANE)	0.84 U [MDL=0.84]	0.87 U [MDL=0.87]	0.86 U [MDL=0.86]	0.91 U [MDL=0.91]	0.82 UJ [MDL=0.82]	44 UJ [MDL=44]	0.89 UJ [MDL=0.89]
GAMMA-CHLORDANE	0.48 U [MDL=0.48]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]	0.52 U [MDL=0.52]	0.46 UJ [MDL=0.46]	25 UJ [MDL=25]	0.51 UJ [MDL=0.51]
HEPTACHLOR	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.2 UJ [MDL=1.2]	66 UJ [MDL=66]	1.3 UJ [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-784	SB-784	SB-784	SB-784	SB-784	SB-785	SB-785
SAMPLE ID	D-SB-784-09	D-SB-784-11	D-SB-784-13	D-SB-784-15	D-SS-784-01	D-SB-785-03	D-SB-785-05
SAMPLE DATE	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/2/2010	9/3/2010	9/3/2010
HEPTACHLOR EPOXIDE	0.91 U [MDL=0.91]	0.94 U [MDL=0.94]	0.93 U [MDL=0.93]	0.99 U [MDL=0.99]	0.88 UJ [MDL=0.88]	48 UJ [MDL=48]	0.97 UJ [MDL=0.97]
METHOXYCHLOR	1.7 U [MDL=1.7]	1.8 U [MDL=1.8]	1.7 U [MDL=1.7]	1.8 U [MDL=1.8]	1.7 U [MDL=1.7]	90 U [MDL=90]	1.8 U [MDL=1.8]
TOXAPHENE	22 U [MDL=22]	22 U [MDL=22]	22 U [MDL=22]	23 U [MDL=23]	21 U [MDL=21]	1100 U [MDL=1100]	23 U [MDL=23]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3200 U [MDL=3.2]	3300 U [MDL=3.3]	3300 U [MDL=3.3]	3500 U [MDL=3.5]	8600 J [MDL=3.1]	73000 [MDL=3.4]	4700 J [MDL=3.4]
GASOLINE RANGE ORGANICS	52 U [MDL=52]	54 U [MDL=54]	54 U [MDL=54]	57 U [MDL=57]	51 U [MDL=51]	55 U [MDL=55]	56 U [MDL=56]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-785	SB-785	SB-785	SB-785	SB-785	SB-785	SB-786
SAMPLE ID	D-SB-785-07	D-SS-785-01	D-SB-785-09	D-SB-785-11	D-SB-785-13	D-SB-785-15	D-SB-786-03
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/3/2010
METALS (MG/KG)							
ANTIMONY	0.065 J [MDL=0.03]	0.063 J [MDL=0.026]	0.13 J [MDL=0.029]	0.28 J [MDL=0.028]	0.12 J [MDL=0.029]	0.28 J [MDL=0.028]	0.16 J [MDL=0.028]
ARSENIC	3.2 [MDL=0.078]	1.6 [MDL=0.067]	3.6 L [MDL=0.076]	3.2 L [MDL=0.073]	3.1 L [MDL=0.075]	3.8 L [MDL=0.072]	3.9 [MDL=0.073]
BARIUM	6.1 J [MDL=0.058]	4.1 J [MDL=0.05]	10.7 J [MDL=0.056]	12.7 J [MDL=0.054]	15.1 J [MDL=0.056]	10.9 J [MDL=0.054]	20.2 J [MDL=0.054]
BERYLLIUM	1.2 [MDL=0.059]	0.065 J [MDL=0.051]	4.8 J [MDL=0.057]	6.4 J [MDL=0.056]	4.6 J [MDL=0.057]	4.5 J [MDL=0.055]	2.4 [MDL=0.055]
CADMIUM	0.022 J [MDL=0.0098]	0.0084 UL [MDL=0.0084]	0.01 B [MDL=0.0095]	0.0092 U [MDL=0.0092]	0.12 K [MDL=0.0095]	0.013 B [MDL=0.0091]	0.091 J [MDL=0.0092]
CHROMIUM	15 [MDL=0.05]	14.2 [MDL=0.043]	14.9 J [MDL=0.049]	28.8 J [MDL=0.047]	23.2 J [MDL=0.049]	28.7 J [MDL=0.047]	18.5 [MDL=0.047]
COBALT	4.7 [MDL=0.0048]	0.65 [MDL=0.0041]	15.6 [MDL=0.0046]	8 [MDL=0.0045]	13.7 [MDL=0.0046]	8.6 [MDL=0.0044]	13.2 [MDL=0.0045]
COPPER	8.9 J [MDL=0.054]	5.1 J [MDL=0.047]	89.7 [MDL=0.052]	23.5 [MDL=0.051]	56.2 [MDL=0.052]	14.6 [MDL=0.05]	20.3 J [MDL=0.051]
IRON	15500 J [MDL=1.3]	6620 J [MDL=1.1]	36600 J [MDL=1.2]	38700 J [MDL=1.2]	34200 J [MDL=1.2]	37900 J [MDL=1.2]	19000 J [MDL=1.2]
LEAD	2.9 J [MDL=0.016]	1.1 J [MDL=0.014]	6.7 [MDL=0.016]	6.7 [MDL=0.015]	14 [MDL=0.016]	4.8 [MDL=0.015]	12.2 J [MDL=0.015]
MANGANESE	38 J [MDL=0.059]	9.4 J [MDL=0.051]	63.2 [MDL=0.057]	66.4 [MDL=0.056]	96 [MDL=0.057]	54.1 [MDL=0.055]	50.1 J [MDL=0.055]
MERCURY	0.019 U [MDL=0.019]	0.016 U [MDL=0.016]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.059 J [MDL=0.018]	0.018 U [MDL=0.018]	0.16 K [MDL=0.018]
MOLYBDENUM	0.81 [MDL=0.079]	0.4 [MDL=0.068]	0.17 J [MDL=0.077]	0.32 [MDL=0.075]	0.6 [MDL=0.077]	0.55 [MDL=0.074]	0.33 [MDL=0.074]
NICKEL	8.3 J [MDL=0.026]	0.84 J [MDL=0.023]	35.4 J [MDL=0.026]	22.4 J [MDL=0.025]	32.8 J [MDL=0.026]	27.7 J [MDL=0.025]	27.6 J [MDL=0.025]
SELENIUM	0.45 J [MDL=0.11]	0.25 J [MDL=0.097]	1.2 J [MDL=0.11]	1.1 J [MDL=0.11]	1.1 J [MDL=0.11]	1.5 L [MDL=0.11]	2.4 L [MDL=0.11]
SILVER	0.02 U [MDL=0.02]	0.017 U [MDL=0.017]	0.02 UJ [MDL=0.02]	0.019 UJ [MDL=0.019]	0.029 J [MDL=0.019]	0.019 UJ [MDL=0.019]	0.16 K [MDL=0.019]
THALLIUM	0.016 UL [MDL=0.016]	0.014 UL [MDL=0.014]	0.12 [MDL=0.016]	0.12 [MDL=0.015]	0.094 B [MDL=0.016]	0.084 B [MDL=0.015]	0.057 J [MDL=0.015]
VANADIUM	21.8 [MDL=0.051]	18.7 [MDL=0.044]	24.5 [MDL=0.05]	30.7 [MDL=0.049]	34.4 [MDL=0.05]	48.3 [MDL=0.048]	28.4 [MDL=0.048]
ZINC	19.8 J [MDL=0.25]	3.3 J [MDL=0.22]	127 [MDL=0.24]	65.8 [MDL=0.24]	114 [MDL=0.24]	42.5 [MDL=0.23]	58.3 J [MDL=0.23]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.34 U [MDL=0.34]	0.52 J [MDL=0.29]	0.89 J [MDL=0.33]	0.88 J [MDL=0.32]	0.33 U [MDL=0.33]	0.8 J [MDL=0.32]	0.32 U [MDL=0.32]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	34 U [MDL=34]	29 UL [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
1,4-DIOXANE	28 U [MDL=28]	24 UL [MDL=24]	27 U [MDL=27]	26 U [MDL=26]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	10 UL [MDL=10]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	31 U [MDL=31]	27 U [MDL=27]	31 U [MDL=31]	30 U [MDL=30]	30 U [MDL=30]	29 U [MDL=29]	29 U [MDL=29]
2,4,6-TRICHLOROPHENOL	100 U [MDL=100]	87 U [MDL=87]	98 U [MDL=98]	95 U [MDL=95]	97 U [MDL=97]	93 U [MDL=93]	94 U [MDL=94]
2,4-DICHLOROPHENOL	25 U [MDL=25]	22 U [MDL=22]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	23 U [MDL=23]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	25 U [MDL=25]	22 U [MDL=22]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	23 U [MDL=23]	23 U [MDL=23]
2,4-DINITROPHENOL	100 U [MDL=100]	87 U [MDL=87]	98 U [MDL=98]	95 U [MDL=95]	97 U [MDL=97]	93 U [MDL=93]	94 U [MDL=94]
2,4-DINITROTOLUENE	34 U [MDL=34]	29 UL [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
2,6-DINITROTOLUENE	26 U [MDL=26]	23 UL [MDL=23]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
2-CHLORONAPHTHALENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
2-CHLOROPHENOL	34 U [MDL=34]	29 U [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	100 U [MDL=100]	87 U [MDL=87]	98 U [MDL=98]	95 U [MDL=95]	97 U [MDL=97]	93 U [MDL=93]	94 U [MDL=94]
2-NITROANILINE	11 U [MDL=11]	9.8 UL [MDL=9.8]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	34 U [MDL=34]	29 U [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	23 U [MDL=23]	19 UL [MDL=19]	22 U [MDL=22]	21 U [MDL=21]	22 U [MDL=22]	21 U [MDL=21]	21 U [MDL=21]
3-NITROANILINE	20 U [MDL=20]	17 UL [MDL=17]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	100 U [MDL=100]	87 U [MDL=87]	98 U [MDL=98]	95 U [MDL=95]	97 U [MDL=97]	93 U [MDL=93]	94 U [MDL=94]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	14 UL [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	23 U [MDL=23]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
4-CHLOROANILINE	21 U [MDL=21]	18 UL [MDL=18]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	14 UL [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
4-METHYLPHENOL	100 U [MDL=100]	87 U [MDL=87]	98 U [MDL=98]	95 U [MDL=95]	97 U [MDL=97]	93 U [MDL=93]	94 U [MDL=94]
4-NITROANILINE	33 U [MDL=33]	28 UL [MDL=28]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	31 U [MDL=31]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-785 D-SB-785-07 9/3/2010	SB-785 D-SS-785-01 9/3/2010	SB-785 D-SB-785-09 9/8/2010	SB-785 D-SB-785-11 9/8/2010	SB-785 D-SB-785-13 9/8/2010	SB-785 D-SB-785-15 9/8/2010	SB-786 D-SB-786-03 9/3/2010
4-NITROPHENOL	100 U [MDL=100]	87 U [MDL=87]	98 U [MDL=98]	95 U [MDL=95]	97 U [MDL=97]	93 U [MDL=93]	94 U [MDL=94]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	12 U [MDL=12]	10 UL [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	9.8 UL [MDL=9.8]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	15 U [MDL=15]	13 UL [MDL=13]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	28 U [MDL=28]	24 UL [MDL=24]	27 U [MDL=27]	26 U [MDL=26]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]
BIS(2-CHLOROETHYL)ETHER	2.5 U [MDL=2.5]	2.2 UL [MDL=2.2]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	24 U [MDL=24]	21 UL [MDL=21]	23 U [MDL=23]	22 U [MDL=22]	23 U [MDL=23]	22 U [MDL=22]	22 J [MDL=22]
BUTYL BENZYL PHTHALATE	13 U [MDL=13]	11 UL [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	46 U [MDL=46]	40 UL [MDL=40]	45 U [MDL=45]	44 U [MDL=44]	45 U [MDL=45]	43 U [MDL=43]	43 U [MDL=43]
CARBAZOLE	34 U [MDL=34]	29 UL [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	33 J [MDL=32]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	18 J [MDL=3.9]
DIETHYL PHTHALATE	20 U [MDL=20]	17 UL [MDL=17]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
DIMETHYL PHTHALATE	21 U [MDL=21]	18 UL [MDL=18]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	19 U [MDL=19]	16 UL [MDL=16]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	34 U [MDL=34]	29 UL [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.3 UL [MDL=2.3]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	34 U [MDL=34]	29 UL [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
HEXACHLOROCYCLOPENTADIENE	34 U [MDL=34]	29 UL [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
HEXACHLOROETHANE	11 U [MDL=11]	9.7 UL [MDL=9.7]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	14 UL [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.8 U [MDL=2.8]	2.4 UL [MDL=2.4]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	17 UL [MDL=17]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	34 U [MDL=34]	29 UL [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	23 UL [MDL=23]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
PENTACHLOROPHENOL	100 U [MDL=100]	87 U [MDL=87]	98 U [MDL=98]	95 U [MDL=95]	97 U [MDL=97]	93 U [MDL=93]	94 U [MDL=94]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	34 U [MDL=34]	29 U [MDL=29]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.71 UJ [MDL=0.71]	0.71 U [MDL=0.71]	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	0.57 U [MDL=0.57]	0.55 U [MDL=0.55]	6.9 U [MDL=6.9]
1,1,1-TRICHLOROETHANE	0.64 UJ [MDL=0.64]	0.64 U [MDL=0.64]	0.53 U [MDL=0.53]	0.5 U [MDL=0.5]	0.52 U [MDL=0.52]	0.5 U [MDL=0.5]	16 U [MDL=16]
1,1,2,2-TETRACHLOROETHANE	0.39 UJ [MDL=0.39]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	6.8 U [MDL=6.8]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.5 UJ [MDL=1.5]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	30 U [MDL=30]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-785	SB-785	SB-785	SB-785	SB-785	SB-785	SB-786
SAMPLE ID	D-SB-785-07	D-SS-785-01	D-SB-785-09	D-SB-785-11	D-SB-785-13	D-SB-785-15	D-SB-786-03
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/3/2010
1,1-DICHLOROETHANE	0.41 UJ [MDL=0.41]	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	13 U [MDL=13]
1,1-DICHLOROETHENE	0.6 UJ [MDL=0.6]	0.6 U [MDL=0.6]	0.49 U [MDL=0.49]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]	14 U [MDL=14]
1,1-DICHLOROPROPENE	0.35 UJ [MDL=0.35]	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	7.6 U [MDL=7.6]
1,2,3-TRICHLOROBENZENE	0.44 UJ [MDL=0.44]	0.44 U [MDL=0.44]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	7.6 U [MDL=7.6]
1,2,3-TRICHLOROPROPANE	1 UJ [MDL=1]	1 U [MDL=1]	0.85 U [MDL=0.85]	0.81 U [MDL=0.81]	0.83 U [MDL=0.83]	0.8 U [MDL=0.8]	16 U [MDL=16]
1,2,3-TRIMETHYLBENZENE	0.2 UJ [MDL=0.2]	0.2 U [MDL=0.2]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	23 J [MDL=0.13]
1,2,4-TRICHLOROBENZENE	0.31 UJ [MDL=0.31]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	5.6 U [MDL=5.6]
1,2,4-TRIMETHYLBENZENE	0.75 UJ [MDL=0.75]	0.75 U [MDL=0.75]	0.61 U [MDL=0.61]	0.58 U [MDL=0.58]	0.6 U [MDL=0.6]	0.58 U [MDL=0.58]	41 J [MDL=3.8]
1,2-DIBROMO-3-CHLOROPROPANE	1.5 UJ [MDL=1.5]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	38 U [MDL=38]
1,2-DIBROMOETHANE	0.58 UJ [MDL=0.58]	0.57 U [MDL=0.57]	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	7.6 U [MDL=7.6]
1,2-DICHLOROBENZENE	0.41 UJ [MDL=0.41]	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	6.6 U [MDL=6.6]
1,2-DICHLOROETHANE	0.39 UJ [MDL=0.39]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	7.6 U [MDL=7.6]
1,2-DICHLOROPROPANE	0.79 UJ [MDL=0.79]	0.79 U [MDL=0.79]	0.65 U [MDL=0.65]	0.62 U [MDL=0.62]	0.64 U [MDL=0.64]	0.61 U [MDL=0.61]	6.3 U [MDL=6.3]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.4 UJ [MDL=0.4]	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	3.7 U [MDL=3.7]
1,3-DICHLOROPROPANE	0.39 UJ [MDL=0.39]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	17 U [MDL=17]
1,4-DICHLOROBENZENE	0.76 UJ [MDL=0.76]	0.76 U [MDL=0.76]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	6.1 U [MDL=6.1]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	1.1 UJ [MDL=1.1]	1.1 U [MDL=1.1]	0.88 U [MDL=0.88]	0.85 U [MDL=0.85]	0.87 U [MDL=0.87]	0.83 U [MDL=0.83]	18 U [MDL=18]
2-BUTANONE	5 J [MDL=1.6]	1.6 U [MDL=1.6]	1.3 U [MDL=1.3]	1.6 J [MDL=1.3]	1.3 U [MDL=1.3]	3.3 J [MDL=1.2]	120 B [MDL=33]
2-CHLOROETHYL VINYL ETHER	1.6 UJ [MDL=1.6]	1.6 U [MDL=1.6]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	33 U [MDL=33]
2-CHLOROTOLUENE	0.46 UJ [MDL=0.46]	0.46 U [MDL=0.46]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	6.9 U [MDL=6.9]
2-HEXANONE	0.73 UJ [MDL=0.73]	0.72 U [MDL=0.72]	0.59 U [MDL=0.59]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	15 U [MDL=15]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.47 UJ [MDL=0.47]	0.47 U [MDL=0.47]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	7.6 U [MDL=7.6]
4-ISOPROPYLTOLUENE	0.24 UJ [MDL=0.24]	0.24 U [MDL=0.24]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	3.7 U [MDL=3.7]
4-METHYL-2-PENTANONE	0.62 UJ [MDL=0.62]	0.62 U [MDL=0.62]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	37 U [MDL=37]
ACETONE	390 B [MDL=170]	18 B [MDL=7.2]	220 B [MDL=170]	37 B [MDL=5.7]	28 B [MDL=5.8]	200 B [MDL=170]	130 U [MDL=130]
BENZENE	0.26 UJ [MDL=0.26]	0.26 U [MDL=0.26]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	9.2 U [MDL=9.2]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.38 UJ [MDL=0.38]	0.38 U [MDL=0.38]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	9.9 U [MDL=9.9]
BROMOCHLOROMETHANE	0.82 UJ [MDL=0.82]	0.81 U [MDL=0.81]	0.67 U [MDL=0.67]	0.64 U [MDL=0.64]	0.66 U [MDL=0.66]	0.63 U [MDL=0.63]	9.9 U [MDL=9.9]
BROMODICHLOROMETHANE	0.32 UJ [MDL=0.32]	0.32 U [MDL=0.32]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	7.6 U [MDL=7.6]
BROMOFORM	0.38 UJ [MDL=0.38]	0.38 U [MDL=0.38]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	15 U [MDL=15]
BROMOMETHANE	0.62 UJ [MDL=0.62]	0.62 U [MDL=0.62]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	22 U [MDL=22]
CARBON DISULFIDE	2.3 B [MDL=0.51]	0.5 U [MDL=0.5]	0.97 B [MDL=0.41]	0.81 B [MDL=0.4]	1.2 B [MDL=0.41]	0.39 U [MDL=0.39]	35 J [MDL=9.2]
CARBON TETRACHLORIDE	0.43 UJ [MDL=0.43]	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	4.9 U [MDL=4.9]
CHLOROBENZENE	0.38 UJ [MDL=0.38]	0.38 U [MDL=0.38]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	4.9 U [MDL=4.9]
CHLORODIBROMOMETHANE	0.63 UJ [MDL=0.63]	0.63 U [MDL=0.63]	0.52 U [MDL=0.52]	0.49 U [MDL=0.49]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	9.2 U [MDL=9.2]
CHLOROETHANE	0.99 UJ [MDL=0.99]	0.99 U [MDL=0.99]	0.81 U [MDL=0.81]	0.77 U [MDL=0.77]	0.79 U [MDL=0.79]	0.76 U [MDL=0.76]	47 U [MDL=47]
CHLOROFORM	0.33 UJ [MDL=0.33]	0.33 U [MDL=0.33]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	6.7 U [MDL=6.7]
CHLOROMETHANE	0.47 UJ [MDL=0.47]	0.47 U [MDL=0.47]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.7 J [MDL=0.38]	0.36 U [MDL=0.36]	11 U [MDL=11]
CIS-1,2-DICHLOROETHENE	0.41 UJ [MDL=0.41]	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	5.3 U [MDL=5.3]
CIS-1,3-DICHLOROPROPENE	0.39 UJ [MDL=0.39]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	6 U [MDL=6]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.73 UJ [MDL=0.73]	0.72 U [MDL=0.72]	0.59 U [MDL=0.59]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	11 U [MDL=11]
DICHLORODIFLUOROMETHANE	0.58 UJ [MDL=0.58]	0.57 U [MDL=0.57]	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	12 U [MDL=12]
DIISOPROPYL ETHER	1.7 UJ [MDL=1.7]	1.7 U [MDL=1.7]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	38 U [MDL=38]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-785	SB-785	SB-785	SB-785	SB-785	SB-785	SB-786
SAMPLE ID	D-SB-785-07	D-SS-785-01	D-SB-785-09	D-SB-785-11	D-SB-785-13	D-SB-785-15	D-SB-786-03
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/3/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.25 UJ [MDL=0.25]	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.17 U [MDL=0.17]
ETHYLBENZENE	0.3 UJ [MDL=0.3]	0.3 U [MDL=0.3]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	40 J [MDL=4.1]
HEXACHLOROBUTADIENE	1.4 UJ [MDL=1.4]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	11 U [MDL=11]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.18 UJ [MDL=0.18]	0.18 U [MDL=0.18]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	5.2 J [MDL=5]
M+P-XYLENES	1.4 UJ [MDL=1.4]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	68 J [MDL=4.7]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.49 UJ [MDL=0.49]	0.49 U [MDL=0.49]	0.4 UJ [MDL=0.4]	0.39 U [MDL=0.39]	0.4 U [MDL=0.4]	0.38 UJ [MDL=0.38]	5.4 U [MDL=5.4]
METHYLENE CHLORIDE	3.8 B [MDL=0.77]	1.5 B [MDL=0.77]	0.63 U [MDL=0.63]	0.6 U [MDL=0.6]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	120 J [MDL=59]
NAPHTHALENE	1.1 B [MDL=0.22]	1.1 B [MDL=0.22]	0.85 B [MDL=0.18]	0.8 B [MDL=0.17]	0.81 B [MDL=0.18]	0.81 B [MDL=0.17]	4000 [MDL=5.1]
N-BUTYLBENZENE	0.26 UJ [MDL=0.26]	0.26 U [MDL=0.26]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	6.1 U [MDL=6.1]
N-PROPYLBENZENE	0.46 UJ [MDL=0.46]	0.46 U [MDL=0.46]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	11 U [MDL=11]
O-XYLENE	0.4 UJ [MDL=0.4]	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	50 J [MDL=6.5]
SEC-BUTYLBENZENE	0.21 UJ [MDL=0.21]	0.21 U [MDL=0.21]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	3.6 U [MDL=3.6]
STYRENE	0.17 UJ [MDL=0.17]	0.17 U [MDL=0.17]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	4.3 U [MDL=4.3]
TERT-AMYL METHYL ETHER	0.43 UJ [MDL=0.43]	0.42 U [MDL=0.42]	0.35 UJ [MDL=0.35]	0.33 UJ [MDL=0.33]	0.34 UJ [MDL=0.34]	0.33 UJ [MDL=0.33]	0.28 U [MDL=0.28]
TERT-BUTYLBENZENE	0.33 UJ [MDL=0.33]	0.33 U [MDL=0.33]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	5 U [MDL=5]
TERTIARY-BUTYL ALCOHOL	67 B [MDL=8.7]	61 B [MDL=8.7]	51 B [MDL=7.1]	47 B [MDL=6.8]	49 B [MDL=7]	6.7 UR [MDL=6.7]	2200 B [MDL=180]
TETRACHLOROETHENE	0.6 UJ [MDL=0.6]	0.6 U [MDL=0.6]	0.49 U [MDL=0.49]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]	9.2 U [MDL=9.2]
TOLUENE	0.31 UJ [MDL=0.31]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.28 J [MDL=0.24]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	13 U [MDL=13]
TOTAL XYLENES	0.77 UJ [MDL=0.77]	0.77 U [MDL=0.77]	0.63 U [MDL=0.63]	0.6 U [MDL=0.6]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	120 J [MDL=6.2]
TRANS-1,2-DICHLOROETHENE	0.47 UJ [MDL=0.47]	0.47 U [MDL=0.47]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	7 U [MDL=7]
TRANS-1,3-DICHLOROPROPENE	0.62 UJ [MDL=0.62]	0.62 U [MDL=0.62]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	15 U [MDL=15]
TRICHLOROETHENE	0.48 UJ [MDL=0.48]	0.48 U [MDL=0.48]	0.39 U [MDL=0.39]	0.38 U [MDL=0.38]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	7.4 U [MDL=7.4]
TRICHLOROFLUOROMETHANE	0.39 UJ [MDL=0.39]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	12 U [MDL=12]
VINYL ACETATE	0.29 UJ [MDL=0.29]	0.29 U [MDL=0.29]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	18 U [MDL=18]
VINYL CHLORIDE	0.45 UJ [MDL=0.45]	0.45 U [MDL=0.45]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	14 U [MDL=14]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	16 [MDL=3.9]
ACENAPHTHENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	32 [MDL=3.9]
ACENAPHTHYLENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
ANTHRACENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	38 [MDL=3.9]
BAP EQUIVALENT-HALFND	14.4446 [MDL=NaN]	3.6 U [MDL=NaN]	4 U [MDL=NaN]	3.9 U [MDL=NaN]	17.841 [MDL=NaN]	3.9 U [MDL=NaN]	160.84 [MDL=NaN]
BAP EQUIVALENT-POS	12.1691 [MDL=NaN]	3.6 U [MDL=NaN]	4 U [MDL=NaN]	3.9 U [MDL=NaN]	15.821 [MDL=NaN]	3.9 U [MDL=NaN]	160.84 [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	8.6 [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	12 [MDL=4]	3.9 U [MDL=3.9]	96 [MDL=3.9]
BENZO(A)PYRENE	9.9 [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	12 [MDL=4]	3.9 U [MDL=3.9]	100 [MDL=3.9]
BENZO(B)FLUORANTHENE	14 [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	17 [MDL=4]	3.9 U [MDL=3.9]	170 [MDL=3.9]
BENZO(G,H,I)PERYLENE	9.1 [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	12 [MDL=4]	3.9 U [MDL=3.9]	67 [MDL=3.9]
BENZO(K)FLUORANTHENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	71 [MDL=3.9]
CHRYSENE	9.1 [MDL=1.4]	1.2 UL [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	11 [MDL=1.3]	1.3 U [MDL=1.3]	230 [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	28 [MDL=3.9]
FLUORANTHENE	17 [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	14 [MDL=4]	3.9 U [MDL=3.9]	140 [MDL=3.9]
FLUORENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	29 [MDL=3.9]
INDENO(1,2,3-CD)PYRENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	9.1 [MDL=4]	3.9 U [MDL=3.9]	53 [MDL=3.9]
NAPHTHALENE	4.1 U [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	220 [MDL=3.9]
PHENANTHRENE	15 [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]	89 [MDL=3.9]
PYRENE	13 [MDL=4.1]	3.6 UL [MDL=3.6]	4 U [MDL=4]	3.9 U [MDL=3.9]	14 [MDL=4]	3.9 U [MDL=3.9]	110 [MDL=3.9]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-785	SB-785	SB-785	SB-785	SB-785	SB-785	SB-786
SAMPLE ID	D-SB-785-07	D-SS-785-01	D-SB-785-09	D-SB-785-11	D-SB-785-13	D-SB-785-15	D-SB-786-03
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/3/2010
TOTAL PAHS	95.7 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	101.1 [MDL=NaN]	0 U [MDL=NaN]	1489 [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	23 U [MDL=23]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
AROCLOR-1221	20 U [MDL=20]	17 U [MDL=17]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1232	18 U [MDL=18]	15 U [MDL=15]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	14 U [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	18 U [MDL=18]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1254	21 U [MDL=21]	18 U [MDL=18]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1260	21 U [MDL=21]	18 U [MDL=18]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.78 U [MDL=0.78]	6.7 U [MDL=6.7]	0.76 UJ [MDL=0.76]	0.73 UJ [MDL=0.73]	0.75 UJ [MDL=0.75]	0.72 UJ [MDL=0.72]	7.3 U [MDL=7.3]
4,4'-DDE	0.49 UJ [MDL=0.49]	4.2 UJ [MDL=4.2]	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.46 U [MDL=0.46]	4.6 U [MDL=4.6]
4,4'-DDT	0.79 U [MDL=0.79]	6.8 U [MDL=6.8]	0.77 UJ [MDL=0.77]	0.75 UJ [MDL=0.75]	0.77 UJ [MDL=0.77]	0.74 UJ [MDL=0.74]	7.4 U [MDL=7.4]
ALDRIN	1.5 U [MDL=1.5]	13 U [MDL=13]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	14 U [MDL=14]
ALPHA-BHC	0.91 UJ [MDL=0.91]	7.9 UJ [MDL=7.9]	0.89 U [MDL=0.89]	0.86 U [MDL=0.86]	0.89 U [MDL=0.89]	0.85 U [MDL=0.85]	8.6 UJ [MDL=8.6]
ALPHA-CHLORDANE	1.2 UJ [MDL=1.2]	10 UJ [MDL=10]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	11 U [MDL=11]
BETA-BHC	1.4 UJ [MDL=1.4]	12 UJ [MDL=12]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	13 UJ [MDL=13]
DELTA-BHC	1.5 UJ [MDL=1.5]	13 UJ [MDL=13]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	14 U [MDL=14]
DIELDRIN	0.59 UJ [MDL=0.59]	5.1 UJ [MDL=5.1]	0.57 U [MDL=0.57]	0.56 U [MDL=0.56]	0.57 U [MDL=0.57]	0.55 U [MDL=0.55]	5.5 U [MDL=5.5]
ENDOSULFAN I	0.65 UJ [MDL=0.65]	5.6 UJ [MDL=5.6]	0.63 U [MDL=0.63]	0.62 U [MDL=0.62]	0.63 U [MDL=0.63]	0.61 U [MDL=0.61]	6.1 U [MDL=6.1]
ENDOSULFAN II	1 U [MDL=1]	8.9 U [MDL=8.9]	1 U [MDL=1]	0.97 U [MDL=0.97]	1 U [MDL=1]	0.96 U [MDL=0.96]	9.6 U [MDL=9.6]
ENDOSULFAN SULFATE	1.1 U [MDL=1.1]	9.4 U [MDL=9.4]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	10 U [MDL=10]
ENDRIN	0.63 UJ [MDL=0.63]	5.4 UJ [MDL=5.4]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]	0.58 U [MDL=0.58]	5.9 U [MDL=5.9]
ENDRIN ALDEHYDE	1.3 U [MDL=1.3]	11 U [MDL=11]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	12 U [MDL=12]
ENDRIN KETONE	0.79 U [MDL=0.79]	6.8 U [MDL=6.8]	0.77 U [MDL=0.77]	0.75 U [MDL=0.75]	0.77 U [MDL=0.77]	0.74 U [MDL=0.74]	7.4 U [MDL=7.4]
GAMMA-BHC (LINDANE)	0.93 UJ [MDL=0.93]	8 UJ [MDL=8]	0.9 U [MDL=0.9]	0.88 U [MDL=0.88]	0.9 U [MDL=0.9]	0.86 U [MDL=0.86]	8.7 UJ [MDL=8.7]
GAMMA-CHLORDANE	0.53 UJ [MDL=0.53]	4.5 UJ [MDL=4.5]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	4.9 U [MDL=4.9]
HEPTACHLOR	1.4 UJ [MDL=1.4]	12 UJ [MDL=12]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	13 UJ [MDL=13]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-785	SB-785	SB-785	SB-785	SB-785	SB-785	SB-786
SAMPLE ID	D-SB-785-07	D-SS-785-01	D-SB-785-09	D-SB-785-11	D-SB-785-13	D-SB-785-15	D-SB-786-03
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/3/2010
HEPTACHLOR EPOXIDE	1 UJ [MDL=1]	8.7 UJ [MDL=8.7]	0.98 U [MDL=0.98]	0.95 U [MDL=0.95]	0.97 U [MDL=0.97]	0.93 U [MDL=0.93]	9.4 UJ [MDL=9.4]
METHOXYCHLOR	1.9 U [MDL=1.9]	16 U [MDL=16]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	18 U [MDL=18]
TOXAPHENE	24 U [MDL=24]	210 U [MDL=210]	23 UJ [MDL=23]	22 UJ [MDL=22]	23 UJ [MDL=23]	22 UJ [MDL=22]	220 U [MDL=220]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	56000 [MDL=3.5]	9700 J [MDL=3]	3400 UJ [MDL=3.4]	3300 UJ [MDL=3.3]	17000 [MDL=3.4]	3300 U [MDL=3.3]	26000 [MDL=3.3]
GASOLINE RANGE ORGANICS	58 U [MDL=58]	50 U [MDL=50]	56 U [MDL=56]	54 U [MDL=54]	56 U [MDL=56]	54 U [MDL=54]	250 [MDL=54]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-786	SB-786	SB-786	SB-786	SB-786	SB-786	SB-786
SAMPLE ID	D-SB-786-05	D-SB-786-07	D-SB-786-09	D-SB-786-11	D-SB-786-13	D-SS-786-01	D-SB-786-15
SAMPLE DATE	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/8/2010
METALS (MG/KG)							
ANTIMONY	0.32 J [MDL=0.03]	0.17 J [MDL=0.03]	0.2 J [MDL=0.028]	0.027 UL [MDL=0.027]	0.075 J [MDL=0.029]	0.24 J [MDL=0.029]	0.064 J [MDL=0.027]
ARSENIC	7.7 [MDL=0.078]	14.3 [MDL=0.077]	3.6 [MDL=0.073]	2.5 [MDL=0.071]	1.3 [MDL=0.075]	6 [MDL=0.074]	0.88 L [MDL=0.07]
BARIUM	27.7 J [MDL=0.058]	12 J [MDL=0.057]	5.2 J [MDL=0.054]	6.8 J [MDL=0.053]	14.4 J [MDL=0.056]	37.1 J [MDL=0.055]	4.4 J [MDL=0.052]
BERYLLIUM	4 [MDL=0.059]	1.2 [MDL=0.058]	1.1 [MDL=0.056]	0.31 [MDL=0.054]	0.98 [MDL=0.057]	2 [MDL=0.056]	0.3 J [MDL=0.053]
CADMIUM	0.091 J [MDL=0.0098]	0.038 J [MDL=0.0097]	0.025 J [MDL=0.0092]	0.023 J [MDL=0.0089]	0.041 J [MDL=0.0094]	0.11 J [MDL=0.0093]	0.034 J [MDL=0.0088]
CHROMIUM	24.3 [MDL=0.05]	18.4 [MDL=0.05]	26.8 [MDL=0.047]	3.8 [MDL=0.046]	18.9 [MDL=0.048]	20.8 [MDL=0.048]	2.1 J [MDL=0.045]
COBALT	14.9 [MDL=0.0048]	7.9 [MDL=0.0047]	11.3 [MDL=0.0045]	1.5 [MDL=0.0043]	8.5 [MDL=0.0046]	8.9 [MDL=0.0045]	1.9 [MDL=0.0043]
COPPER	30 J [MDL=0.054]	16.1 J [MDL=0.053]	13.6 J [MDL=0.051]	3.1 J [MDL=0.049]	4.9 J [MDL=0.052]	22.4 J [MDL=0.051]	5 [MDL=0.048]
IRON	36400 J [MDL=1.3]	19400 J [MDL=1.2]	31300 J [MDL=1.2]	1830 J [MDL=1.1]	13500 J [MDL=1.2]	25400 J [MDL=1.2]	462 J [MDL=1.1]
LEAD	13.4 J [MDL=0.016]	5.9 J [MDL=0.016]	7 J [MDL=0.015]	2.8 J [MDL=0.015]	3.8 J [MDL=0.016]	26.5 J [MDL=0.077]	1.3 [MDL=0.015]
MANGANESE	91.2 J [MDL=0.059]	33.5 J [MDL=0.058]	16.6 J [MDL=0.056]	3.1 J [MDL=0.054]	5.6 J [MDL=0.057]	102 J [MDL=0.056]	1.6 [MDL=0.053]
MERCURY	0.16 K [MDL=0.019]	0.021 J [MDL=0.019]	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.018 U [MDL=0.018]	0.25 K [MDL=0.018]	0.017 U [MDL=0.017]
MOLYBDENUM	0.52 [MDL=0.079]	0.49 [MDL=0.078]	0.69 [MDL=0.075]	0.072 U [MDL=0.072]	0.13 J [MDL=0.076]	0.56 [MDL=0.075]	0.095 J [MDL=0.071]
NICKEL	39.2 J [MDL=0.026]	20.3 J [MDL=0.026]	23.8 J [MDL=0.025]	2.5 J [MDL=0.024]	14 J [MDL=0.025]	20.7 J [MDL=0.025]	3.2 J [MDL=0.024]
SELENIUM	3.5 L [MDL=0.11]	1.3 L [MDL=0.11]	1.2 L [MDL=0.11]	4.6 L [MDL=0.1]	2 L [MDL=0.11]	3.1 L [MDL=0.11]	0.57 J [MDL=0.1]
SILVER	0.08 J [MDL=0.02]	0.02 U [MDL=0.02]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]	0.38 [MDL=0.019]	0.047 J [MDL=0.018]
THALLIUM	0.065 J [MDL=0.016]	0.033 J [MDL=0.016]	0.018 J [MDL=0.015]	0.037 J [MDL=0.015]	0.12 L [MDL=0.016]	0.034 J [MDL=0.015]	0.064 B [MDL=0.015]
VANADIUM	38.4 [MDL=0.052]	33.7 [MDL=0.051]	68 [MDL=0.049]	4.6 [MDL=0.047]	16.5 [MDL=0.049]	34.2 [MDL=0.049]	1.6 [MDL=0.046]
ZINC	90 J [MDL=0.25]	23 J [MDL=0.25]	20.2 J [MDL=0.24]	3.4 J [MDL=0.23]	16.9 J [MDL=0.24]	48.5 J [MDL=0.24]	4.7 [MDL=0.22]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.7 J [MDL=0.34]	0.54 J [MDL=0.33]	0.71 J [MDL=0.32]	0.31 U [MDL=0.31]	0.55 J [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
1,4-DIOXANE	28 U [MDL=28]	27 U [MDL=27]	26 U [MDL=26]	25 U [MDL=25]	27 U [MDL=27]	26 U [MDL=26]	25 U [MDL=25]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	31 U [MDL=31]	31 U [MDL=31]	30 U [MDL=30]	29 U [MDL=29]	30 U [MDL=30]	30 U [MDL=30]	28 U [MDL=28]
2,4,6-TRICHLOROPHENOL	100 U [MDL=100]	99 U [MDL=99]	95 U [MDL=95]	91 U [MDL=91]	97 U [MDL=97]	95 U [MDL=95]	90 U [MDL=90]
2,4-DICHLOROPHENOL	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]
2,4-DIMETHYLPHENOL	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]
2,4-DINITROPHENOL	100 U [MDL=100]	99 U [MDL=99]	95 U [MDL=95]	91 U [MDL=91]	97 U [MDL=97]	95 U [MDL=95]	90 U [MDL=90]
2,4-DINITROTOLUENE	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
2,6-DINITROTOLUENE	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]
2-CHLORONAPHTHALENE	4.2 U [MDL=4.2]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]
2-CHLOROPHENOL	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	100 U [MDL=100]	99 U [MDL=99]	95 U [MDL=95]	91 U [MDL=91]	97 U [MDL=97]	95 U [MDL=95]	90 U [MDL=90]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
2-NITROPHENOL	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	23 U [MDL=23]	22 U [MDL=22]	21 U [MDL=21]	21 U [MDL=21]	22 U [MDL=22]	21 U [MDL=21]	20 U [MDL=20]
3-NITROANILINE	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]
4,6-DINITRO-2-METHYLPHENOL	100 U [MDL=100]	99 U [MDL=99]	95 U [MDL=95]	91 U [MDL=91]	97 U [MDL=97]	95 U [MDL=95]	90 U [MDL=90]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]
4-CHLOROANILINE	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
4-METHYLPHENOL	100 U [MDL=100]	99 U [MDL=99]	95 U [MDL=95]	91 U [MDL=91]	97 U [MDL=97]	95 U [MDL=95]	90 U [MDL=90]
4-NITROANILINE	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	29 U [MDL=29]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-786 D-SB-786-05 9/3/2010	SB-786 D-SB-786-07 9/3/2010	SB-786 D-SB-786-09 9/3/2010	SB-786 D-SB-786-11 9/3/2010	SB-786 D-SB-786-13 9/3/2010	SB-786 D-SS-786-01 9/3/2010	SB-786 D-SB-786-15 9/8/2010
4-NITROPHENOL	100 U [MDL=100]	99 U [MDL=99]	95 U [MDL=95]	91 U [MDL=91]	97 U [MDL=97]	95 U [MDL=95]	90 U [MDL=90]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	13 U [MDL=13]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	28 U [MDL=28]	27 U [MDL=27]	26 U [MDL=26]	25 U [MDL=25]	27 U [MDL=27]	26 U [MDL=26]	25 U [MDL=25]
BIS(2-CHLOROETHYL)ETHER	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.2 U [MDL=2.2]
BIS(2-ETHYLHEXYL)PHTHALATE	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	21 U [MDL=21]
BUTYL BENZYL PHTHALATE	13 U [MDL=13]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]
CAPROLACTAM	47 U [MDL=47]	46 U [MDL=46]	44 U [MDL=44]	42 U [MDL=42]	45 U [MDL=45]	44 U [MDL=44]	42 U [MDL=42]
CARBAZOLE	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	62 [MDL=32]	30 U [MDL=30]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	8.9 J [MDL=4.2]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	34 J [MDL=3.9]	3.7 U [MDL=3.7]
DIETHYL PHTHALATE	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]
DIMETHYL PHTHALATE	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]
DI-N-BUTYL PHTHALATE	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	18 U [MDL=18]	17 U [MDL=17]
DI-N-OCTYL PHTHALATE	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]
HEXACHLOROBUTADIENE	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
HEXACHLOROCYCLOPENTADIENE	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
HEXACHLOROETHANE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.8 U [MDL=2.8]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]
N-NITROSO-DI-N-PROPYLAMINE	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]
PENTACHLOROPHENOL	100 U [MDL=100]	99 U [MDL=99]	95 U [MDL=95]	91 U [MDL=91]	97 U [MDL=97]	95 U [MDL=95]	90 U [MDL=90]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	34 U [MDL=34]	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	33 U [MDL=33]	32 U [MDL=32]	30 U [MDL=30]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	8.5 U [MDL=8.5]	0.68 U [MDL=0.68]	0.54 U [MDL=0.54]	6.3 U [MDL=6.3]	8.1 U [MDL=8.1]	0.56 U [MDL=0.56]	0.5 U [MDL=0.5]
1,1,1-TRICHLOROETHANE	20 U [MDL=20]	0.62 U [MDL=0.62]	0.48 U [MDL=0.48]	15 U [MDL=15]	19 U [MDL=19]	0.51 U [MDL=0.51]	0.45 U [MDL=0.45]
1,1,2,2-TETRACHLOROETHANE	8.3 U [MDL=8.3]	0.38 U [MDL=0.38]	0.29 U [MDL=0.29]	6.2 U [MDL=6.2]	8 U [MDL=8]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	36 U [MDL=36]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	27 U [MDL=27]	35 U [MDL=35]	1.2 U [MDL=1.2]	1 U [MDL=1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-786	SB-786	SB-786	SB-786	SB-786	SB-786	SB-786
SAMPLE ID	D-SB-786-05	D-SB-786-07	D-SB-786-09	D-SB-786-11	D-SB-786-13	D-SS-786-01	D-SB-786-15
SAMPLE DATE	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/8/2010
1,1-DICHLOROETHANE	16 U [MDL=16]	0.4 U [MDL=0.4]	0.31 U [MDL=0.31]	12 U [MDL=12]	15 U [MDL=15]	0.33 U [MDL=0.33]	0.29 U [MDL=0.29]
1,1-DICHLOROETHENE	17 U [MDL=17]	0.57 U [MDL=0.57]	0.45 U [MDL=0.45]	13 U [MDL=13]	16 U [MDL=16]	0.47 U [MDL=0.47]	0.42 U [MDL=0.42]
1,1-DICHLOROPROPENE	9.3 U [MDL=9.3]	0.33 U [MDL=0.33]	0.26 U [MDL=0.26]	7 U [MDL=7]	8.9 U [MDL=8.9]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]
1,2,3-TRICHLOROBENZENE	9.3 U [MDL=9.3]	0.42 U [MDL=0.42]	0.33 U [MDL=0.33]	7 U [MDL=7]	8.9 U [MDL=8.9]	0.34 U [MDL=0.34]	0.3 U [MDL=0.3]
1,2,3-TRICHLOROPROPANE	20 U [MDL=20]	0.99 U [MDL=0.99]	0.78 U [MDL=0.78]	15 U [MDL=15]	19 U [MDL=19]	0.81 U [MDL=0.81]	0.72 U [MDL=0.72]
1,2,3-TRIMETHYLBENZENE	8.3 J [MDL=0.16]	3.4 J [MDL=0.19]	0.41 B [MDL=0.15]	0.12 U [MDL=0.12]	3.2 J [MDL=0.15]	0.15 U [MDL=0.15]	0.16 J [MDL=0.14]
1,2,4-TRICHLOROBENZENE	6.8 U [MDL=6.8]	0.3 U [MDL=0.3]	0.23 U [MDL=0.23]	5.1 U [MDL=5.1]	6.5 U [MDL=6.5]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]
1,2,4-TRIMETHYLBENZENE	4.7 U [MDL=4.7]	19 [MDL=0.72]	0.74 J [MDL=0.56]	3.5 U [MDL=3.5]	4.5 U [MDL=4.5]	0.59 U [MDL=0.59]	0.52 U [MDL=0.52]
1,2-DIBROMO-3-CHLOROPROPANE	47 U [MDL=47]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	35 U [MDL=35]	45 U [MDL=45]	1.2 U [MDL=1.2]	1 U [MDL=1]
1,2-DIBROMOETHANE	9.3 U [MDL=9.3]	0.55 U [MDL=0.55]	0.43 U [MDL=0.43]	7 U [MDL=7]	8.9 U [MDL=8.9]	0.45 U [MDL=0.45]	0.4 U [MDL=0.4]
1,2-DICHLOROBENZENE	8 U [MDL=8]	0.4 U [MDL=0.4]	0.31 U [MDL=0.31]	6 U [MDL=6]	7.7 U [MDL=7.7]	0.33 U [MDL=0.33]	0.29 U [MDL=0.29]
1,2-DICHLOROETHANE	9.3 U [MDL=9.3]	0.38 U [MDL=0.38]	0.29 U [MDL=0.29]	7 U [MDL=7]	8.9 U [MDL=8.9]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]
1,2-DICHLOROPROPANE	7.6 U [MDL=7.6]	0.76 U [MDL=0.76]	0.6 U [MDL=0.6]	5.7 U [MDL=5.7]	7.3 U [MDL=7.3]	0.62 U [MDL=0.62]	0.55 U [MDL=0.55]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	4.5 U [MDL=4.5]	0.39 U [MDL=0.39]	0.3 U [MDL=0.3]	3.3 U [MDL=3.3]	4.3 U [MDL=4.3]	0.32 U [MDL=0.32]	0.28 U [MDL=0.28]
1,3-DICHLOROPROPANE	20 U [MDL=20]	0.38 U [MDL=0.38]	0.29 U [MDL=0.29]	15 U [MDL=15]	20 U [MDL=20]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]
1,4-DICHLOROBENZENE	7.4 U [MDL=7.4]	0.73 U [MDL=0.73]	0.57 U [MDL=0.57]	5.6 U [MDL=5.6]	7.1 U [MDL=7.1]	0.6 U [MDL=0.6]	0.53 U [MDL=0.53]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	21 U [MDL=21]	1 U [MDL=1]	0.81 U [MDL=0.81]	16 U [MDL=16]	21 U [MDL=21]	0.85 U [MDL=0.85]	0.75 U [MDL=0.75]
2-BUTANONE	40 U [MDL=40]	5.9 B [MDL=1.5]	1.3 B [MDL=1.2]	120 B [MDL=30]	38 U [MDL=38]	2.1 B [MDL=1.3]	1.1 U [MDL=1.1]
2-CHLOROETHYL VINYL ETHER	40 U [MDL=40]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	30 U [MDL=30]	38 U [MDL=38]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]
2-CHLOROTOLUENE	8.4 U [MDL=8.4]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]	6.3 U [MDL=6.3]	8 U [MDL=8]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]
2-HEXANONE	19 U [MDL=19]	0.7 U [MDL=0.7]	0.54 U [MDL=0.54]	14 U [MDL=14]	18 U [MDL=18]	0.57 U [MDL=0.57]	0.5 U [MDL=0.5]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	9.2 U [MDL=9.2]	0.45 U [MDL=0.45]	0.35 U [MDL=0.35]	6.9 U [MDL=6.9]	8.8 U [MDL=8.8]	0.37 U [MDL=0.37]	0.33 U [MDL=0.33]
4-ISOPROPYLTOLUENE	4.5 U [MDL=4.5]	0.34 J [MDL=0.23]	0.18 U [MDL=0.18]	3.3 U [MDL=3.3]	4.3 U [MDL=4.3]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]
4-METHYL-2-PENTANONE	45 U [MDL=45]	0.6 U [MDL=0.6]	0.47 U [MDL=0.47]	33 U [MDL=33]	43 U [MDL=43]	0.49 U [MDL=0.49]	0.43 U [MDL=0.43]
ACETONE	160 U [MDL=160]	35 B [MDL=7]	26 B [MDL=5.4]	260 B [MDL=120]	350 B [MDL=150]	21 B [MDL=5.7]	16 B [MDL=5]
BENZENE	11 U [MDL=11]	0.25 U [MDL=0.25]	0.79 J [MDL=0.2]	10 J [MDL=8.4]	20 J [MDL=11]	0.72 J [MDL=0.21]	3.4 J [MDL=0.18]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	12 U [MDL=12]	0.36 U [MDL=0.36]	0.29 U [MDL=0.29]	9.1 U [MDL=9.1]	12 U [MDL=12]	0.3 U [MDL=0.3]	0.26 U [MDL=0.26]
BROMOCHLOROMETHANE	12 U [MDL=12]	0.78 U [MDL=0.78]	0.61 U [MDL=0.61]	9.1 U [MDL=9.1]	12 U [MDL=12]	0.64 U [MDL=0.64]	0.57 U [MDL=0.57]
BROMODICHLOROMETHANE	9.2 U [MDL=9.2]	0.31 U [MDL=0.31]	0.24 U [MDL=0.24]	6.9 U [MDL=6.9]	8.8 U [MDL=8.8]	0.25 U [MDL=0.25]	0.22 U [MDL=0.22]
BROMOFORM	18 U [MDL=18]	0.36 U [MDL=0.36]	0.29 U [MDL=0.29]	13 U [MDL=13]	17 U [MDL=17]	0.3 U [MDL=0.3]	0.26 U [MDL=0.26]
BROMOMETHANE	27 U [MDL=27]	0.6 U [MDL=0.6]	0.47 U [MDL=0.47]	20 U [MDL=20]	26 U [MDL=26]	0.49 U [MDL=0.49]	0.43 U [MDL=0.43]
CARBON DISULFIDE	11 U [MDL=11]	1.4 B [MDL=0.49]	0.94 B [MDL=0.38]	8.4 U [MDL=8.4]	11 U [MDL=11]	2.2 B [MDL=0.4]	0.35 U [MDL=0.35]
CARBON TETRACHLORIDE	6 U [MDL=6]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]	4.5 U [MDL=4.5]	5.7 U [MDL=5.7]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]
CHLOROBENZENE	6 U [MDL=6]	0.36 U [MDL=0.36]	0.29 U [MDL=0.29]	4.5 U [MDL=4.5]	5.7 U [MDL=5.7]	0.3 U [MDL=0.3]	0.26 U [MDL=0.26]
CHLORODIBROMOMETHANE	11 U [MDL=11]	0.61 U [MDL=0.61]	0.48 U [MDL=0.48]	8.4 U [MDL=8.4]	11 U [MDL=11]	0.5 U [MDL=0.5]	0.44 U [MDL=0.44]
CHLOROETHANE	57 U [MDL=57]	0.95 U [MDL=0.95]	0.74 U [MDL=0.74]	42 U [MDL=42]	54 U [MDL=54]	0.78 U [MDL=0.78]	0.69 U [MDL=0.69]
CHLOROFORM	8.2 U [MDL=8.2]	0.32 U [MDL=0.32]	0.25 U [MDL=0.25]	6.1 U [MDL=6.1]	7.9 U [MDL=7.9]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]
CHLOROMETHANE	13 U [MDL=13]	0.45 U [MDL=0.45]	0.35 U [MDL=0.35]	9.8 U [MDL=9.8]	13 U [MDL=13]	0.37 U [MDL=0.37]	0.33 U [MDL=0.33]
CIS-1,2-DICHLOROETHENE	6.4 U [MDL=6.4]	0.4 U [MDL=0.4]	0.31 U [MDL=0.31]	4.8 U [MDL=4.8]	6.2 U [MDL=6.2]	0.33 U [MDL=0.33]	0.29 U [MDL=0.29]
CIS-1,3-DICHLOROPROPENE	7.4 U [MDL=7.4]	0.38 U [MDL=0.38]	0.29 U [MDL=0.29]	5.5 U [MDL=5.5]	7.1 U [MDL=7.1]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	13 U [MDL=13]	0.7 U [MDL=0.7]	0.54 U [MDL=0.54]	9.8 U [MDL=9.8]	13 U [MDL=13]	0.57 U [MDL=0.57]	0.5 U [MDL=0.5]
DICHLORODIFLUOROMETHANE	15 U [MDL=15]	0.55 U [MDL=0.55]	0.43 U [MDL=0.43]	11 U [MDL=11]	14 U [MDL=14]	0.45 U [MDL=0.45]	0.4 U [MDL=0.4]
DIISOPROPYL ETHER	47 U [MDL=47]	1.7 U [MDL=1.7]	1.3 U [MDL=1.3]	35 U [MDL=35]	45 U [MDL=45]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-786 D-SB-786-05 9/3/2010	SB-786 D-SB-786-07 9/3/2010	SB-786 D-SB-786-09 9/3/2010	SB-786 D-SB-786-11 9/3/2010	SB-786 D-SB-786-13 9/3/2010	SB-786 D-SS-786-01 9/3/2010	SB-786 D-SB-786-15 9/8/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]	0.15 U [MDL=0.15]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.18 U [MDL=0.18]
ETHYLBENZENE	13 J [MDL=5]	0.67 J [MDL=0.29]	0.22 U [MDL=0.22]	3.8 U [MDL=3.8]	9.2 J [MDL=4.8]	0.23 U [MDL=0.23]	0.35 J [MDL=0.21]
HEXACHLOROBUTADIENE	13 U [MDL=13]	1.3 U [MDL=1.3]	1 U [MDL=1]	9.8 U [MDL=9.8]	13 U [MDL=13]	1.1 U [MDL=1.1]	0.96 U [MDL=0.96]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	6.1 U [MDL=6.1]	3.1 J [MDL=0.18]	0.14 U [MDL=0.14]	4.5 U [MDL=4.5]	5.8 U [MDL=5.8]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]
M+P-XYLENES	21 J [MDL=5.8]	6 J [MDL=1.3]	1 U [MDL=1]	12 J [MDL=4.3]	20 J [MDL=5.5]	1.1 U [MDL=1.1]	0.96 U [MDL=0.96]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	6.6 U [MDL=6.6]	0.47 U [MDL=0.47]	0.37 U [MDL=0.37]	4.9 UJ [MDL=4.9]	6.3 UJ [MDL=6.3]	0.39 U [MDL=0.39]	0.34 UJ [MDL=0.34]
METHYLENE CHLORIDE	120 J [MDL=72]	5.2 B [MDL=0.74]	5.4 B [MDL=0.58]	74 J [MDL=54]	77 J [MDL=69]	3.9 B [MDL=0.61]	0.54 U [MDL=0.54]
NAPHTHALENE	1900 [MDL=6.2]	4.1 B [MDL=0.21]	16 [MDL=0.16]	260 [MDL=4.7]	530 [MDL=6]	2.2 B [MDL=0.17]	47 [MDL=0.15]
N-BUTYLBENZENE	7.4 U [MDL=7.4]	0.25 U [MDL=0.25]	0.2 U [MDL=0.2]	5.6 U [MDL=5.6]	7.1 U [MDL=7.1]	0.21 U [MDL=0.21]	0.18 U [MDL=0.18]
N-PROPYLBENZENE	13 U [MDL=13]	1.2 J [MDL=0.44]	0.35 U [MDL=0.35]	9.8 U [MDL=9.8]	13 U [MDL=13]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]
O-XYLENE	20 J [MDL=7.9]	35 [MDL=0.39]	2 J [MDL=0.3]	6.3 J [MDL=5.9]	12 J [MDL=7.6]	0.32 U [MDL=0.32]	0.57 J [MDL=0.28]
SEC-BUTYLBENZENE	4.4 U [MDL=4.4]	0.2 U [MDL=0.2]	0.16 U [MDL=0.16]	3.3 U [MDL=3.3]	4.2 U [MDL=4.2]	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]
STYRENE	5.2 U [MDL=5.2]	0.17 U [MDL=0.17]	0.13 U [MDL=0.13]	3.9 U [MDL=3.9]	5 U [MDL=5]	0.14 U [MDL=0.14]	0.12 U [MDL=0.12]
TERT-AMYL METHYL ETHER	0.34 U [MDL=0.34]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]	0.26 UJ [MDL=0.26]	0.33 UJ [MDL=0.33]	0.33 U [MDL=0.33]	0.3 UJ [MDL=0.3]
TERT-BUTYLBENZENE	6.1 U [MDL=6.1]	0.32 U [MDL=0.32]	0.25 U [MDL=0.25]	4.5 U [MDL=4.5]	5.8 U [MDL=5.8]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]
TERTIARY-BUTYL ALCOHOL	2600 B [MDL=220]	59 B [MDL=8.4]	46 B [MDL=6.6]	2200 B [MDL=170]	2800 B [MDL=210]	49 B [MDL=6.9]	43 B [MDL=6.1]
TETRACHLOROETHENE	11 U [MDL=11]	0.57 U [MDL=0.57]	0.45 U [MDL=0.45]	8.4 U [MDL=8.4]	11 U [MDL=11]	0.47 U [MDL=0.47]	0.42 U [MDL=0.42]
TOLUENE	16 U [MDL=16]	0.3 U [MDL=0.3]	0.23 U [MDL=0.23]	13 J [MDL=12]	31 J [MDL=15]	0.24 U [MDL=0.24]	0.58 J [MDL=0.22]
TOTAL XYLENES	41 J [MDL=7.5]	42 [MDL=0.74]	2.9 J [MDL=0.58]	18 J [MDL=5.6]	32 J [MDL=7.2]	0.61 U [MDL=0.61]	1 J [MDL=0.54]
TRANS-1,2-DICHLOROETHENE	8.6 U [MDL=8.6]	0.45 U [MDL=0.45]	0.35 U [MDL=0.35]	6.4 U [MDL=6.4]	8.2 U [MDL=8.2]	0.37 U [MDL=0.37]	0.33 U [MDL=0.33]
TRANS-1,3-DICHLOROPROPENE	19 U [MDL=19]	0.6 U [MDL=0.6]	0.47 U [MDL=0.47]	14 U [MDL=14]	18 U [MDL=18]	0.49 U [MDL=0.49]	0.43 U [MDL=0.43]
TRICHLOROETHENE	9 U [MDL=9]	0.46 U [MDL=0.46]	0.36 U [MDL=0.36]	6.8 U [MDL=6.8]	8.7 U [MDL=8.7]	0.38 U [MDL=0.38]	0.34 U [MDL=0.34]
TRICHLOROFLUOROMETHANE	15 U [MDL=15]	0.38 U [MDL=0.38]	0.29 U [MDL=0.29]	11 U [MDL=11]	14 U [MDL=14]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]
VINYL ACETATE	21 U [MDL=21]	0.28 U [MDL=0.28]	0.22 U [MDL=0.22]	16 U [MDL=16]	21 U [MDL=21]	0.23 U [MDL=0.23]	0.2 U [MDL=0.2]
VINYL CHLORIDE	17 U [MDL=17]	0.43 U [MDL=0.43]	0.34 U [MDL=0.34]	13 U [MDL=13]	16 U [MDL=16]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	45 [MDL=4.2]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	27 [MDL=3.9]	3.7 U [MDL=3.7]
ACENAPHTHENE	23 [MDL=4.2]	11 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	100 [MDL=3.9]	3.7 U [MDL=3.7]
ACENAPHTHYLENE	4.2 U [MDL=4.2]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	10 [MDL=3.9]	3.7 U [MDL=3.7]
ANTHRACENE	20 [MDL=4.2]	23 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	190 [MDL=3.9]	3.7 U [MDL=3.7]
BAP EQUIVALENT-HALFND	50.017 [MDL=NaN]	58.244 [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	4 U [MDL=NaN]	573.68 [MDL=NaN]	3.7 U [MDL=NaN]
BAP EQUIVALENT-POS	50.017 [MDL=NaN]	58.244 [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	4 U [MDL=NaN]	573.68 [MDL=NaN]	3.7 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	25 [MDL=4.2]	41 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	520 [MDL=3.9]	3.7 U [MDL=3.7]
BENZO(A)PYRENE	24 [MDL=4.2]	30 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	380 [MDL=3.9]	3.7 U [MDL=3.7]
BENZO(B)FLUORANTHENE	40 [MDL=4.2]	56 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	440 [MDL=3.9]	3.7 U [MDL=3.7]
BENZO(G,H,I)PERYLENE	16 [MDL=4.2]	16 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	210 [MDL=3.9]	3.7 U [MDL=3.7]
BENZO(K)FLUORANTHENE	16 [MDL=4.2]	19 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	220 [MDL=3.9]	3.7 U [MDL=3.7]
CHRYSENE	57 [MDL=1.4]	54 [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	480 [MDL=1.3]	1.2 U [MDL=1.2]
DIBENZO(A,H)ANTHRACENE	18 [MDL=4.2]	17 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	76 [MDL=3.9]	3.7 U [MDL=3.7]
FLUORANTHENE	84 [MDL=4.2]	140 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	890 [MDL=3.9]	3.7 U [MDL=3.7]
FLUORENE	17 [MDL=4.2]	12 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	93 [MDL=3.9]	3.7 U [MDL=3.7]
INDENO(1,2,3-CD)PYRENE	13 [MDL=4.2]	13 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	190 [MDL=3.9]	3.7 U [MDL=3.7]
NAPHTHALENE	820 [MDL=4.2]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	11 [MDL=4]	85 [MDL=3.9]	3.7 U [MDL=3.7]
PHENANTHRENE	84 [MDL=4.2]	84 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	630 [MDL=3.9]	3.7 U [MDL=3.7]
PYRENE	61 [MDL=4.2]	110 [MDL=4.1]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4 U [MDL=4]	850 [MDL=3.9]	3.7 U [MDL=3.7]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-786	SB-786	SB-786	SB-786	SB-786	SB-786	SB-786
SAMPLE ID	D-SB-786-05	D-SB-786-07	D-SB-786-09	D-SB-786-11	D-SB-786-13	D-SS-786-01	D-SB-786-15
SAMPLE DATE	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/8/2010
TOTAL PAHS	1363 [MDL=NaN]	626 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	11 [MDL=NaN]	5391 [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]
AROCLOR-1221	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]
AROCLOR-1232	18 U [MDL=18]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]
AROCLOR-1254	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]
AROCLOR-1260	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.78 U [MDL=0.78]	0.77 U [MDL=0.77]	0.73 U [MDL=0.73]	0.71 U [MDL=0.71]	0.75 U [MDL=0.75]	15 U [MDL=15]	0.7 UJ [MDL=0.7]
4,4'-DDE	0.49 U [MDL=0.49]	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.47 U [MDL=0.47]	9.3 U [MDL=9.3]	0.44 U [MDL=0.44]
4,4'-DDT	0.79 U [MDL=0.79]	0.78 U [MDL=0.78]	0.75 U [MDL=0.75]	0.72 U [MDL=0.72]	0.76 U [MDL=0.76]	15 U [MDL=15]	0.71 UJ [MDL=0.71]
ALDRIN	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	29 U [MDL=29]	1.3 U [MDL=1.3]
ALPHA-BHC	0.92 UJ [MDL=0.92]	0.91 UJ [MDL=0.91]	0.86 UJ [MDL=0.86]	0.83 UJ [MDL=0.83]	0.88 UJ [MDL=0.88]	17 UJ [MDL=17]	0.82 U [MDL=0.82]
ALPHA-CHLORDANE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	22 U [MDL=22]	1.1 U [MDL=1.1]
BETA-BHC	1.4 UJ [MDL=1.4]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	26 UJ [MDL=26]	1.2 U [MDL=1.2]
DELTA-BHC	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	29 U [MDL=29]	1.3 U [MDL=1.3]
DIELDRIN	0.59 U [MDL=0.59]	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]	11 U [MDL=11]	0.53 U [MDL=0.53]
ENDOSULFAN I	0.65 U [MDL=0.65]	0.65 U [MDL=0.65]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.63 U [MDL=0.63]	12 U [MDL=12]	0.58 U [MDL=0.58]
ENDOSULFAN II	1 U [MDL=1]	1 U [MDL=1]	0.97 U [MDL=0.97]	0.94 U [MDL=0.94]	0.99 U [MDL=0.99]	19 U [MDL=19]	0.92 U [MDL=0.92]
ENDOSULFAN SULFATE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	0.99 U [MDL=0.99]	1.1 U [MDL=1.1]	21 U [MDL=21]	0.98 U [MDL=0.98]
ENDRIN	0.63 U [MDL=0.63]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.57 U [MDL=0.57]	0.6 U [MDL=0.6]	12 U [MDL=12]	0.56 U [MDL=0.56]
ENDRIN ALDEHYDE	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	24 U [MDL=24]	1.1 U [MDL=1.1]
ENDRIN KETONE	0.79 U [MDL=0.79]	0.78 U [MDL=0.78]	0.75 U [MDL=0.75]	0.72 U [MDL=0.72]	0.76 U [MDL=0.76]	15 U [MDL=15]	0.71 U [MDL=0.71]
GAMMA-BHC (LINDANE)	0.93 UJ [MDL=0.93]	0.92 UJ [MDL=0.92]	0.88 UJ [MDL=0.88]	0.85 UJ [MDL=0.85]	0.89 UJ [MDL=0.89]	18 UJ [MDL=18]	0.83 U [MDL=0.83]
GAMMA-CHLORDANE	0.53 U [MDL=0.53]	0.52 U [MDL=0.52]	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	0.51 U [MDL=0.51]	10 U [MDL=10]	0.47 U [MDL=0.47]
HEPTACHLOR	1.4 UJ [MDL=1.4]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	26 UJ [MDL=26]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-786	SB-786	SB-786	SB-786	SB-786	SB-786	SB-786
SAMPLE ID	D-SB-786-05	D-SB-786-07	D-SB-786-09	D-SB-786-11	D-SB-786-13	D-SS-786-01	D-SB-786-15
SAMPLE DATE	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/3/2010	9/8/2010
HEPTACHLOR EPOXIDE	1 UJ [MDL=1]	0.99 UJ [MDL=0.99]	0.95 UJ [MDL=0.95]	0.91 UJ [MDL=0.91]	0.97 UJ [MDL=0.97]	19 UJ [MDL=19]	0.9 U [MDL=0.9]
METHOXYCHLOR	1.9 U [MDL=1.9]	1.9 U [MDL=1.9]	1.8 U [MDL=1.8]	1.7 U [MDL=1.7]	1.8 U [MDL=1.8]	36 U [MDL=36]	1.7 U [MDL=1.7]
TOXAPHENE	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]	22 U [MDL=22]	23 U [MDL=23]	450 U [MDL=450]	21 UJ [MDL=21]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	45000 [MDL=3.5]	92000 [MDL=6.9]	3300 U [MDL=3.3]	3200 U [MDL=3.2]	4300 J [MDL=3.4]	520000 [MDL=33]	3800 J [MDL=3.1]
GASOLINE RANGE ORGANICS	150 [MDL=58]	190 [MDL=57]	54 U [MDL=54]	53 U [MDL=53]	79 J [MDL=56]	71 J [MDL=55]	52 U [MDL=52]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-787	SB-787	SB-787	SB-787	SB-787	SB-787	SB-787
SAMPLE ID	D-SB-787-07	D-SS-787-01	D-SB-787-03	D-SB-787-05	D-SB-787-09	D-SB-787-11	D-SB-787-13
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
METALS (MG/KG)							
ANTIMONY	0.35 J [MDL=0.029]	0.19 J [MDL=0.028]	0.18 J [MDL=0.027]	0.33 J [MDL=0.031]	0.34 J [MDL=0.029]	0.33 J [MDL=0.027]	0.22 J [MDL=0.028]
ARSENIC	6.6 [MDL=0.076]	5.3 [MDL=0.072]	4.6 L [MDL=0.071]	5.3 L [MDL=0.079]	6.8 L [MDL=0.074]	5 L [MDL=0.071]	5.4 L [MDL=0.072]
BARIUM	19.8 J [MDL=0.056]	30.7 J [MDL=0.053]	25.8 J [MDL=0.053]	19.2 J [MDL=0.059]	11 J [MDL=0.055]	10.8 J [MDL=0.052]	15.7 J [MDL=0.054]
BERYLLIUM	4.5 [MDL=0.057]	1.9 [MDL=0.054]	1.6 J [MDL=0.054]	3.9 J [MDL=0.06]	4.5 J [MDL=0.056]	2.8 J [MDL=0.054]	3.7 J [MDL=0.055]
CADMIUM	0.025 J [MDL=0.0095]	0.4 L [MDL=0.009]	0.15 K [MDL=0.0089]	0.041 J [MDL=0.01]	0.067 J [MDL=0.0093]	0.078 J [MDL=0.0089]	0.091 J [MDL=0.0091]
CHROMIUM	38.8 [MDL=0.049]	18.6 [MDL=0.046]	17.7 J [MDL=0.046]	26.4 J [MDL=0.051]	34.2 J [MDL=0.048]	28.9 J [MDL=0.046]	27.8 J [MDL=0.047]
COBALT	8.2 [MDL=0.0046]	27.5 [MDL=0.0044]	23.6 [MDL=0.0043]	6.2 [MDL=0.0049]	12.4 [MDL=0.0045]	7.5 [MDL=0.0043]	11.7 [MDL=0.0044]
COPPER	21.9 J [MDL=0.053]	21.6 J [MDL=0.05]	20.3 [MDL=0.049]	23.3 [MDL=0.055]	20.3 [MDL=0.051]	10.5 [MDL=0.049]	15.4 [MDL=0.05]
IRON	51100 J [MDL=1.2]	21500 J [MDL=1.2]	24200 J [MDL=1.1]	40500 J [MDL=1.3]	72900 J [MDL=11.9]	33800 J [MDL=1.1]	21700 J [MDL=1.2]
LEAD	8 J [MDL=0.016]	21.4 J [MDL=0.015]	13.1 [MDL=0.015]	9.1 [MDL=0.017]	6.8 [MDL=0.015]	12.3 [MDL=0.015]	8.2 [MDL=0.015]
MANGANESE	89 J [MDL=0.057]	70.5 J [MDL=0.054]	111 [MDL=0.054]	66.1 [MDL=0.06]	43.4 [MDL=0.056]	20.4 [MDL=0.054]	15.9 [MDL=0.055]
MERCURY	0.018 U [MDL=0.018]	0.48 K [MDL=0.017]	0.096 J [MDL=0.017]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.018 U [MDL=0.018]
MOLYBDENUM	0.93 [MDL=0.077]	0.45 [MDL=0.073]	0.4 [MDL=0.072]	0.72 [MDL=0.081]	1 [MDL=0.075]	0.78 [MDL=0.072]	0.31 [MDL=0.074]
NICKEL	34 J [MDL=0.026]	40.6 J [MDL=0.024]	30 J [MDL=0.024]	22.3 J [MDL=0.027]	51.2 J [MDL=0.025]	16.1 J [MDL=0.024]	25 J [MDL=0.025]
SELENIUM	1.2 L [MDL=0.11]	2.3 L [MDL=0.1]	1.4 L [MDL=0.1]	1.1 J [MDL=0.12]	1.7 L [MDL=0.11]	1.5 L [MDL=0.1]	1.6 L [MDL=0.11]
SILVER	0.02 U [MDL=0.02]	0.28 K [MDL=0.019]	0.14 J [MDL=0.018]	0.02 UJ [MDL=0.02]	0.019 UJ [MDL=0.019]	0.018 UJ [MDL=0.018]	0.019 UJ [MDL=0.019]
THALLIUM	0.079 J [MDL=0.016]	0.054 J [MDL=0.015]	0.076 B [MDL=0.015]	0.099 B [MDL=0.017]	0.064 B [MDL=0.015]	0.056 B [MDL=0.015]	0.11 J [MDL=0.015]
VANADIUM	50.6 [MDL=0.05]	29.2 [MDL=0.048]	32.1 [MDL=0.047]	42.5 [MDL=0.053]	88.5 [MDL=0.049]	66.9 [MDL=0.047]	54.8 [MDL=0.048]
ZINC	38.8 J [MDL=0.24]	139 J [MDL=0.23]	49.5 [MDL=0.23]	37.8 [MDL=0.26]	57.5 [MDL=0.24]	27.2 [MDL=0.23]	45.3 [MDL=0.23]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.51 J [MDL=0.35]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
1,4-DIOXANE	27 U [MDL=27]	26 U [MDL=26]	50 U [MDL=50]	28 U [MDL=28]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	11 U [MDL=11]	22 U [MDL=22]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	31 U [MDL=31]	29 U [MDL=29]	57 U [MDL=57]	32 U [MDL=32]	30 U [MDL=30]	29 U [MDL=29]	29 U [MDL=29]
2,4,6-TRICHLOROPHENOL	98 U [MDL=98]	93 U [MDL=93]	180 U [MDL=180]	100 U [MDL=100]	95 U [MDL=95]	91 U [MDL=91]	93 U [MDL=93]
2,4-DICHLOROPHENOL	24 U [MDL=24]	23 U [MDL=23]	46 U [MDL=46]	26 U [MDL=26]	24 U [MDL=24]	23 U [MDL=23]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	23 U [MDL=23]	46 U [MDL=46]	26 U [MDL=26]	24 U [MDL=24]	23 U [MDL=23]	23 U [MDL=23]
2,4-DINITROPHENOL	98 U [MDL=98]	93 U [MDL=93]	180 U [MDL=180]	100 U [MDL=100]	95 U [MDL=95]	91 U [MDL=91]	93 U [MDL=93]
2,4-DINITROTOLUENE	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
2,6-DINITROTOLUENE	26 U [MDL=26]	24 U [MDL=24]	48 U [MDL=48]	27 U [MDL=27]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]
2-CHLORONAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	7.5 U [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
2-CHLOROPHENOL	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	98 U [MDL=98]	93 U [MDL=93]	180 U [MDL=180]	100 U [MDL=100]	95 U [MDL=95]	91 U [MDL=91]	93 U [MDL=93]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	21 U [MDL=21]	12 U [MDL=12]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]
2-NITROPHENOL	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	21 U [MDL=21]	41 U [MDL=41]	23 U [MDL=23]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]
3-NITROANILINE	20 U [MDL=20]	19 U [MDL=19]	37 U [MDL=37]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	98 U [MDL=98]	93 U [MDL=93]	180 U [MDL=180]	100 U [MDL=100]	95 U [MDL=95]	91 U [MDL=91]	93 U [MDL=93]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	30 U [MDL=30]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	24 U [MDL=24]	48 U [MDL=48]	27 U [MDL=27]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]
4-CHLOROANILINE	21 U [MDL=21]	20 U [MDL=20]	39 U [MDL=39]	22 U [MDL=22]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	30 U [MDL=30]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
4-METHYLPHENOL	98 U [MDL=98]	93 U [MDL=93]	180 U [MDL=180]	100 U [MDL=100]	95 U [MDL=95]	91 U [MDL=91]	93 U [MDL=93]
4-NITROANILINE	32 U [MDL=32]	30 U [MDL=30]	59 U [MDL=59]	33 U [MDL=33]	31 U [MDL=31]	30 U [MDL=30]	30 U [MDL=30]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-787 D-SB-787-07 9/3/2010	SB-787 D-SS-787-01 9/3/2010	SB-787 D-SB-787-03 9/8/2010	SB-787 D-SB-787-05 9/8/2010	SB-787 D-SB-787-09 9/8/2010	SB-787 D-SB-787-11 9/8/2010	SB-787 D-SB-787-13 9/8/2010
4-NITROPHENOL	98 U [MDL=98]	93 U [MDL=93]	180 U [MDL=180]	100 U [MDL=100]	95 U [MDL=95]	91 U [MDL=91]	93 U [MDL=93]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	21 U [MDL=21]	12 U [MDL=12]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	21 U [MDL=21]	12 U [MDL=12]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	15 U [MDL=15]	14 U [MDL=14]	27 U [MDL=27]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	26 U [MDL=26]	50 U [MDL=50]	28 U [MDL=28]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	4.6 U [MDL=4.6]	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	22 U [MDL=22]	43 U [MDL=43]	24 U [MDL=24]	23 U [MDL=23]	22 U [MDL=22]	22 U [MDL=22]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	12 U [MDL=12]	23 U [MDL=23]	13 U [MDL=13]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]
CAPROLACTAM	45 U [MDL=45]	43 U [MDL=43]	84 U [MDL=84]	47 U [MDL=47]	44 U [MDL=44]	42 U [MDL=42]	43 U [MDL=43]
CARBAZOLE	33 U [MDL=33]	31 U [MDL=31]	180 [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	4 U [MDL=4]	3.8 U [MDL=3.8]	120 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
DIETHYL PHTHALATE	20 U [MDL=20]	19 U [MDL=19]	37 U [MDL=37]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
DIMETHYL PHTHALATE	21 U [MDL=21]	20 U [MDL=20]	39 U [MDL=39]	22 U [MDL=22]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	17 U [MDL=17]	34 U [MDL=34]	19 U [MDL=19]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	4.8 U [MDL=4.8]	2.7 U [MDL=2.7]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
HEXACHLOROCYCLOPENTADIENE	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
HEXACHLOROETHANE	11 U [MDL=11]	10 U [MDL=10]	21 U [MDL=21]	12 U [MDL=12]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	15 U [MDL=15]	30 U [MDL=30]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	5 U [MDL=5]	2.8 U [MDL=2.8]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	19 U [MDL=19]	37 U [MDL=37]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	24 U [MDL=24]	48 U [MDL=48]	27 U [MDL=27]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]
PENTACHLOROPHENOL	98 U [MDL=98]	93 U [MDL=93]	180 U [MDL=180]	100 U [MDL=100]	95 U [MDL=95]	91 U [MDL=91]	93 U [MDL=93]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	33 U [MDL=33]	31 U [MDL=31]	62 U [MDL=62]	35 U [MDL=35]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.55 U [MDL=0.55]	0.57 U [MDL=0.57]	0.48 U [MDL=0.48]	0.58 U [MDL=0.58]	0.53 U [MDL=0.53]	0.5 U [MDL=0.5]	0.52 U [MDL=0.52]
1,1,1-TRICHLOROETHANE	0.5 U [MDL=0.5]	0.51 U [MDL=0.51]	0.43 U [MDL=0.43]	0.52 U [MDL=0.52]	0.48 U [MDL=0.48]	0.45 U [MDL=0.45]	0.47 U [MDL=0.47]
1,1,2,2-TETRACHLOROETHANE	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1 U [MDL=1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-787	SB-787	SB-787	SB-787	SB-787	SB-787	SB-787
SAMPLE ID	D-SB-787-07	D-SS-787-01	D-SB-787-03	D-SB-787-05	D-SB-787-09	D-SB-787-11	D-SB-787-13
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
1,1-DICHLOROETHANE	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,1-DICHLOROETHENE	0.46 U [MDL=0.46]	0.48 U [MDL=0.48]	0.4 U [MDL=0.4]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]
1,1-DICHLOROPROPENE	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.28 U [MDL=0.28]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]
1,2,3-TRICHLOROBENZENE	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.3 U [MDL=0.3]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]
1,2,3-TRICHLOROPROPANE	0.8 U [MDL=0.8]	0.82 U [MDL=0.82]	0.7 U [MDL=0.7]	0.84 U [MDL=0.84]	0.77 U [MDL=0.77]	0.73 U [MDL=0.73]	0.76 U [MDL=0.76]
1,2,3-TRIMETHYLBENZENE	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.13 U [MDL=0.13]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]
1,2,4-TRICHLOROBENZENE	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]
1,2,4-TRIMETHYLBENZENE	0.58 U [MDL=0.58]	0.6 U [MDL=0.6]	0.5 U [MDL=0.5]	0.61 U [MDL=0.61]	0.56 U [MDL=0.56]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]
1,2-DIBROMO-3-CHLOROPROPANE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1 U [MDL=1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
1,2-DIBROMOETHANE	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.39 U [MDL=0.39]	0.47 U [MDL=0.47]	0.43 U [MDL=0.43]	0.41 U [MDL=0.41]	0.42 U [MDL=0.42]
1,2-DICHLOROBENZENE	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,2-DICHLOROETHANE	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
1,2-DICHLOROPROPANE	0.62 U [MDL=0.62]	0.63 U [MDL=0.63]	0.54 U [MDL=0.54]	0.65 U [MDL=0.65]	0.59 U [MDL=0.59]	0.56 U [MDL=0.56]	0.58 U [MDL=0.58]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
1,3-DICHLOROPROPANE	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
1,4-DICHLOROBENZENE	0.59 U [MDL=0.59]	0.6 U [MDL=0.6]	0.51 U [MDL=0.51]	0.62 U [MDL=0.62]	0.57 U [MDL=0.57]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.84 U [MDL=0.84]	0.86 U [MDL=0.86]	0.73 U [MDL=0.73]	0.88 U [MDL=0.88]	0.81 U [MDL=0.81]	0.76 U [MDL=0.76]	0.79 U [MDL=0.79]
2-BUTANONE	1.9 B [MDL=1.2]	2.8 B [MDL=1.3]	5.6 J [MDL=1.1]	6.1 J [MDL=1.3]	2.5 J [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
2-CHLOROTOLUENE	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]
2-HEXANONE	0.56 U [MDL=0.56]	0.58 U [MDL=0.58]	0.49 U [MDL=0.49]	0.59 U [MDL=0.59]	0.54 U [MDL=0.54]	0.51 U [MDL=0.51]	0.53 U [MDL=0.53]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]
4-ISOPROPYLTOLUENE	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.16 U [MDL=0.16]	0.2 U [MDL=0.2]	0.18 U [MDL=0.18]	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]
4-METHYL-2-PENTANONE	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]	0.42 U [MDL=0.42]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]
ACETONE	45 B [MDL=5.6]	17 B [MDL=5.8]	36 B [MDL=4.9]	240 B [MDL=160]	290 [MDL=5.4]	29 B [MDL=5.1]	100 B [MDL=5.3]
BENZENE	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]
BROMOCHLOROMETHANE	0.63 U [MDL=0.63]	0.65 U [MDL=0.65]	0.55 U [MDL=0.55]	0.66 U [MDL=0.66]	0.61 U [MDL=0.61]	0.58 U [MDL=0.58]	0.6 U [MDL=0.6]
BROMODICHLOROMETHANE	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
BROMOFORM	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]
BROMOMETHANE	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]	0.42 U [MDL=0.42]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]
CARBON DISULFIDE	0.84 B [MDL=0.39]	1 B [MDL=0.4]	1.2 B [MDL=0.34]	0.91 B [MDL=0.41]	0.38 U [MDL=0.38]	0.73 B [MDL=0.36]	0.37 U [MDL=0.37]
CARBON TETRACHLORIDE	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]
CHLOROBENZENE	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]
CHLORODIBROMOMETHANE	0.49 U [MDL=0.49]	0.5 U [MDL=0.5]	0.43 U [MDL=0.43]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]
CHLOROETHANE	0.77 U [MDL=0.77]	0.79 U [MDL=0.79]	0.67 U [MDL=0.67]	0.8 U [MDL=0.8]	0.74 U [MDL=0.74]	0.7 U [MDL=0.7]	0.72 U [MDL=0.72]
CHLOROFORM	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
CHLOROMETHANE	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]
CIS-1,2-DICHLOROETHENE	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
CIS-1,3-DICHLOROPROPENE	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.56 U [MDL=0.56]	0.58 U [MDL=0.58]	0.49 U [MDL=0.49]	0.59 U [MDL=0.59]	0.54 U [MDL=0.54]	0.51 U [MDL=0.51]	0.53 U [MDL=0.53]
DICHLORODIFLUOROMETHANE	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.39 U [MDL=0.39]	0.47 U [MDL=0.47]	0.43 U [MDL=0.43]	0.41 U [MDL=0.41]	0.42 U [MDL=0.42]
DIISOPROPYL ETHER	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-787	SB-787	SB-787	SB-787	SB-787	SB-787	SB-787
SAMPLE ID	D-SB-787-07	D-SS-787-01	D-SB-787-03	D-SB-787-05	D-SB-787-09	D-SB-787-11	D-SB-787-13
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]
ETHYLBENZENE	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]
HEXACHLOROBUTADIENE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.93 U [MDL=0.93]	1.1 U [MDL=1.1]	1 U [MDL=1]	0.97 U [MDL=0.97]	1 U [MDL=1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.12 U [MDL=0.12]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]
M+P-XYLENES	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.93 U [MDL=0.93]	1.1 U [MDL=1.1]	1 U [MDL=1]	0.97 U [MDL=0.97]	1 U [MDL=1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.38 U [MDL=0.38]	0.39 U [MDL=0.39]	0.33 UJ [MDL=0.33]	0.4 UJ [MDL=0.4]	0.37 UJ [MDL=0.37]	0.35 UJ [MDL=0.35]	0.36 UJ [MDL=0.36]
METHYLENE CHLORIDE	3.1 B [MDL=0.6]	2.8 B [MDL=0.61]	0.52 U [MDL=0.52]	0.63 U [MDL=0.63]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]
NAPHTHALENE	0.92 B [MDL=0.17]	1.7 B [MDL=0.17]	0.99 B [MDL=0.15]	0.92 B [MDL=0.18]	0.78 B [MDL=0.16]	0.76 B [MDL=0.15]	0.77 B [MDL=0.16]
N-BUTYLBENZENE	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]
N-PROPYLBENZENE	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]
O-XYLENE	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
SEC-BUTYLBENZENE	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]
STYRENE	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.12 U [MDL=0.12]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.29 UJ [MDL=0.29]	0.35 UJ [MDL=0.35]	0.32 UJ [MDL=0.32]	0.3 UJ [MDL=0.3]	0.31 UJ [MDL=0.31]
TERT-BUTYLBENZENE	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
TERTIARY-BUTYL ALCOHOL	47 B [MDL=6.8]	48 B [MDL=7]	42 B [MDL=5.9]	56 B [MDL=7.1]	48 B [MDL=6.5]	6.2 UR [MDL=6.2]	45 B [MDL=6.4]
TETRACHLOROETHENE	0.46 U [MDL=0.46]	0.48 U [MDL=0.48]	0.4 U [MDL=0.4]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]
TOLUENE	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.26 J [MDL=0.21]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]
TOTAL XYLENES	0.6 U [MDL=0.6]	0.61 U [MDL=0.61]	0.52 U [MDL=0.52]	0.63 U [MDL=0.63]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]
TRANS-1,2-DICHLOROETHENE	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]
TRANS-1,3-DICHLOROPROPENE	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]	0.42 U [MDL=0.42]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]
TRICHLOROETHENE	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.39 U [MDL=0.39]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]
TRICHLOROFLUOROMETHANE	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
VINYL ACETATE	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]
VINYL CHLORIDE	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.3 U [MDL=0.3]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	50 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
ACENAPHTHENE	4 U [MDL=4]	11 [MDL=3.8]	230 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
ACENAPHTHYLENE	4 U [MDL=4]	3.8 U [MDL=3.8]	7.5 U [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
ANTHRACENE	4 U [MDL=4]	20 [MDL=3.8]	430 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
BAP EQUIVALENT-HALFND	4 U [MDL=NaN]	72.364 [MDL=NaN]	771.78 [MDL=NaN]	4.2 U [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-POS	4 U [MDL=NaN]	72.364 [MDL=NaN]	771.78 [MDL=NaN]	4.2 U [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	4 U [MDL=4]	49 [MDL=3.8]	720 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
BENZO(A)PYRENE	4 U [MDL=4]	40 [MDL=3.8]	520 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
BENZO(B)FLUORANTHENE	4 U [MDL=4]	58 [MDL=3.8]	680 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
BENZO(G,H,I)PERYLENE	4 U [MDL=4]	26 [MDL=3.8]	250 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
BENZO(K)FLUORANTHENE	4 U [MDL=4]	22 [MDL=3.8]	310 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
CHRYSENE	1.3 U [MDL=1.3]	44 [MDL=1.3]	680 [MDL=2.5]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	4 U [MDL=4]	19 [MDL=3.8]	85 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
FLUORANTHENE	4 U [MDL=4]	93 [MDL=3.8]	1700 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
FLUORENE	4 U [MDL=4]	9.8 [MDL=3.8]	230 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
INDENO(1,2,3-CD)PYRENE	4 U [MDL=4]	24 [MDL=3.8]	230 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
NAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	75 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
PHENANTHRENE	4 U [MDL=4]	53 [MDL=3.8]	1600 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]
PYRENE	4 U [MDL=4]	73 [MDL=3.8]	1100 [MDL=7.5]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-787 D-SB-787-07 9/3/2010	SB-787 D-SS-787-01 9/3/2010	SB-787 D-SB-787-03 9/8/2010	SB-787 D-SB-787-05 9/8/2010	SB-787 D-SB-787-09 9/8/2010	SB-787 D-SB-787-11 9/8/2010	SB-787 D-SB-787-13 9/8/2010
TOTAL PAHS	0 U [MDL=NaN]	541.8 [MDL=NaN]	8890 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	24 U [MDL=24]	24 U [MDL=24]	27 U [MDL=27]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]
AROCLOR-1221	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]	18 U [MDL=18]	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	22 U [MDL=22]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
AROCLOR-1254	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	22 U [MDL=22]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
AROCLOR-1260	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	22 U [MDL=22]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.76 U [MDL=0.76]	0.72 U [MDL=0.72]	0.71 UJ [MDL=0.71]	0.79 UJ [MDL=0.79]	0.74 UJ [MDL=0.74]	0.71 UJ [MDL=0.71]	0.72 UJ [MDL=0.72]
4,4'-DDE	0.48 UJ [MDL=0.48]	0.45 UJ [MDL=0.45]	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]
4,4'-DDT	0.77 U [MDL=0.77]	0.73 U [MDL=0.73]	0.72 UJ [MDL=0.72]	0.81 UJ [MDL=0.81]	0.75 UJ [MDL=0.75]	0.72 UJ [MDL=0.72]	0.74 UJ [MDL=0.74]
ALDRIN	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
ALPHA-BHC	0.89 UJ [MDL=0.89]	0.85 UJ [MDL=0.85]	0.83 U [MDL=0.83]	0.94 U [MDL=0.94]	0.87 U [MDL=0.87]	0.83 U [MDL=0.83]	0.85 U [MDL=0.85]
ALPHA-CHLORDANE	1.1 UJ [MDL=1.1]	1.1 UJ [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
BETA-BHC	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DELTA-BHC	1.5 UJ [MDL=1.5]	1.4 UJ [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
DIELDRIN	0.57 UJ [MDL=0.57]	0.54 UJ [MDL=0.54]	0.54 U [MDL=0.54]	0.6 U [MDL=0.6]	0.56 U [MDL=0.56]	0.54 U [MDL=0.54]	0.55 U [MDL=0.55]
ENDOSULFAN I	0.64 UJ [MDL=0.64]	0.6 UJ [MDL=0.6]	0.59 U [MDL=0.59]	0.67 U [MDL=0.67]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]
ENDOSULFAN II	1 U [MDL=1]	0.95 U [MDL=0.95]	0.94 U [MDL=0.94]	1.1 U [MDL=1.1]	0.98 U [MDL=0.98]	0.94 U [MDL=0.94]	0.96 U [MDL=0.96]
ENDOSULFAN SULFATE	1.1 U [MDL=1.1]	1 U [MDL=1]	0.99 U [MDL=0.99]	1.1 U [MDL=1.1]	1 U [MDL=1]	0.99 U [MDL=0.99]	1 U [MDL=1]
ENDRIN	0.61 UJ [MDL=0.61]	0.58 UJ [MDL=0.58]	0.57 U [MDL=0.57]	0.64 U [MDL=0.64]	0.59 U [MDL=0.59]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.77 U [MDL=0.77]	0.73 U [MDL=0.73]	0.72 U [MDL=0.72]	0.81 U [MDL=0.81]	0.75 U [MDL=0.75]	0.72 U [MDL=0.72]	0.74 U [MDL=0.74]
GAMMA-BHC (LINDANE)	0.9 UJ [MDL=0.9]	0.86 UJ [MDL=0.86]	0.84 U [MDL=0.84]	0.95 U [MDL=0.95]	0.88 U [MDL=0.88]	0.84 U [MDL=0.84]	0.86 U [MDL=0.86]
GAMMA-CHLORDANE	0.51 UJ [MDL=0.51]	0.49 UJ [MDL=0.49]	0.48 U [MDL=0.48]	0.54 U [MDL=0.54]	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]
HEPTACHLOR	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-787	SB-787	SB-787	SB-787	SB-787	SB-787	SB-787
SAMPLE ID	D-SB-787-07	D-SS-787-01	D-SB-787-03	D-SB-787-05	D-SB-787-09	D-SB-787-11	D-SB-787-13
SAMPLE DATE	9/3/2010	9/3/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
HEPTACHLOR EPOXIDE	0.98 UJ [MDL=0.98]	0.93 UJ [MDL=0.93]	0.91 U [MDL=0.91]	1 U [MDL=1]	0.95 U [MDL=0.95]	0.91 U [MDL=0.91]	0.93 U [MDL=0.93]
METHOXYCHLOR	1.8 U [MDL=1.8]	1.7 U [MDL=1.7]	1.7 U [MDL=1.7]	1.9 U [MDL=1.9]	1.8 U [MDL=1.8]	1.7 U [MDL=1.7]	1.8 U [MDL=1.8]
TOXAPHENE	23 U [MDL=23]	22 U [MDL=22]	22 UJ [MDL=22]	24 UJ [MDL=24]	23 UJ [MDL=23]	22 UJ [MDL=22]	22 UJ [MDL=22]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3400 U [MDL=3.4]	59000 [MDL=3.2]	81000 [MDL=6.4]	9000 J [MDL=3.6]	3300 UJ [MDL=3.3]	3200 UJ [MDL=3.2]	3300 UJ [MDL=3.3]
GASOLINE RANGE ORGANICS	56 U [MDL=56]	53 U [MDL=53]	53 U [MDL=53]	59 U [MDL=59]	55 U [MDL=55]	52 U [MDL=52]	54 U [MDL=54]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-787	SB-788	SB-788	SB-788	SB-788	SB-788	SB-788
SAMPLE ID	D-SB-787-15	D-SB-788-03	D-SB-788-05	D-SB-788-07	D-SB-788-09	D-SB-788-11	D-SB-788-13
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
METALS (MG/KG)							
ANTIMONY	0.027 UL [MDL=0.027]	0.14 UJ [MDL=0.14]	0.16 J [MDL=0.03]	0.11 J [MDL=0.03]	0.15 J [MDL=0.029]	0.43 J [MDL=0.029]	0.31 J [MDL=0.03]
ARSENIC	1.7 L [MDL=0.07]	1.9 [MDL=0.071]	5 [MDL=0.076]	2.8 [MDL=0.077]	4.8 [MDL=0.076]	5.6 [MDL=0.075]	7.5 [MDL=0.077]
BARIUM	10.7 J [MDL=0.052]	25.4 [MDL=0.26]	9.1 [MDL=0.057]	21.2 [MDL=0.057]	13.9 [MDL=0.056]	25.2 [MDL=0.055]	10.8 [MDL=0.057]
BERYLLIUM	1.7 J [MDL=0.053]	0.73 [MDL=0.054]	1.7 [MDL=0.058]	2.2 [MDL=0.058]	2.4 [MDL=0.057]	0.057 U [MDL=0.057]	0.058 U [MDL=0.058]
CADMIUM	0.077 J [MDL=0.0088]	1.1 [MDL=0.0089]	0.016 B [MDL=0.0096]	0.018 B [MDL=0.0096]	0.052 J [MDL=0.0095]	0.034 J [MDL=0.0094]	0.021 B [MDL=0.0097]
CHROMIUM	4.7 J [MDL=0.045]	8.8 [MDL=0.046]	24.4 [MDL=0.049]	13.8 [MDL=0.049]	19.8 [MDL=0.049]	34 [MDL=0.048]	30.2 [MDL=0.05]
COBALT	4.8 [MDL=0.0043]	6.1 [MDL=0.0043]	4 [MDL=0.0047]	4.1 [MDL=0.0047]	4.2 [MDL=0.0046]	12.3 [MDL=0.0046]	5.1 [MDL=0.0047]
COPPER	5 [MDL=0.048]	17.2 L [MDL=0.049]	19.1 L [MDL=0.053]	19.4 L [MDL=0.053]	20.2 L [MDL=0.053]	22.5 L [MDL=0.052]	24 L [MDL=0.053]
IRON	1020 J [MDL=1.1]	5730 [MDL=1.1]	28800 [MDL=1.2]	8690 [MDL=1.2]	20800 [MDL=1.2]	49900 [MDL=1.2]	42200 [MDL=1.2]
LEAD	3.5 [MDL=0.015]	30.6 [MDL=0.074]	4.9 [MDL=0.016]	6.2 [MDL=0.016]	5.6 [MDL=0.016]	9.8 [MDL=0.016]	6.4 [MDL=0.016]
MANGANESE	6.9 [MDL=0.053]	17 [MDL=0.054]	22.5 [MDL=0.058]	10.2 [MDL=0.058]	17.8 [MDL=0.057]	104 [MDL=0.057]	38.8 [MDL=0.058]
MERCURY	0.017 U [MDL=0.017]	0.6 [MDL=0.017]	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]
MOLYBDENUM	0.18 J [MDL=0.071]	0.16 J [MDL=0.072]	0.5 [MDL=0.077]	0.53 [MDL=0.078]	0.56 [MDL=0.077]	0.77 [MDL=0.076]	0.77 [MDL=0.078]
NICKEL	9.1 J [MDL=0.024]	11.1 [MDL=0.024]	12.2 [MDL=0.026]	7.6 [MDL=0.026]	9.2 [MDL=0.026]	37.6 [MDL=0.025]	16.9 [MDL=0.026]
SELENIUM	1.8 L [MDL=0.1]	1.3 J [MDL=0.1]	0.5 J [MDL=0.11]	1.5 J [MDL=0.11]	1.1 J [MDL=0.11]	1.8 J [MDL=0.11]	0.6 J [MDL=0.11]
SILVER	0.026 J [MDL=0.018]	0.65 [MDL=0.018]	0.02 U [MDL=0.02]	0.02 U [MDL=0.02]	0.02 U [MDL=0.02]	0.019 U [MDL=0.019]	0.02 U [MDL=0.02]
THALLIUM	0.07 B [MDL=0.015]	0.074 U [MDL=0.074]	0.04 B [MDL=0.016]	0.12 B [MDL=0.016]	0.073 B [MDL=0.016]	0.15 J [MDL=0.016]	0.052 J [MDL=0.016]
VANADIUM	6 [MDL=0.046]	13.1 [MDL=0.047]	49.8 [MDL=0.05]	37.9 [MDL=0.051]	41.1 [MDL=0.05]	40 [MDL=0.049]	64.7 [MDL=0.051]
ZINC	23.5 [MDL=0.22]	205 J [MDL=0.23]	26.7 J [MDL=0.25]	24.2 J [MDL=0.25]	32 J [MDL=0.24]	70.5 J [MDL=0.24]	26.5 J [MDL=0.25]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.32 J [MDL=0.3]	1.1 [MDL=0.31]	0.51 J [MDL=0.33]	0.58 J [MDL=0.33]	0.63 J [MDL=0.33]	0.32 U [MDL=0.32]	0.79 J [MDL=0.33]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
1,4-DIOXANE	25 U [MDL=25]	25 U [MDL=25]	27 U [MDL=27]	27 U [MDL=27]	27 U [MDL=27]	26 U [MDL=26]	27 U [MDL=27]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]
2,4,5-TRICHLOROPHENOL	28 U [MDL=28]	29 U [MDL=29]	31 U [MDL=31]	31 U [MDL=31]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]
2,4,6-TRICHLOROPHENOL	90 U [MDL=90]	91 U [MDL=91]	98 U [MDL=98]	99 U [MDL=99]	98 U [MDL=98]	96 U [MDL=96]	99 U [MDL=99]
2,4-DICHLOROPHENOL	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]
2,4-DIMETHYLPHENOL	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]
2,4-DINITROPHENOL	90 U [MDL=90]	91 U [MDL=91]	98 U [MDL=98]	99 U [MDL=99]	98 U [MDL=98]	96 U [MDL=96]	99 U [MDL=99]
2,4-DINITROTOLUENE	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
2,6-DINITROTOLUENE	24 U [MDL=24]	24 U [MDL=24]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]
2-CHLORONAPHTHALENE	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
2-CHLOROPHENOL	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	90 U [MDL=90]	91 U [MDL=91]	98 U [MDL=98]	99 U [MDL=99]	98 U [MDL=98]	96 U [MDL=96]	99 U [MDL=99]
2-NITROANILINE	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	20 U [MDL=20]	21 U [MDL=21]	22 U [MDL=22]	22 U [MDL=22]	22 U [MDL=22]	22 U [MDL=22]	22 U [MDL=22]
3-NITROANILINE	18 U [MDL=18]	18 U [MDL=18]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
4,6-DINITRO-2-METHYLPHENOL	90 U [MDL=90]	91 U [MDL=91]	98 U [MDL=98]	99 U [MDL=99]	98 U [MDL=98]	96 U [MDL=96]	99 U [MDL=99]
4-BROMOPHENYL PHENYL ETHER	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]
4-CHLORO-3-METHYLPHENOL	24 U [MDL=24]	24 U [MDL=24]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]
4-CHLOROANILINE	19 U [MDL=19]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]
4-CHLOROPHENYL PHENYL ETHER	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]
4-METHYLPHENOL	90 U [MDL=90]	91 U [MDL=91]	98 U [MDL=98]	99 U [MDL=99]	98 U [MDL=98]	96 U [MDL=96]	99 U [MDL=99]
4-NITROANILINE	29 U [MDL=29]	30 U [MDL=30]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-787 D-SB-787-15 9/8/2010	SB-788 D-SB-788-03 9/8/2010	SB-788 D-SB-788-05 9/8/2010	SB-788 D-SB-788-07 9/8/2010	SB-788 D-SB-788-09 9/8/2010	SB-788 D-SB-788-11 9/8/2010	SB-788 D-SB-788-13 9/8/2010
4-NITROPHENOL	90 U [MDL=90]	91 U [MDL=91]	98 U [MDL=98]	99 U [MDL=99]	98 U [MDL=98]	96 U [MDL=96]	99 U [MDL=99]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	13 U [MDL=13]	14 U [MDL=14]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	25 U [MDL=25]	25 U [MDL=25]	27 U [MDL=27]	27 U [MDL=27]	27 U [MDL=27]	26 U [MDL=26]	27 U [MDL=27]
BIS(2-CHLOROETHYL)ETHER	2.2 U [MDL=2.2]	2.3 U [MDL=2.3]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]
BIS(2-ETHYLHEXYL)PHTHALATE	21 U [MDL=21]	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]	24 U [MDL=24]
BUTYL BENZYL PHTHALATE	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	42 U [MDL=42]	42 U [MDL=42]	45 U [MDL=45]	46 U [MDL=46]	45 U [MDL=45]	45 U [MDL=45]	46 U [MDL=46]
CARBAZOLE	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
DIETHYL PHTHALATE	18 U [MDL=18]	18 U [MDL=18]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
DIMETHYL PHTHALATE	19 U [MDL=19]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]
DI-N-BUTYL PHTHALATE	17 U [MDL=17]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	18 U [MDL=18]	18 U [MDL=18]	19 U [MDL=19]
DI-N-OCTYL PHTHALATE	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]
HEXACHLOROBUTADIENE	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
HEXACHLOROCYCLOPENTADIENE	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
HEXACHLOROETHANE	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.7 U [MDL=2.7]	2.7 U [MDL=2.7]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]
N-NITROSODIMETHYLAMINE	18 U [MDL=18]	18 U [MDL=18]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
N-NITROSO-DI-N-PROPYLAMINE	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
N-NITROSODIPHENYLAMINE	24 U [MDL=24]	24 U [MDL=24]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]
PENTACHLOROPHENOL	90 U [MDL=90]	91 U [MDL=91]	98 U [MDL=98]	99 U [MDL=99]	98 U [MDL=98]	96 U [MDL=96]	99 U [MDL=99]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	30 U [MDL=30]	31 U [MDL=31]	33 U [MDL=33]	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	33 U [MDL=33]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.52 U [MDL=0.52]	0.5 U [MDL=0.5]	0.57 U [MDL=0.57]	0.52 U [MDL=0.52]	0.55 U [MDL=0.55]	0.72 U [MDL=0.72]	0.61 U [MDL=0.61]
1,1,1-TRICHLOROETHANE	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.52 U [MDL=0.52]	0.47 U [MDL=0.47]	0.49 U [MDL=0.49]	0.65 U [MDL=0.65]	0.55 U [MDL=0.55]
1,1,2,2-TETRACHLOROETHANE	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U [MDL=1.1]	1 U [MDL=1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-787	SB-788	SB-788	SB-788	SB-788	SB-788	SB-788
SAMPLE ID	D-SB-787-15	D-SB-788-03	D-SB-788-05	D-SB-788-07	D-SB-788-09	D-SB-788-11	D-SB-788-13
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
1,1-DICHLOROETHANE	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]
1,1-DICHLOROETHENE	0.44 U [MDL=0.44]	0.42 U [MDL=0.42]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.61 U [MDL=0.61]	0.51 U [MDL=0.51]
1,1-DICHLOROPROPENE	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]
1,2,3-TRICHLOROBENZENE	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.44 U [MDL=0.44]	0.37 U [MDL=0.37]
1,2,3-TRICHLOROPROPANE	0.76 U [MDL=0.76]	0.72 U [MDL=0.72]	0.83 U [MDL=0.83]	0.76 U [MDL=0.76]	0.79 U [MDL=0.79]	1.1 U [MDL=1.1]	0.88 U [MDL=0.88]
1,2,3-TRIMETHYLBENZENE	0.14 U [MDL=0.14]	0.15 J [MDL=0.14]	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.2 U [MDL=0.2]	0.17 U [MDL=0.17]
1,2,4-TRICHLOROBENZENE	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.26 U [MDL=0.26]
1,2,4-TRIMETHYLBENZENE	0.55 U [MDL=0.55]	0.52 U [MDL=0.52]	0.6 U [MDL=0.6]	0.55 U [MDL=0.55]	0.57 U [MDL=0.57]	0.76 U [MDL=0.76]	0.64 U [MDL=0.64]
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U [MDL=1.1]	1 U [MDL=1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]
1,2-DIBROMOETHANE	0.42 U [MDL=0.42]	0.4 U [MDL=0.4]	0.46 U [MDL=0.46]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]	0.58 U [MDL=0.58]	0.49 U [MDL=0.49]
1,2-DICHLOROBENZENE	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]
1,2-DICHLOROETHANE	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]
1,2-DICHLOROPROPANE	0.58 U [MDL=0.58]	0.55 U [MDL=0.55]	0.64 U [MDL=0.64]	0.58 U [MDL=0.58]	0.61 U [MDL=0.61]	0.81 U [MDL=0.81]	0.68 U [MDL=0.68]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]
1,3-DICHLOROPROPANE	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]
1,4-DICHLOROBENZENE	0.56 U [MDL=0.56]	0.53 U [MDL=0.53]	0.61 U [MDL=0.61]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.77 U [MDL=0.77]	0.65 U [MDL=0.65]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.79 U [MDL=0.79]	0.75 U [MDL=0.75]	0.87 U [MDL=0.87]	0.79 U [MDL=0.79]	0.83 U [MDL=0.83]	1.1 U [MDL=1.1]	0.92 U [MDL=0.92]
2-BUTANONE	1.7 J [MDL=1.2]	19 [MDL=1.1]	4.6 J [MDL=1.3]	1.2 U [MDL=1.2]	6 J [MDL=1.2]	1.6 U [MDL=1.6]	1.9 J [MDL=1.4]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.6 U [MDL=1.6]	1.4 U [MDL=1.4]
2-CHLOROTOLUENE	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.47 U [MDL=0.47]	0.39 U [MDL=0.39]
2-HEXANONE	0.53 U [MDL=0.53]	0.5 U [MDL=0.5]	0.58 U [MDL=0.58]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]	0.74 U [MDL=0.74]	0.62 U [MDL=0.62]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.38 U [MDL=0.38]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.48 U [MDL=0.48]	0.4 U [MDL=0.4]
4-ISOPROPYLTOLUENE	0.18 U [MDL=0.18]	0.85 J [MDL=0.17]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]
4-METHYL-2-PENTANONE	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.5 U [MDL=0.5]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.63 U [MDL=0.63]	0.53 U [MDL=0.53]
ACETONE	200 B [MDL=140]	110 B [MDL=5]	120 B [MDL=5.8]	23 B [MDL=5.3]	130 B [MDL=5.5]	18 B [MDL=7.4]	22 B [MDL=6.2]
BENZENE	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.28 U [MDL=0.28]	0.26 U [MDL=0.26]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]
BROMOCHLOROMETHANE	0.6 U [MDL=0.6]	0.57 U [MDL=0.57]	0.65 U [MDL=0.65]	0.6 U [MDL=0.6]	0.62 U [MDL=0.62]	0.83 U [MDL=0.83]	0.7 U [MDL=0.7]
BROMODICHLOROMETHANE	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.33 U [MDL=0.33]	0.27 U [MDL=0.27]
BROMOFORM	0.28 U [MDL=0.28]	0.26 U [MDL=0.26]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]
BROMOMETHANE	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.5 U [MDL=0.5]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.63 U [MDL=0.63]	0.53 U [MDL=0.53]
CARBON DISULFIDE	0.78 B [MDL=0.37]	1 B [MDL=0.35]	0.97 B [MDL=0.41]	0.81 B [MDL=0.37]	1.5 B [MDL=0.39]	1.1 B [MDL=0.51]	1.1 B [MDL=0.43]
CARBON TETRACHLORIDE	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.43 U [MDL=0.43]	0.36 U [MDL=0.36]
CHLOROBENZENE	0.28 U [MDL=0.28]	0.26 U [MDL=0.26]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]
CHLORODIBROMOMETHANE	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.51 U [MDL=0.51]	0.46 U [MDL=0.46]	0.48 U [MDL=0.48]	0.64 U [MDL=0.64]	0.54 U [MDL=0.54]
CHLOROETHANE	0.73 U [MDL=0.73]	0.69 U [MDL=0.69]	0.79 U [MDL=0.79]	0.72 U [MDL=0.72]	0.76 U [MDL=0.76]	1 U [MDL=1]	0.84 U [MDL=0.84]
CHLOROFORM	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]
CHLOROMETHANE	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.38 U [MDL=0.38]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.48 U [MDL=0.48]	0.4 U [MDL=0.4]
CIS-1,2-DICHLOROETHENE	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]
CIS-1,3-DICHLOROPROPENE	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.53 U [MDL=0.53]	0.5 U [MDL=0.5]	0.58 U [MDL=0.58]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]	0.74 U [MDL=0.74]	0.62 U [MDL=0.62]
DICHLORODIFLUOROMETHANE	0.42 U [MDL=0.42]	0.4 U [MDL=0.4]	0.46 U [MDL=0.46]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]	0.58 U [MDL=0.58]	0.49 U [MDL=0.49]
DIISOPROPYL ETHER	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.8 U [MDL=1.8]	1.5 U [MDL=1.5]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-787 D-SB-787-15 9/8/2010	SB-788 D-SB-788-03 9/8/2010	SB-788 D-SB-788-05 9/8/2010	SB-788 D-SB-788-07 9/8/2010	SB-788 D-SB-788-09 9/8/2010	SB-788 D-SB-788-11 9/8/2010	SB-788 D-SB-788-13 9/8/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.26 U [MDL=0.26]	0.22 U [MDL=0.22]
ETHYLBENZENE	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.3 U [MDL=0.3]	0.25 U [MDL=0.25]
HEXACHLOROBUTADIENE	1 U [MDL=1]	0.96 U [MDL=0.96]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.15 U [MDL=0.15]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.19 U [MDL=0.19]	0.16 U [MDL=0.16]
M+P-XYLENES	1 U [MDL=1]	0.96 U [MDL=0.96]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.36 UJ [MDL=0.36]	0.34 UJ [MDL=0.34]	0.4 UJ [MDL=0.4]	0.36 UJ [MDL=0.36]	0.38 UJ [MDL=0.38]	0.5 UJ [MDL=0.5]	0.42 UJ [MDL=0.42]
METHYLENE CHLORIDE	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.62 U [MDL=0.62]	0.56 U [MDL=0.56]	0.6 B [MDL=0.59]	0.78 U [MDL=0.78]	0.66 U [MDL=0.66]
NAPHTHALENE	0.76 B [MDL=0.16]	6 B [MDL=0.15]	0.85 B [MDL=0.18]	0.75 B [MDL=0.16]	0.8 B [MDL=0.17]	1.1 B [MDL=0.22]	0.87 B [MDL=0.19]
N-BUTYLBENZENE	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]
N-PROPYLBENZENE	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.47 U [MDL=0.47]	0.39 U [MDL=0.39]
O-XYLENE	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]
SEC-BUTYLBENZENE	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.21 U [MDL=0.21]	0.18 U [MDL=0.18]
STYRENE	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.18 U [MDL=0.18]	0.15 U [MDL=0.15]
TERT-AMYL METHYL ETHER	0.31 UJ [MDL=0.31]	0.3 UJ [MDL=0.3]	0.34 UJ [MDL=0.34]	0.31 UJ [MDL=0.31]	0.33 UJ [MDL=0.33]	0.43 UJ [MDL=0.43]	0.36 UJ [MDL=0.36]
TERT-BUTYLBENZENE	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]
TERTIARY-BUTYL ALCOHOL	45 B [MDL=6.4]	6.1 UR [MDL=6.1]	49 B [MDL=7]	44 B [MDL=6.4]	6.7 UR [MDL=6.7]	8.9 UR [MDL=8.9]	52 B [MDL=7.4]
TETRACHLOROETHENE	0.44 U [MDL=0.44]	0.42 U [MDL=0.42]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.61 U [MDL=0.61]	0.51 U [MDL=0.51]
TOLUENE	0.23 U [MDL=0.23]	0.69 J [MDL=0.22]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.43 J [MDL=0.32]	0.4 J [MDL=0.26]
TOTAL XYLENES	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.62 U [MDL=0.62]	0.56 U [MDL=0.56]	0.59 U [MDL=0.59]	0.78 U [MDL=0.78]	0.66 U [MDL=0.66]
TRANS-1,2-DICHLOROETHENE	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.38 U [MDL=0.38]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.48 U [MDL=0.48]	0.4 U [MDL=0.4]
TRANS-1,3-DICHLOROPROPENE	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.5 U [MDL=0.5]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.63 U [MDL=0.63]	0.53 U [MDL=0.53]
TRICHLOROETHENE	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.39 U [MDL=0.39]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.49 U [MDL=0.49]	0.41 U [MDL=0.41]
TRICHLOROFLUOROMETHANE	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]
VINYL ACETATE	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.29 U [MDL=0.29]	0.24 U [MDL=0.24]
VINYL CHLORIDE	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.46 U [MDL=0.46]	0.38 U [MDL=0.38]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	3.7 U [MDL=3.7]	7.9 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
ACENAPHTHENE	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
ACENAPHTHYLENE	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
ANTHRACENE	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
BAP EQUIVALENT-HALFND	3.7 U [MDL=NaN]	52.962 [MDL=NaN]	4.1 U [MDL=NaN]	4.1 U [MDL=NaN]	4 U [MDL=NaN]	4 U [MDL=NaN]	4.1 U [MDL=NaN]
BAP EQUIVALENT-POS	3.7 U [MDL=NaN]	51.062 [MDL=NaN]	4.1 U [MDL=NaN]	4.1 U [MDL=NaN]	4 U [MDL=NaN]	4 U [MDL=NaN]	4.1 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	3.7 U [MDL=3.7]	26 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
BENZO(A)PYRENE	3.7 U [MDL=3.7]	40 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
BENZO(B)FLUORANTHENE	3.7 U [MDL=3.7]	48 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
BENZO(G,H,I)PERYLENE	3.7 U [MDL=3.7]	25 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
BENZO(K)FLUORANTHENE	3.7 U [MDL=3.7]	23 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
CHRYSENE	1.2 U [MDL=1.2]	32 [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]
DIBENZO(A,H)ANTHRACENE	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
FLUORANTHENE	3.7 U [MDL=3.7]	49 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
FLUORENE	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
INDENO(1,2,3-CD)PYRENE	3.7 U [MDL=3.7]	34 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
NAPHTHALENE	3.7 U [MDL=3.7]	20 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
PHENANTHRENE	3.7 U [MDL=3.7]	29 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]
PYRENE	3.7 U [MDL=3.7]	46 [MDL=3.8]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	4 U [MDL=4]	4 U [MDL=4]	4.1 U [MDL=4.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-787 D-SB-787-15 9/8/2010	SB-788 D-SB-788-03 9/8/2010	SB-788 D-SB-788-05 9/8/2010	SB-788 D-SB-788-07 9/8/2010	SB-788 D-SB-788-09 9/8/2010	SB-788 D-SB-788-11 9/8/2010	SB-788 D-SB-788-13 9/8/2010
TOTAL PAHS	0 U [MDL=NaN]	379.9 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	24 U [MDL=24]	24 U [MDL=24]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]
AROCLOR-1221	18 U [MDL=18]	18 U [MDL=18]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
AROCLOR-1232	16 U [MDL=16]	16 U [MDL=16]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]
AROCLOR-1242	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1248	19 U [MDL=19]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]
AROCLOR-1254	19 U [MDL=19]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]
AROCLOR-1260	19 U [MDL=19]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.7 UJ [MDL=0.7]	0.71 UJ [MDL=0.71]	0.76 UJ [MDL=0.76]	0.77 UJ [MDL=0.77]	0.76 UJ [MDL=0.76]	0.75 UJ [MDL=0.75]	0.77 UJ [MDL=0.77]
4,4'-DDE	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.48 U [MDL=0.48]	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]
4,4'-DDT	0.71 UJ [MDL=0.71]	0.72 UJ [MDL=0.72]	0.77 UJ [MDL=0.77]	0.78 UJ [MDL=0.78]	0.77 UJ [MDL=0.77]	0.76 UJ [MDL=0.76]	0.78 UJ [MDL=0.78]
ALDRIN	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]
ALPHA-BHC	0.82 U [MDL=0.82]	0.83 U [MDL=0.83]	0.9 U [MDL=0.9]	0.9 U [MDL=0.9]	0.89 U [MDL=0.89]	0.88 U [MDL=0.88]	0.9 U [MDL=0.9]
ALPHA-CHLORDANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
BETA-BHC	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]
DELTA-BHC	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]
DIELDRIN	0.53 U [MDL=0.53]	0.54 U [MDL=0.54]	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]
ENDOSULFAN I	0.58 U [MDL=0.58]	0.59 U [MDL=0.59]	0.64 U [MDL=0.64]	0.64 U [MDL=0.64]	0.64 U [MDL=0.64]	0.63 U [MDL=0.63]	0.64 U [MDL=0.64]
ENDOSULFAN II	0.92 U [MDL=0.92]	0.94 U [MDL=0.94]	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]	0.99 U [MDL=0.99]	1 U [MDL=1]
ENDOSULFAN SULFATE	0.98 U [MDL=0.98]	0.99 U [MDL=0.99]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]
ENDRIN	0.56 U [MDL=0.56]	0.57 UJ [MDL=0.57]	0.61 UJ [MDL=0.61]	0.62 UJ [MDL=0.62]	0.61 UJ [MDL=0.61]	0.6 UJ [MDL=0.6]	0.62 UJ [MDL=0.62]
ENDRIN ALDEHYDE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.71 U [MDL=0.71]	0.72 U [MDL=0.72]	0.77 U [MDL=0.77]	0.78 U [MDL=0.78]	0.77 U [MDL=0.77]	0.76 U [MDL=0.76]	0.78 U [MDL=0.78]
GAMMA-BHC (LINDANE)	0.83 U [MDL=0.83]	0.85 U [MDL=0.85]	0.91 U [MDL=0.91]	0.91 U [MDL=0.91]	0.9 U [MDL=0.9]	0.89 U [MDL=0.89]	0.92 U [MDL=0.92]
GAMMA-CHLORDANE	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]	0.52 U [MDL=0.52]	0.52 U [MDL=0.52]	0.51 U [MDL=0.51]	0.51 U [MDL=0.51]	0.52 U [MDL=0.52]
HEPTACHLOR	1.2 U [MDL=1.2]	1.3 UJ [MDL=1.3]	1.4 UJ [MDL=1.4]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.4 UJ [MDL=1.4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-787	SB-788	SB-788	SB-788	SB-788	SB-788	SB-788
SAMPLE ID	D-SB-787-15	D-SB-788-03	D-SB-788-05	D-SB-788-07	D-SB-788-09	D-SB-788-11	D-SB-788-13
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
HEPTACHLOR EPOXIDE	0.9 U [MDL=0.9]	0.91 U [MDL=0.91]	0.98 U [MDL=0.98]	0.99 U [MDL=0.99]	0.98 U [MDL=0.98]	0.96 U [MDL=0.96]	0.99 U [MDL=0.99]
METHOXYCHLOR	1.7 U [MDL=1.7]	1.7 UJ [MDL=1.7]	1.8 UJ [MDL=1.8]	1.9 UJ [MDL=1.9]	1.8 UJ [MDL=1.8]	1.8 UJ [MDL=1.8]	1.9 UJ [MDL=1.9]
TOXAPHENE	21 UJ [MDL=21]	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]	24 U [MDL=24]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3100 UJ [MDL=3.1]	26000 [MDL=3.2]	7500 J [MDL=3.4]	5900 J [MDL=3.5]	17000 [MDL=3.4]	3400 U [MDL=3.4]	4600 J [MDL=3.5]
GASOLINE RANGE ORGANICS	52 U [MDL=52]	53 U [MDL=53]	57 U [MDL=57]	57 U [MDL=57]	56 U [MDL=56]	55 U [MDL=55]	57 U [MDL=57]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-788	SB-788	SB-789	SB-789	SB-789	SB-789	SB-789
SAMPLE ID	D-SB-788-15	D-SB-788-SS	D-SB-789-03	D-SB-789-05	D-SB-789-07	D-SB-789-09	D-SB-789-11
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
METALS (MG/KG)							
ANTIMONY	0.39 J [MDL=0.028]	0.034 J [MDL=0.026]	0.069 J [MDL=0.026]	0.18 J [MDL=0.029]	0.24 J [MDL=0.03]	0.21 J [MDL=0.028]	0.14 J [MDL=0.028]
ARSENIC	5.2 [MDL=0.072]	0.95 [MDL=0.066]	3.1 [MDL=0.068]	5.5 [MDL=0.075]	8.8 [MDL=0.077]	4 [MDL=0.074]	2.8 [MDL=0.073]
BARIUM	23 [MDL=0.053]	6.8 [MDL=0.049]	21.5 [MDL=0.051]	13.2 [MDL=0.056]	18.8 [MDL=0.057]	11.2 [MDL=0.055]	11.3 [MDL=0.054]
BERYLLIUM	5.5 [MDL=0.054]	0.087 J [MDL=0.05]	0.28 [MDL=0.052]	1.2 [MDL=0.057]	3.1 [MDL=0.059]	1.9 [MDL=0.056]	1.8 [MDL=0.055]
CADMIUM	0.031 B [MDL=0.009]	0.0083 UL [MDL=0.0083]	0.026 B [MDL=0.0086]	0.024 B [MDL=0.0094]	0.023 B [MDL=0.0097]	0.013 B [MDL=0.0093]	0.013 B [MDL=0.0091]
CHROMIUM	30.9 [MDL=0.046]	12.4 [MDL=0.043]	11.3 [MDL=0.044]	22.1 [MDL=0.048]	32.6 [MDL=0.05]	18.5 [MDL=0.047]	13.7 [MDL=0.047]
COBALT	11.2 [MDL=0.0044]	1.5 [MDL=0.004]	3.4 [MDL=0.0042]	6.8 [MDL=0.0046]	5.4 [MDL=0.0047]	6.2 [MDL=0.0045]	5.7 [MDL=0.0045]
COPPER	20.5 L [MDL=0.05]	4.2 L [MDL=0.046]	7.9 L [MDL=0.047]	22.3 L [MDL=0.052]	55.6 L [MDL=0.054]	18.8 L [MDL=0.051]	14.5 L [MDL=0.05]
IRON	43700 [MDL=1.2]	5460 [MDL=1.1]	7830 [MDL=1.1]	28200 [MDL=1.2]	38300 [MDL=1.2]	23200 [MDL=1.2]	18400 [MDL=1.2]
LEAD	8.6 [MDL=0.015]	2.2 [MDL=0.014]	6.8 [MDL=0.014]	7.8 [MDL=0.016]	5.8 [MDL=0.016]	5.3 [MDL=0.015]	4.5 [MDL=0.015]
MANGANESE	93.6 [MDL=0.054]	28.6 [MDL=0.05]	21.1 [MDL=0.052]	33.5 [MDL=0.057]	29.9 [MDL=0.059]	58.6 [MDL=0.056]	49 [MDL=0.055]
MERCURY	0.017 U [MDL=0.017]	0.016 U [MDL=0.016]	0.028 [MDL=0.017]	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]
MOLYBDENUM	0.7 [MDL=0.073]	0.23 [MDL=0.067]	0.37 [MDL=0.069]	0.57 [MDL=0.076]	0.73 [MDL=0.079]	0.33 [MDL=0.075]	0.22 J [MDL=0.074]
NICKEL	34.8 [MDL=0.024]	3.3 [MDL=0.022]	5.7 [MDL=0.023]	17 [MDL=0.025]	14.3 [MDL=0.026]	17.7 [MDL=0.025]	15.7 [MDL=0.025]
SELENIUM	1.7 J [MDL=0.1]	0.16 J [MDL=0.096]	0.61 J [MDL=0.099]	0.6 J [MDL=0.11]	1.1 J [MDL=0.11]	1.6 J [MDL=0.11]	1.8 J [MDL=0.11]
SILVER	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.027 B [MDL=0.018]	0.025 B [MDL=0.019]	0.026 B [MDL=0.02]	0.019 U [MDL=0.019]	0.019 U [MDL=0.019]
THALLIUM	0.13 B [MDL=0.015]	0.014 U [MDL=0.014]	0.089 B [MDL=0.014]	0.075 B [MDL=0.016]	0.047 B [MDL=0.016]	0.064 B [MDL=0.015]	0.057 B [MDL=0.015]
VANADIUM	36.7 [MDL=0.047]	12.1 [MDL=0.044]	20.3 [MDL=0.045]	44 [MDL=0.05]	69.5 [MDL=0.051]	42.6 [MDL=0.049]	24.8 [MDL=0.048]
ZINC	64.2 J [MDL=0.23]	4.8 J [MDL=0.21]	19 J [MDL=0.22]	50.3 J [MDL=0.24]	35.5 J [MDL=0.25]	26.8 J [MDL=0.24]	24.8 J [MDL=0.23]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.31 U [MDL=0.31]	0.53 J [MDL=0.29]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.87 J [MDL=0.34]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
1,4-DIOXANE	25 U [MDL=25]	23 U [MDL=23]	24 U [MDL=24]	27 U [MDL=27]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	29 U [MDL=29]	27 U [MDL=27]	28 U [MDL=28]	30 U [MDL=30]	31 U [MDL=31]	30 U [MDL=30]	29 U [MDL=29]
2,4,6-TRICHLOROPHENOL	92 U [MDL=92]	85 U [MDL=85]	88 U [MDL=88]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]	94 U [MDL=94]
2,4-DICHLOROPHENOL	23 U [MDL=23]	21 U [MDL=21]	22 U [MDL=22]	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	23 U [MDL=23]	21 U [MDL=21]	22 U [MDL=22]	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]
2,4-DINITROPHENOL	92 U [MDL=92]	85 U [MDL=85]	88 U [MDL=88]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]	94 U [MDL=94]
2,4-DINITROTOLUENE	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
2,6-DINITROTOLUENE	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
2-CHLORONAPHTHALENE	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
2-CHLOROPHENOL	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	92 U [MDL=92]	85 U [MDL=85]	88 U [MDL=88]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]	94 U [MDL=94]
2-NITROANILINE	11 U [MDL=11]	9.7 U [MDL=9.7]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	22 U [MDL=22]	22 U [MDL=22]	21 U [MDL=21]	21 U [MDL=21]
3-NITROANILINE	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	92 U [MDL=92]	85 U [MDL=85]	88 U [MDL=88]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]	94 U [MDL=94]
4-BROMOPHENYL PHENYL ETHER	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
4-CHLOROANILINE	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
4-METHYLPHENOL	92 U [MDL=92]	85 U [MDL=85]	88 U [MDL=88]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]	94 U [MDL=94]
4-NITROANILINE	30 U [MDL=30]	28 U [MDL=28]	29 U [MDL=29]	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]	30 U [MDL=30]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-788 D-SB-788-15 9/8/2010	SB-788 D-SB-788-SS 9/8/2010	SB-789 D-SB-789-03 9/8/2010	SB-789 D-SB-789-05 9/8/2010	SB-789 D-SB-789-07 9/8/2010	SB-789 D-SB-789-09 9/8/2010	SB-789 D-SB-789-11 9/8/2010
4-NITROPHENOL	92 U [MDL=92]	85 U [MDL=85]	88 U [MDL=88]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]	94 U [MDL=94]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	9.8 U [MDL=9.8]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	9.7 U [MDL=9.7]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	14 U [MDL=14]	13 U [MDL=13]	13 U [MDL=13]	14 U [MDL=14]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	25 U [MDL=25]	23 U [MDL=23]	24 U [MDL=24]	27 U [MDL=27]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]
BIS(2-CHLOROETHYL)ETHER	2.3 U [MDL=2.3]	2.1 U [MDL=2.1]	2.2 U [MDL=2.2]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	22 U [MDL=22]	20 J [MDL=20]	21 U [MDL=21]	23 U [MDL=23]	24 J [MDL=24]	23 U [MDL=23]	22 U [MDL=22]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	43 U [MDL=43]	39 U [MDL=39]	41 U [MDL=41]	45 U [MDL=45]	46 U [MDL=46]	44 U [MDL=44]	43 U [MDL=43]
CARBAZOLE	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	3.8 U [MDL=3.8]	11 J [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
DIETHYL PHTHALATE	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
DIMETHYL PHTHALATE	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	18 U [MDL=18]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.4 U [MDL=2.4]	2.2 U [MDL=2.2]	2.3 U [MDL=2.3]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
HEXACHLOROCYCLOPENTADIENE	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
HEXACHLOROETHANE	10 U [MDL=10]	9.6 U [MDL=9.6]	9.9 U [MDL=9.9]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.5 U [MDL=2.5]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.7 U [MDL=2.7]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]
N-NITROSODIMETHYLAMINE	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
N-NITROSODIPHENYLAMINE	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
PENTACHLOROPHENOL	92 U [MDL=92]	85 U [MDL=85]	88 U [MDL=88]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]	94 U [MDL=94]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.49 U [MDL=0.49]	0.54 U [MDL=0.54]	0.5 U [MDL=0.5]	0.52 U [MDL=0.52]	0.61 U [MDL=0.61]	0.57 U [MDL=0.57]	0.51 U [MDL=0.51]
1,1,1-TRICHLOROETHANE	0.45 U [MDL=0.45]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	0.47 U [MDL=0.47]	0.55 U [MDL=0.55]	0.51 U [MDL=0.51]	0.46 U [MDL=0.46]
1,1,2,2-TETRACHLOROETHANE	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-788	SB-788	SB-789	SB-789	SB-789	SB-789	SB-789
SAMPLE ID	D-SB-788-15	D-SB-788-SS	D-SB-789-03	D-SB-789-05	D-SB-789-07	D-SB-789-09	D-SB-789-11
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
1,1-DICHLOROETHANE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]
1,1-DICHLOROETHENE	0.41 U [MDL=0.41]	0.45 U [MDL=0.45]	0.42 U [MDL=0.42]	0.43 U [MDL=0.43]	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.43 U [MDL=0.43]
1,1-DICHLOROPROPENE	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]
1,2,3-TRICHLOROBENZENE	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]
1,2,3-TRICHLOROPROPANE	0.72 U [MDL=0.72]	0.79 U [MDL=0.79]	0.72 U [MDL=0.72]	0.75 U [MDL=0.75]	0.89 U [MDL=0.89]	0.82 U [MDL=0.82]	0.74 U [MDL=0.74]
1,2,3-TRIMETHYLBENZENE	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]
1,2,4-TRICHLOROBENZENE	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.22 U [MDL=0.22]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.22 U [MDL=0.22]
1,2,4-TRIMETHYLBENZENE	0.52 U [MDL=0.52]	0.57 U [MDL=0.57]	0.52 U [MDL=0.52]	0.54 U [MDL=0.54]	0.64 U [MDL=0.64]	0.59 U [MDL=0.59]	0.53 U [MDL=0.53]
1,2-DIBROMO-3-CHLOROPROPANE	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]
1,2-DIBROMOETHANE	0.4 U [MDL=0.4]	0.44 U [MDL=0.44]	0.4 U [MDL=0.4]	0.42 U [MDL=0.42]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.41 U [MDL=0.41]
1,2-DICHLOROBENZENE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]
1,2-DICHLOROETHANE	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]
1,2-DICHLOROPROPANE	0.55 U [MDL=0.55]	0.6 U [MDL=0.6]	0.56 U [MDL=0.56]	0.57 U [MDL=0.57]	0.68 U [MDL=0.68]	0.63 U [MDL=0.63]	0.57 U [MDL=0.57]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]
1,3-DICHLOROPROPANE	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]
1,4-DICHLOROBENZENE	0.53 U [MDL=0.53]	0.58 U [MDL=0.58]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]	0.65 U [MDL=0.65]	0.6 U [MDL=0.6]	0.54 U [MDL=0.54]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.75 U [MDL=0.75]	0.82 U [MDL=0.82]	0.76 U [MDL=0.76]	0.78 U [MDL=0.78]	0.93 U [MDL=0.93]	0.86 U [MDL=0.86]	0.77 U [MDL=0.77]
2-BUTANONE	1.3 J [MDL=1.1]	1.6 J [MDL=1.2]	6.6 J [MDL=1.1]	12 [MDL=1.2]	4.7 J [MDL=1.4]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]
2-CHLOROETHYL VINYL ETHER	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]
2-CHLOROTOLUENE	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.33 U [MDL=0.33]
2-HEXANONE	0.5 U [MDL=0.5]	0.55 U [MDL=0.55]	0.51 U [MDL=0.51]	0.52 U [MDL=0.52]	0.62 U [MDL=0.62]	0.58 U [MDL=0.58]	0.52 U [MDL=0.52]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.33 U [MDL=0.33]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.4 U [MDL=0.4]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]
4-ISOPROPYLTOLUENE	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]
4-METHYL-2-PENTANONE	0.43 U [MDL=0.43]	0.47 U [MDL=0.47]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.44 U [MDL=0.44]
ACETONE	230 [MDL=5]	440 J [MDL=180]	78 B [MDL=5.1]	100 [MDL=5.2]	170 [MDL=6.2]	250 [MDL=5.8]	30 B [MDL=5.2]
BENZENE	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.26 U [MDL=0.26]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]
BROMOCHLOROMETHANE	0.57 U [MDL=0.57]	0.62 U [MDL=0.62]	0.57 U [MDL=0.57]	0.59 U [MDL=0.59]	0.7 U [MDL=0.7]	0.65 U [MDL=0.65]	0.58 U [MDL=0.58]
BROMODICHLOROMETHANE	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.28 U [MDL=0.28]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]
BROMOFORM	0.26 U [MDL=0.26]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]
BROMOMETHANE	0.43 U [MDL=0.43]	0.47 U [MDL=0.47]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.44 U [MDL=0.44]
CARBON DISULFIDE	0.35 U [MDL=0.35]	0.65 J [MDL=0.38]	0.53 J [MDL=0.35]	0.45 J [MDL=0.37]	0.43 U [MDL=0.43]	0.4 U [MDL=0.4]	0.36 U [MDL=0.36]
CARBON TETRACHLORIDE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.3 U [MDL=0.3]
CHLOROBENZENE	0.26 U [MDL=0.26]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]
CHLORODIBROMOMETHANE	0.44 U [MDL=0.44]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.54 U [MDL=0.54]	0.5 U [MDL=0.5]	0.45 U [MDL=0.45]
CHLOROETHANE	0.69 U [MDL=0.69]	0.75 U [MDL=0.75]	0.69 U [MDL=0.69]	0.72 U [MDL=0.72]	0.85 U [MDL=0.85]	0.79 U [MDL=0.79]	0.71 U [MDL=0.71]
CHLOROFORM	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]
CHLOROMETHANE	0.33 U [MDL=0.33]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.4 U [MDL=0.4]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]
CIS-1,2-DICHLOROETHENE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]
CIS-1,3-DICHLOROPROPENE	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.5 U [MDL=0.5]	0.55 U [MDL=0.55]	0.51 U [MDL=0.51]	0.52 U [MDL=0.52]	0.62 U [MDL=0.62]	0.58 U [MDL=0.58]	0.52 U [MDL=0.52]
DICHLORODIFLUOROMETHANE	0.4 U [MDL=0.4]	0.44 U [MDL=0.44]	0.4 U [MDL=0.4]	0.42 U [MDL=0.42]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.41 U [MDL=0.41]
DIISOPROPYL ETHER	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-788 D-SB-788-15 9/8/2010	SB-788 D-SB-788-SS 9/8/2010	SB-789 D-SB-789-03 9/8/2010	SB-789 D-SB-789-05 9/8/2010	SB-789 D-SB-789-07 9/8/2010	SB-789 D-SB-789-09 9/8/2010	SB-789 D-SB-789-11 9/8/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.2 U [MDL=0.2]	0.18 U [MDL=0.18]
ETHYLBENZENE	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.21 U [MDL=0.21]
HEXACHLOROBUTADIENE	0.96 U [MDL=0.96]	1 U [MDL=1]	0.97 U [MDL=0.97]	1 U [MDL=1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	0.98 U [MDL=0.98]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.13 U [MDL=0.13]
M+P-XYLENES	0.96 U [MDL=0.96]	1 U [MDL=1]	0.97 U [MDL=0.97]	1 U [MDL=1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	0.98 U [MDL=0.98]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.34 UJ [MDL=0.34]	0.38 UJ [MDL=0.38]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.42 U [MDL=0.42]	0.39 U [MDL=0.39]	0.35 U [MDL=0.35]
METHYLENE CHLORIDE	0.53 U [MDL=0.53]	0.59 U [MDL=0.59]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]	0.66 U [MDL=0.66]	0.61 U [MDL=0.61]	0.55 U [MDL=0.55]
NAPHTHALENE	0.73 B [MDL=0.15]	0.17 U [MDL=0.17]	2.2 B [MDL=0.15]	0.16 U [MDL=0.16]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]
N-BUTYLBENZENE	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]
N-PROPYLBENZENE	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	2.6 J [MDL=0.33]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.33 U [MDL=0.33]
O-XYLENE	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]
SEC-BUTYLBENZENE	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.18 U [MDL=0.18]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]
STYRENE	0.12 U [MDL=0.12]	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]	0.12 U [MDL=0.12]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.12 U [MDL=0.12]
TERT-AMYL METHYL ETHER	0.3 UJ [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.3 U [MDL=0.3]
TERT-BUTYLBENZENE	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]
TERTIARY-BUTYL ALCOHOL	6.1 UR [MDL=6.1]	6.6 UR [MDL=6.6]	6.1 UR [MDL=6.1]	6.3 UR [MDL=6.3]	7.5 UR [MDL=7.5]	6.9 UR [MDL=6.9]	6.2 UR [MDL=6.2]
TETRACHLOROETHENE	0.41 U [MDL=0.41]	0.45 U [MDL=0.45]	0.42 U [MDL=0.42]	0.43 U [MDL=0.43]	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.43 U [MDL=0.43]
TOLUENE	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.32 J [MDL=0.22]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.22 U [MDL=0.22]
TOTAL XYLENES	0.53 U [MDL=0.53]	0.59 U [MDL=0.59]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]	0.66 U [MDL=0.66]	0.61 U [MDL=0.61]	0.55 U [MDL=0.55]
TRANS-1,2-DICHLOROETHENE	0.33 U [MDL=0.33]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.4 U [MDL=0.4]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]
TRANS-1,3-DICHLOROPROPENE	0.43 U [MDL=0.43]	0.47 U [MDL=0.47]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.44 U [MDL=0.44]
TRICHLOROETHENE	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.41 U [MDL=0.41]	0.38 U [MDL=0.38]	0.34 U [MDL=0.34]
TRICHLOROFLUOROMETHANE	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]
VINYL ACETATE	0.2 U [MDL=0.2]	0.22 U [MDL=0.22]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]
VINYL CHLORIDE	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	3.8 U [MDL=3.8]	10 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
ACENAPHTHENE	3.8 U [MDL=3.8]	16 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
ACENAPHTHYLENE	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
ANTHRACENE	3.8 U [MDL=3.8]	20 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BAP EQUIVALENT-HALFND	3.8 U [MDL=NaN]	105.452 [MDL=NaN]	17.2786 [MDL=NaN]	4 U [MDL=NaN]	4.1 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-POS	3.8 U [MDL=NaN]	105.452 [MDL=NaN]	15.1 [MDL=NaN]	4 U [MDL=NaN]	4.1 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	3.8 U [MDL=3.8]	53 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BENZO(A)PYRENE	3.8 U [MDL=3.8]	63 [MDL=3.5]	14 [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BENZO(B)FLUORANTHENE	3.8 U [MDL=3.8]	83 [MDL=3.5]	11 [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BENZO(G,H,I)PERYLENE	3.8 U [MDL=3.8]	36 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
BENZO(K)FLUORANTHENE	3.8 U [MDL=3.8]	29 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
CHRYSENE	1.3 U [MDL=1.3]	62 [MDL=1.2]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	3.8 U [MDL=3.8]	24 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
FLUORANTHENE	3.8 U [MDL=3.8]	110 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
FLUORENE	3.8 U [MDL=3.8]	18 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
INDENO(1,2,3-CD)PYRENE	3.8 U [MDL=3.8]	45 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
NAPHTHALENE	3.8 U [MDL=3.8]	19 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
PHENANTHRENE	3.8 U [MDL=3.8]	87 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]
PYRENE	3.8 U [MDL=3.8]	93 [MDL=3.5]	3.6 U [MDL=3.6]	4 U [MDL=4]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-788 D-SB-788-15 9/8/2010	SB-788 D-SB-788-SS 9/8/2010	SB-789 D-SB-789-03 9/8/2010	SB-789 D-SB-789-05 9/8/2010	SB-789 D-SB-789-07 9/8/2010	SB-789 D-SB-789-09 9/8/2010	SB-789 D-SB-789-11 9/8/2010
TOTAL PAHS	0 U [MDL=NaN]	768 [MDL=NaN]	25 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
AROCLOR-1221	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1232	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]
AROCLOR-1242	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1254	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1260	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.72 UJ [MDL=0.72]	1.3 UJ [MDL=1.3]	0.68 UJ [MDL=0.68]	0.75 UJ [MDL=0.75]	0.77 UJ [MDL=0.77]	0.74 UJ [MDL=0.74]	0.73 UJ [MDL=0.73]
4,4'-DDE	0.45 U [MDL=0.45]	0.83 U [MDL=0.83]	0.43 U [MDL=0.43]	0.47 U [MDL=0.47]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]
4,4'-DDT	0.73 UJ [MDL=0.73]	1.3 UJ [MDL=1.3]	0.69 U [MDL=0.69]	0.76 U [MDL=0.76]	0.79 U [MDL=0.79]	0.75 U [MDL=0.75]	0.74 U [MDL=0.74]
ALDRIN	1.4 U [MDL=1.4]	2.6 U [MDL=2.6]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
ALPHA-BHC	0.84 U [MDL=0.84]	1.6 U [MDL=1.6]	0.8 U [MDL=0.8]	0.88 U [MDL=0.88]	0.91 U [MDL=0.91]	0.87 U [MDL=0.87]	0.86 U [MDL=0.86]
ALPHA-CHLORDANE	1.1 U [MDL=1.1]	2 U [MDL=2]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
BETA-BHC	1.3 U [MDL=1.3]	6.4 J [MDL=2.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DELTA-BHC	1.4 U [MDL=1.4]	2.6 U [MDL=2.6]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
DIELDRIN	0.54 U [MDL=0.54]	1 U [MDL=1]	0.52 U [MDL=0.52]	0.57 U [MDL=0.57]	0.59 U [MDL=0.59]	0.56 U [MDL=0.56]	0.55 U [MDL=0.55]
ENDOSULFAN I	0.6 U [MDL=0.6]	1.1 U [MDL=1.1]	0.57 U [MDL=0.57]	0.63 U [MDL=0.63]	0.65 U [MDL=0.65]	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]
ENDOSULFAN II	0.95 U [MDL=0.95]	1.7 U [MDL=1.7]	0.9 U [MDL=0.9]	0.99 U [MDL=0.99]	1 U [MDL=1]	0.97 U [MDL=0.97]	0.96 U [MDL=0.96]
ENDOSULFAN SULFATE	1 U [MDL=1]	1.9 U [MDL=1.9]	0.96 U [MDL=0.96]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1 U [MDL=1]
ENDRIN	0.58 UJ [MDL=0.58]	1.1 UJ [MDL=1.1]	0.55 UJ [MDL=0.55]	0.6 UJ [MDL=0.6]	0.62 UJ [MDL=0.62]	0.59 UJ [MDL=0.59]	0.59 UJ [MDL=0.59]
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	2.1 U [MDL=2.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.73 U [MDL=0.73]	1.3 U [MDL=1.3]	0.69 U [MDL=0.69]	0.76 U [MDL=0.76]	0.79 U [MDL=0.79]	0.75 U [MDL=0.75]	0.74 U [MDL=0.74]
GAMMA-BHC (LINDANE)	0.86 U [MDL=0.86]	1.6 U [MDL=1.6]	0.82 U [MDL=0.82]	0.89 U [MDL=0.89]	0.92 U [MDL=0.92]	0.88 U [MDL=0.88]	0.87 U [MDL=0.87]
GAMMA-CHLORDANE	0.49 U [MDL=0.49]	0.89 U [MDL=0.89]	0.46 U [MDL=0.46]	0.51 U [MDL=0.51]	0.52 U [MDL=0.52]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]
HEPTACHLOR	1.3 UJ [MDL=1.3]	2.3 UJ [MDL=2.3]	1.2 UJ [MDL=1.2]	1.3 UJ [MDL=1.3]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-788	SB-788	SB-789	SB-789	SB-789	SB-789	SB-789
SAMPLE ID	D-SB-788-15	D-SB-788-SS	D-SB-789-03	D-SB-789-05	D-SB-789-07	D-SB-789-09	D-SB-789-11
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
HEPTACHLOR EPOXIDE	0.92 U [MDL=0.92]	1.7 U [MDL=1.7]	0.88 U [MDL=0.88]	0.97 U [MDL=0.97]	1 U [MDL=1]	0.95 U [MDL=0.95]	0.94 U [MDL=0.94]
METHOXYCHLOR	1.7 UJ [MDL=1.7]	3.2 UJ [MDL=3.2]	1.7 UJ [MDL=1.7]	1.8 UJ [MDL=1.8]	1.9 UJ [MDL=1.9]	1.8 UJ [MDL=1.8]	1.8 UJ [MDL=1.8]
TOXAPHENE	22 U [MDL=22]	40 U [MDL=40]	21 U [MDL=21]	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	22 U [MDL=22]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3200 U [MDL=3.2]	24000 [MDL=3]	17000 [MDL=3.1]	15000 [MDL=3.4]	10000 J [MDL=3.5]	4700 J [MDL=3.3]	3700 J [MDL=3.3]
GASOLINE RANGE ORGANICS	53 U [MDL=53]	49 U [MDL=49]	51 U [MDL=51]	56 U [MDL=56]	57 U [MDL=57]	55 U [MDL=55]	54 U [MDL=54]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-789	SB-789	SB-789	SB-790	SB-790	SB-790	SB-790
SAMPLE ID	D-SB-789-13	D-SB-789-15	D-SB-789-SS	D-SB-790-03	D-SB-790-05	D-SB-790-07	D-SB-790-09
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
METALS (MG/KG)							
ANTIMONY	0.47 J [MDL=0.029]	0.32 J [MDL=0.028]	0.056 J [MDL=0.026]	0.2 B [MDL=0.028]	0.2 B [MDL=0.028]	0.22 J [MDL=0.029]	0.23 J [MDL=0.031]
ARSENIC	6.8 [MDL=0.075]	4.5 [MDL=0.072]	1.7 [MDL=0.066]	4.5 [MDL=0.072]	4.9 [MDL=0.073]	6.3 [MDL=0.075]	4.1 [MDL=0.079]
BARIUM	23.6 [MDL=0.055]	16.7 [MDL=0.053]	17.3 [MDL=0.049]	33.8 [MDL=0.053]	31 [MDL=0.055]	27.8 [MDL=0.056]	19.8 [MDL=0.059]
BERYLLIUM	10.5 [MDL=0.057]	7.2 [MDL=0.055]	0.2 [MDL=0.05]	2.2 [MDL=0.055]	2 [MDL=0.056]	2.6 [MDL=0.057]	2.5 [MDL=0.06]
CADMIUM	0.041 J [MDL=0.0094]	0.034 J [MDL=0.0091]	0.024 B [MDL=0.0083]	0.12 [MDL=0.0091]	0.4 [MDL=0.0092]	0.12 L [MDL=0.0095]	0.044 J [MDL=0.01]
CHROMIUM	33.3 [MDL=0.048]	27.8 [MDL=0.046]	11.3 [MDL=0.043]	19.5 [MDL=0.046]	18.3 [MDL=0.047]	18.9 [MDL=0.049]	23.7 [MDL=0.051]
COBALT	21.3 [MDL=0.0046]	18.1 [MDL=0.0044]	1.8 [MDL=0.0041]	13.7 [MDL=0.0044]	14.3 [MDL=0.0045]	24.5 [MDL=0.0046]	4.6 [MDL=0.0049]
COPPER	48.6 L [MDL=0.052]	23.5 L [MDL=0.05]	9.6 L [MDL=0.046]	23.2 [MDL=0.05]	22.3 [MDL=0.051]	23.4 [MDL=0.052]	30.1 L [MDL=0.055]
IRON	85000 [MDL=12.1]	43700 [MDL=1.2]	4680 [MDL=1.1]	21900 [MDL=1.2]	20200 [MDL=1.2]	22200 [MDL=1.2]	33200 [MDL=1.3]
LEAD	10.3 [MDL=0.016]	5.9 [MDL=0.015]	7.8 [MDL=0.014]	16.5 [MDL=0.015]	30.9 [MDL=0.015]	20.6 [MDL=0.016]	9.3 [MDL=0.017]
MANGANESE	341 [MDL=0.057]	106 [MDL=0.055]	10.8 [MDL=0.05]	84.9 [MDL=0.055]	112 [MDL=0.056]	78.4 [MDL=0.057]	62.4 [MDL=0.06]
MERCURY	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.019 J [MDL=0.016]	0.36 [MDL=0.017]	0.21 [MDL=0.018]	0.63 [MDL=0.018]	0.019 U [MDL=0.019]
MOLYBDENUM	1 [MDL=0.076]	0.67 [MDL=0.073]	0.31 [MDL=0.067]	0.39 [MDL=0.073]	0.49 [MDL=0.075]	0.35 [MDL=0.077]	0.46 [MDL=0.08]
NICKEL	54.1 [MDL=0.025]	41.7 [MDL=0.024]	3.1 [MDL=0.022]	28.4 [MDL=0.024]	31 [MDL=0.025]	41.4 [MDL=0.026]	15.3 [MDL=0.027]
SELENIUM	1.6 J [MDL=0.11]	1.5 J [MDL=0.1]	0.58 J [MDL=0.096]	2.3 [MDL=0.1]	2.4 [MDL=0.11]	3.5 [MDL=0.11]	1 J [MDL=0.11]
SILVER	0.029 B [MDL=0.019]	0.024 B [MDL=0.019]	0.025 B [MDL=0.017]	0.24 K [MDL=0.019]	0.25 K [MDL=0.019]	0.32 K [MDL=0.019]	0.024 B [MDL=0.02]
THALLIUM	0.11 B [MDL=0.016]	0.086 B [MDL=0.015]	0.067 B [MDL=0.014]	0.042 J [MDL=0.015]	0.053 J [MDL=0.015]	0.051 J [MDL=0.016]	0.12 B [MDL=0.017]
VANADIUM	66.2 [MDL=0.049]	56.5 [MDL=0.048]	17.4 [MDL=0.044]	29.6 [MDL=0.048]	27.5 [MDL=0.049]	28 [MDL=0.05]	42 [MDL=0.052]
ZINC	96.2 J [MDL=0.24]	66.4 J [MDL=0.23]	11.8 J [MDL=0.21]	61.1 [MDL=0.23]	87.5 [MDL=0.24]	77.9 [MDL=0.24]	39.2 J [MDL=0.26]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.36 J [MDL=0.33]	0.31 U [MDL=0.31]	0.57 J [MDL=0.29]	0.31 U [MDL=0.31]	0.57 J [MDL=0.32]	0.33 U [MDL=0.33]	0.55 J [MDL=0.34]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
1,4-DIOXANE	27 U [MDL=27]	26 U [MDL=26]	24 U [MDL=24]	26 U [MDL=26]	100 U [MDL=100]	27 U [MDL=27]	28 U [MDL=28]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	45 U [MDL=45]	12 U [MDL=12]	12 U [MDL=12]
2,4,5-TRICHLOROPHENOL	30 U [MDL=30]	29 U [MDL=29]	27 U [MDL=27]	29 U [MDL=29]	120 U [MDL=120]	30 U [MDL=30]	32 U [MDL=32]
2,4,6-TRICHLOROPHENOL	96 U [MDL=96]	93 U [MDL=93]	85 U [MDL=85]	93 U [MDL=93]	380 U [MDL=380]	97 U [MDL=97]	100 U [MDL=100]
2,4-DICHLOROPHENOL	24 U [MDL=24]	23 U [MDL=23]	21 U [MDL=21]	23 U [MDL=23]	95 U [MDL=95]	24 U [MDL=24]	26 U [MDL=26]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	23 U [MDL=23]	21 U [MDL=21]	23 U [MDL=23]	95 U [MDL=95]	24 U [MDL=24]	26 U [MDL=26]
2,4-DINITROPHENOL	96 U [MDL=96]	93 U [MDL=93]	85 U [MDL=85]	93 U [MDL=93]	380 U [MDL=380]	97 U [MDL=97]	100 U [MDL=100]
2,4-DINITROTOLUENE	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
2,6-DINITROTOLUENE	25 U [MDL=25]	24 U [MDL=24]	22 U [MDL=22]	24 U [MDL=24]	100 U [MDL=100]	26 U [MDL=26]	27 U [MDL=27]
2-CHLORONAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	3.8 U [MDL=3.8]	16 U [MDL=16]	4 U [MDL=4]	4.2 U [MDL=4.2]
2-CHLOROPHENOL	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	96 U [MDL=96]	93 U [MDL=93]	85 U [MDL=85]	93 U [MDL=93]	380 U [MDL=380]	97 U [MDL=97]	100 U [MDL=100]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	9.7 U [MDL=9.7]	11 U [MDL=11]	43 U [MDL=43]	11 U [MDL=11]	12 U [MDL=12]
2-NITROPHENOL	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	21 U [MDL=21]	19 U [MDL=19]	21 U [MDL=21]	85 U [MDL=85]	22 U [MDL=22]	23 U [MDL=23]
3-NITROANILINE	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	19 U [MDL=19]	76 U [MDL=76]	19 U [MDL=19]	20 U [MDL=20]
4,6-DINITRO-2-METHYLPHENOL	96 U [MDL=96]	93 U [MDL=93]	85 U [MDL=85]	93 U [MDL=93]	380 U [MDL=380]	97 U [MDL=97]	100 U [MDL=100]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]	62 U [MDL=62]	16 U [MDL=16]	17 U [MDL=17]
4-CHLORO-3-METHYLPHENOL	25 U [MDL=25]	24 U [MDL=24]	22 U [MDL=22]	24 U [MDL=24]	100 U [MDL=100]	26 U [MDL=26]	27 U [MDL=27]
4-CHLOROANILINE	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	20 U [MDL=20]	81 U [MDL=81]	21 U [MDL=21]	22 U [MDL=22]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]	62 U [MDL=62]	16 U [MDL=16]	17 U [MDL=17]
4-METHYLPHENOL	96 U [MDL=96]	93 U [MDL=93]	85 U [MDL=85]	93 U [MDL=93]	380 U [MDL=380]	97 U [MDL=97]	100 U [MDL=100]
4-NITROANILINE	31 U [MDL=31]	30 U [MDL=30]	28 U [MDL=28]	30 U [MDL=30]	120 U [MDL=120]	32 U [MDL=32]	33 U [MDL=33]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-789 D-SB-789-13 9/8/2010	SB-789 D-SB-789-15 9/8/2010	SB-789 D-SB-789-SS 9/8/2010	SB-790 D-SB-790-03 9/8/2010	SB-790 D-SB-790-05 9/8/2010	SB-790 D-SB-790-07 9/8/2010	SB-790 D-SB-790-09 9/8/2010
4-NITROPHENOL	96 U [MDL=96]	93 U [MDL=93]	85 U [MDL=85]	93 U [MDL=93]	380 U [MDL=380]	97 U [MDL=97]	100 U [MDL=100]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	9.8 U [MDL=9.8]	11 U [MDL=11]	44 U [MDL=44]	11 U [MDL=11]	12 U [MDL=12]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	9.7 U [MDL=9.7]	11 U [MDL=11]	43 U [MDL=43]	11 U [MDL=11]	12 U [MDL=12]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	14 U [MDL=14]	14 U [MDL=14]	13 U [MDL=13]	14 U [MDL=14]	57 U [MDL=57]	15 U [MDL=15]	15 U [MDL=15]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	26 U [MDL=26]	24 U [MDL=24]	26 U [MDL=26]	100 U [MDL=100]	27 U [MDL=27]	28 U [MDL=28]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.1 U [MDL=2.1]	2.3 U [MDL=2.3]	9.5 U [MDL=9.5]	2.4 U [MDL=2.4]	2.6 U [MDL=2.6]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	22 U [MDL=22]	20 U [MDL=20]	22 U [MDL=22]	90 U [MDL=90]	23 U [MDL=23]	24 U [MDL=24]
BUTYL BENZYL PHTHALATE	29 J [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	47 U [MDL=47]	12 U [MDL=12]	13 U [MDL=13]
CAPROLACTAM	45 U [MDL=45]	43 U [MDL=43]	40 U [MDL=40]	43 U [MDL=43]	180 U [MDL=180]	45 U [MDL=45]	47 U [MDL=47]
CARBAZOLE	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	14 J [MDL=3.8]	58 J [MDL=16]	29 J [MDL=4]	4.2 U [MDL=4.2]
DIETHYL PHTHALATE	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	19 U [MDL=19]	76 U [MDL=76]	19 U [MDL=19]	20 U [MDL=20]
DIMETHYL PHTHALATE	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	20 U [MDL=20]	81 U [MDL=81]	21 U [MDL=21]	22 U [MDL=22]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	71 U [MDL=71]	18 U [MDL=18]	19 U [MDL=19]
DI-N-OCTYL PHTHALATE	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.2 U [MDL=2.2]	2.4 U [MDL=2.4]	10 U [MDL=10]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]
HEXACHLOROBUTADIENE	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
HEXACHLOROCYCLOPENTADIENE	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
HEXACHLOROETHANE	11 U [MDL=11]	10 U [MDL=10]	9.6 U [MDL=9.6]	10 U [MDL=10]	43 U [MDL=43]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]	62 U [MDL=62]	16 U [MDL=16]	17 U [MDL=17]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	2.6 U [MDL=2.6]	10 U [MDL=10]	2.7 U [MDL=2.7]	2.8 U [MDL=2.8]
N-NITROSODIMETHYLAMINE	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	19 U [MDL=19]	76 U [MDL=76]	19 U [MDL=19]	20 U [MDL=20]
N-NITROSO-DI-N-PROPYLAMINE	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
N-NITROSODIPHENYLAMINE	25 U [MDL=25]	24 U [MDL=24]	22 U [MDL=22]	24 U [MDL=24]	100 U [MDL=100]	26 U [MDL=26]	27 U [MDL=27]
PENTACHLOROPHENOL	96 U [MDL=96]	93 U [MDL=93]	85 U [MDL=85]	93 U [MDL=93]	380 U [MDL=380]	97 U [MDL=97]	100 U [MDL=100]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	33 U [MDL=33]	31 U [MDL=31]	29 U [MDL=29]	31 U [MDL=31]	130 U [MDL=130]	33 U [MDL=33]	34 U [MDL=34]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.52 U [MDL=0.52]	0.55 U [MDL=0.55]	0.51 U [MDL=0.51]	0.53 U [MDL=0.53]	0.5 U [MDL=0.5]	0.52 U [MDL=0.52]	0.55 U [MDL=0.55]
1,1,1-TRICHLOROETHANE	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]
1,1,2,2-TETRACHLOROETHANE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-789	SB-789	SB-789	SB-790	SB-790	SB-790	SB-790
SAMPLE ID	D-SB-789-13	D-SB-789-15	D-SB-789-SS	D-SB-790-03	D-SB-790-05	D-SB-790-07	D-SB-790-09
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
1,1-DICHLOROETHANE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]
1,1-DICHLOROETHENE	0.43 U [MDL=0.43]	0.47 U [MDL=0.47]	0.43 U [MDL=0.43]	0.44 U [MDL=0.44]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]
1,1-DICHLOROPROPENE	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]
1,2,3-TRICHLOROBENZENE	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]
1,2,3-TRICHLOROPROPANE	0.75 U [MDL=0.75]	0.8 U [MDL=0.8]	0.74 U [MDL=0.74]	0.76 U [MDL=0.76]	0.73 U [MDL=0.73]	0.76 U [MDL=0.76]	0.8 U [MDL=0.8]
1,2,3-TRIMETHYLBENZENE	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.19 J [MDL=0.14]	0.15 U [MDL=0.15]
1,2,4-TRICHLOROBENZENE	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
1,2,4-TRIMETHYLBENZENE	0.54 U [MDL=0.54]	0.58 U [MDL=0.58]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]	0.52 U [MDL=0.52]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
1,2-DIBROMOETHANE	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]	0.41 U [MDL=0.41]	0.42 U [MDL=0.42]	0.4 U [MDL=0.4]	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]
1,2-DICHLOROBENZENE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]
1,2-DICHLOROETHANE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,2-DICHLOROPROPANE	0.57 U [MDL=0.57]	0.62 U [MDL=0.62]	0.57 U [MDL=0.57]	0.59 U [MDL=0.59]	0.56 U [MDL=0.56]	0.58 U [MDL=0.58]	0.62 U [MDL=0.62]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
1,3-DICHLOROPROPANE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,4-DICHLOROBENZENE	0.55 U [MDL=0.55]	0.59 U [MDL=0.59]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]	0.59 U [MDL=0.59]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.78 U [MDL=0.78]	0.84 U [MDL=0.84]	0.77 U [MDL=0.77]	0.8 U [MDL=0.8]	0.76 U [MDL=0.76]	0.79 U [MDL=0.79]	0.84 U [MDL=0.84]
2-BUTANONE	1.2 U [MDL=1.2]	1.7 J [MDL=1.3]	6 J [MDL=1.2]	2 J [MDL=1.2]	1.9 J [MDL=1.1]	3.6 J [MDL=1.2]	1.3 U [MDL=1.3]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]
2-CHLOROTOLUENE	0.33 U [MDL=0.33]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]
2-HEXANONE	0.52 U [MDL=0.52]	0.56 U [MDL=0.56]	0.52 U [MDL=0.52]	0.53 U [MDL=0.53]	0.51 U [MDL=0.51]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]
4-ISOPROPYLTOLUENE	0.17 U [MDL=0.17]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]
4-METHYL-2-PENTANONE	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]
ACETONE	5.2 U [MDL=5.2]	100 [MDL=5.6]	210 B [MDL=140]	29 B [MDL=5.3]	44 B [MDL=5.1]	28 B [MDL=5.3]	11 B [MDL=5.6]
BENZENE	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]
BROMOCHLOROMETHANE	0.59 U [MDL=0.59]	0.64 U [MDL=0.64]	0.58 U [MDL=0.58]	0.6 U [MDL=0.6]	0.57 U [MDL=0.57]	0.6 U [MDL=0.6]	0.63 U [MDL=0.63]
BROMODICHLOROMETHANE	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]
BROMOFORM	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]
BROMOMETHANE	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]
CARBON DISULFIDE	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.82 J [MDL=0.36]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.67 J [MDL=0.37]	0.39 U [MDL=0.39]
CARBON TETRACHLORIDE	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]
CHLOROBENZENE	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]
CHLORODIBROMOMETHANE	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	0.47 U [MDL=0.47]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]
CHLOROETHANE	0.72 U [MDL=0.72]	0.77 U [MDL=0.77]	0.71 U [MDL=0.71]	0.73 U [MDL=0.73]	0.69 U [MDL=0.69]	0.72 U [MDL=0.72]	0.77 U [MDL=0.77]
CHLOROFORM	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]
CHLOROMETHANE	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]
CIS-1,2-DICHLOROETHENE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]
CIS-1,3-DICHLOROPROPENE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.52 U [MDL=0.52]	0.56 U [MDL=0.56]	0.52 U [MDL=0.52]	0.53 U [MDL=0.53]	0.51 U [MDL=0.51]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]
DICHLORODIFLUOROMETHANE	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]	0.41 U [MDL=0.41]	0.42 U [MDL=0.42]	0.4 U [MDL=0.4]	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]
DIISOPROPYL ETHER	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-789 D-SB-789-13 9/8/2010	SB-789 D-SB-789-15 9/8/2010	SB-789 D-SB-789-SS 9/8/2010	SB-790 D-SB-790-03 9/8/2010	SB-790 D-SB-790-05 9/8/2010	SB-790 D-SB-790-07 9/8/2010	SB-790 D-SB-790-09 9/8/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]
ETHYLBENZENE	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]
HEXACHLOROBUTADIENE	1 U [MDL=1]	1.1 U [MDL=1.1]	0.99 U [MDL=0.99]	1 U [MDL=1]	0.97 U [MDL=0.97]	1 U [MDL=1]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]
M+P-XYLENES	1 U [MDL=1]	1.1 U [MDL=1.1]	0.99 U [MDL=0.99]	1 U [MDL=1]	0.97 U [MDL=0.97]	1 U [MDL=1]	1.1 U [MDL=1.1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.35 UJ [MDL=0.35]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]
METHYLENE CHLORIDE	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]	0.55 U [MDL=0.55]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]
NAPHTHALENE	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	2.1 B [MDL=0.16]	2.2 B [MDL=0.15]	2.9 B [MDL=0.16]	0.17 U [MDL=0.17]
N-BUTYLBENZENE	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]
N-PROPYLBENZENE	0.33 U [MDL=0.33]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]
O-XYLENE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
SEC-BUTYLBENZENE	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]
STYRENE	0.12 U [MDL=0.12]	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]
TERT-BUTYLBENZENE	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]
TERTIARY-BUTYL ALCOHOL	6.3 UR [MDL=6.3]	6.8 UR [MDL=6.8]	6.3 UR [MDL=6.3]	6.4 UR [MDL=6.4]	6.1 UR [MDL=6.1]	6.4 UR [MDL=6.4]	6.8 UR [MDL=6.8]
TETRACHLOROETHENE	0.43 U [MDL=0.43]	0.47 U [MDL=0.47]	0.43 U [MDL=0.43]	0.44 U [MDL=0.44]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]
TOLUENE	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
TOTAL XYLENES	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]	0.55 U [MDL=0.55]	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]
TRANS-1,2-DICHLOROETHENE	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]
TRANS-1,3-DICHLOROPROPENE	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]
TRICHLOROETHENE	0.35 U [MDL=0.35]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.38 U [MDL=0.38]
TRICHLOROFLUOROMETHANE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
VINYL ACETATE	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]
VINYL CHLORIDE	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	8 [MDL=3.8]	16 U [MDL=16]	64 [MDL=4]	4.2 U [MDL=4.2]
ACENAPHTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	34 [MDL=3.8]	140 [MDL=16]	20 [MDL=4]	4.2 U [MDL=4.2]
ACENAPHTHYLENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	3.8 U [MDL=3.8]	16 U [MDL=16]	4 U [MDL=4]	4.2 U [MDL=4.2]
ANTHRACENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	72 [MDL=3.8]	620 [MDL=16]	28 [MDL=4]	4.2 U [MDL=4.2]
BAP EQUIVALENT-HALFND	4 U [MDL=NaN]	3.8 U [MDL=NaN]	22.2431 [MDL=NaN]	224.06 [MDL=NaN]	1353.2 [MDL=NaN]	72.682 [MDL=NaN]	4.2 U [MDL=NaN]
BAP EQUIVALENT-POS	4 U [MDL=NaN]	3.8 U [MDL=NaN]	20.3 [MDL=NaN]	224.06 [MDL=NaN]	1345.2 [MDL=NaN]	70.682 [MDL=NaN]	4.2 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	160 [MDL=3.8]	1500 [MDL=16]	48 [MDL=4]	4.2 U [MDL=4.2]
BENZO(A)PYRENE	4 U [MDL=4]	3.8 U [MDL=3.8]	17 [MDL=3.5]	140 [MDL=3.8]	1000 [MDL=16]	53 [MDL=4]	4.2 U [MDL=4.2]
BENZO(B)FLUORANTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	15 [MDL=3.5]	180 [MDL=3.8]	1400 [MDL=16]	82 [MDL=4]	4.2 U [MDL=4.2]
BENZO(G,H,I)PERYLENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	77 [MDL=3.8]	490 [MDL=16]	34 [MDL=4]	4.2 U [MDL=4.2]
BENZO(K)FLUORANTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	72 [MDL=3.8]	570 [MDL=16]	40 [MDL=4]	4.2 U [MDL=4.2]
CHRYSENE	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	140 [MDL=1.3]	1500 [MDL=5.2]	82 [MDL=1.3]	1.4 U [MDL=1.4]
DIBENZO(A,H)ANTHRACENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	41 [MDL=3.8]	16 U [MDL=16]	4 U [MDL=4]	4.2 U [MDL=4.2]
FLUORANTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	14 [MDL=3.5]	320 [MDL=3.8]	3700 [MDL=16]	110 [MDL=4]	4.2 U [MDL=4.2]
FLUORENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	30 [MDL=3.8]	180 [MDL=16]	29 [MDL=4]	4.2 U [MDL=4.2]
INDENO(1,2,3-CD)PYRENE	4 U [MDL=4]	3.8 U [MDL=3.8]	18 [MDL=3.5]	82 [MDL=3.8]	480 [MDL=16]	42 [MDL=4]	4.2 U [MDL=4.2]
NAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	13 [MDL=3.8]	34 [MDL=16]	45 [MDL=4]	4.2 U [MDL=4.2]
PHENANTHRENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	250 [MDL=3.8]	2100 [MDL=16]	120 [MDL=4]	4.2 U [MDL=4.2]
PYRENE	4 U [MDL=4]	3.8 U [MDL=3.8]	14 [MDL=3.5]	240 [MDL=3.8]	2900 [MDL=16]	87 [MDL=4]	4.2 U [MDL=4.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-789 D-SB-789-13 9/8/2010	SB-789 D-SB-789-15 9/8/2010	SB-789 D-SB-789-SS 9/8/2010	SB-790 D-SB-790-03 9/8/2010	SB-790 D-SB-790-05 9/8/2010	SB-790 D-SB-790-07 9/8/2010	SB-790 D-SB-790-09 9/8/2010
TOTAL PAHS	0 U [MDL=NaN]	0 U [MDL=NaN]	78 [MDL=NaN]	1859 [MDL=NaN]	16614 [MDL=NaN]	884 [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	25 U [MDL=25]	24 U [MDL=24]	22 U [MDL=22]	24 U [MDL=24]	50 U [MDL=50]	26 U [MDL=26]	27 U [MDL=27]
AROCLOR-1221	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	19 U [MDL=19]	38 U [MDL=38]	19 U [MDL=19]	20 U [MDL=20]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	33 U [MDL=33]	17 U [MDL=17]	18 U [MDL=18]
AROCLOR-1242	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]	31 U [MDL=31]	16 U [MDL=16]	17 U [MDL=17]
AROCLOR-1248	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	20 U [MDL=20]	40 U [MDL=40]	21 U [MDL=21]	22 U [MDL=22]
AROCLOR-1254	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	20 U [MDL=20]	40 U [MDL=40]	21 U [MDL=21]	22 U [MDL=22]
AROCLOR-1260	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	20 U [MDL=20]	240 [MDL=40]	21 U [MDL=21]	22 U [MDL=22]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	240 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.75 UJ [MDL=0.75]	0.72 UJ [MDL=0.72]	0.66 UJ [MDL=0.66]	0.72 U [MDL=0.72]	15 U [MDL=15]	0.75 U [MDL=0.75]	0.79 U [MDL=0.79]
4,4'-DDE	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]	34 J [MDL=9.2]	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]
4,4'-DDT	0.76 U [MDL=0.76]	0.73 UJ [MDL=0.73]	0.67 U [MDL=0.67]	0.73 U [MDL=0.73]	15 U [MDL=15]	0.77 U [MDL=0.77]	0.8 U [MDL=0.8]
ALDRIN	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	28 U [MDL=28]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]
ALPHA-BHC	0.88 U [MDL=0.88]	0.85 U [MDL=0.85]	0.78 U [MDL=0.78]	0.85 U [MDL=0.85]	17 U [MDL=17]	0.89 U [MDL=0.89]	0.93 U [MDL=0.93]
ALPHA-CHLORDANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	22 U [MDL=22]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
BETA-BHC	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	26 U [MDL=26]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]
DELTA-BHC	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	28 U [MDL=28]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]
DIELDRIN	0.57 U [MDL=0.57]	0.55 U [MDL=0.55]	0.5 U [MDL=0.5]	0.55 U [MDL=0.55]	11 U [MDL=11]	0.57 U [MDL=0.57]	0.6 U [MDL=0.6]
ENDOSULFAN I	0.63 U [MDL=0.63]	0.6 U [MDL=0.6]	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]	12 U [MDL=12]	0.63 U [MDL=0.63]	0.66 U [MDL=0.66]
ENDOSULFAN II	0.99 U [MDL=0.99]	0.95 U [MDL=0.95]	0.88 U [MDL=0.88]	0.95 U [MDL=0.95]	19 U [MDL=19]	1 U [MDL=1]	1 U [MDL=1]
ENDOSULFAN SULFATE	1 U [MDL=1]	1 U [MDL=1]	0.93 U [MDL=0.93]	1 U [MDL=1]	21 U [MDL=21]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
ENDRIN	0.6 UJ [MDL=0.6]	0.58 UJ [MDL=0.58]	0.53 UJ [MDL=0.53]	0.58 U [MDL=0.58]	12 U [MDL=12]	0.61 U [MDL=0.61]	0.64 U [MDL=0.64]
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	24 U [MDL=24]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]
ENDRIN KETONE	0.76 U [MDL=0.76]	0.73 U [MDL=0.73]	0.67 U [MDL=0.67]	0.73 U [MDL=0.73]	15 U [MDL=15]	0.77 U [MDL=0.77]	0.8 U [MDL=0.8]
GAMMA-BHC (LINDANE)	0.89 U [MDL=0.89]	0.86 U [MDL=0.86]	0.79 U [MDL=0.79]	0.86 UJ [MDL=0.86]	18 UJ [MDL=18]	0.9 UJ [MDL=0.9]	0.95 UJ [MDL=0.95]
GAMMA-CHLORDANE	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	0.49 U [MDL=0.49]	10 U [MDL=10]	0.51 U [MDL=0.51]	0.54 U [MDL=0.54]
HEPTACHLOR	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.2 UJ [MDL=1.2]	1.3 U [MDL=1.3]	26 U [MDL=26]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-789	SB-789	SB-789	SB-790	SB-790	SB-790	SB-790
SAMPLE ID	D-SB-789-13	D-SB-789-15	D-SB-789-SS	D-SB-790-03	D-SB-790-05	D-SB-790-07	D-SB-790-09
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/8/2010
HEPTACHLOR EPOXIDE	0.96 U [MDL=0.96]	0.93 U [MDL=0.93]	0.85 U [MDL=0.85]	0.93 U [MDL=0.93]	19 U [MDL=19]	0.97 U [MDL=0.97]	1 U [MDL=1]
METHOXYCHLOR	1.8 UJ [MDL=1.8]	1.7 UJ [MDL=1.7]	1.6 UJ [MDL=1.6]	1.7 U [MDL=1.7]	36 U [MDL=36]	1.8 U [MDL=1.8]	1.9 U [MDL=1.9]
TOXAPHENE	23 U [MDL=23]	22 U [MDL=22]	20 U [MDL=20]	22 U [MDL=22]	450 U [MDL=450]	23 U [MDL=23]	24 U [MDL=24]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3400 U [MDL=3.4]	3300 U [MDL=3.3]	9700 J [MDL=3]	12000 [MDL=3.3]	63000 [MDL=3.3]	230000 [MDL=17]	9800 J [MDL=3.6]
GASOLINE RANGE ORGANICS	55 U [MDL=55]	53 U [MDL=53]	49 U [MDL=49]	53 U [MDL=53]	55 U [MDL=55]	56 U [MDL=56]	59 U [MDL=59]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-790	SB-790	SB-790	SB-790	SB-791	SB-791	SB-791
SAMPLE ID	D-SB-790-11	D-SB-790-13	D-SB-790-15	D-SB-790-SS	D-SB-791-03	D-SB-791-05	D-SB-791-07
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/9/2010	9/9/2010	9/9/2010
METALS (MG/KG)							
ANTIMONY	0.051 J [MDL=0.03]	0.41 J [MDL=0.029]	0.22 J [MDL=0.028]	0.026 U [MDL=0.026]	0.26 B [MDL=0.029]	0.14 B [MDL=0.031]	0.3 B [MDL=0.028]
ARSENIC	2.1 [MDL=0.076]	5 [MDL=0.074]	3.3 [MDL=0.072]	0.71 [MDL=0.066]	5.4 L [MDL=0.075]	3.7 L [MDL=0.079]	7.9 L [MDL=0.073]
BARIUM	16.1 [MDL=0.057]	14 [MDL=0.055]	20.9 [MDL=0.054]	3.7 [MDL=0.049]	20.6 [MDL=0.056]	14.9 [MDL=0.059]	12.6 [MDL=0.055]
BERYLLIUM	1.6 [MDL=0.058]	4.2 [MDL=0.056]	4.2 [MDL=0.055]	0.05 U [MDL=0.05]	3.1 J [MDL=0.057]	1.6 J [MDL=0.06]	3.4 J [MDL=0.056]
CADMIUM	0.0096 UL [MDL=0.0096]	0.025 B [MDL=0.0094]	0.027 B [MDL=0.0091]	0.0084 UL [MDL=0.0084]	0.027 B [MDL=0.0094]	0.022 B [MDL=0.0099]	0.019 B [MDL=0.0092]
CHROMIUM	9.4 [MDL=0.049]	22.1 [MDL=0.048]	22.7 [MDL=0.047]	8.2 [MDL=0.043]	23.8 [MDL=0.048]	16.9 [MDL=0.051]	31 [MDL=0.047]
COBALT	2.6 [MDL=0.0047]	8.8 [MDL=0.0046]	7.4 [MDL=0.0044]	0.52 [MDL=0.0041]	10.9 [MDL=0.0046]	4.3 [MDL=0.0048]	10.3 [MDL=0.0045]
COPPER	12.8 L [MDL=0.053]	20.1 L [MDL=0.052]	18.5 L [MDL=0.05]	2.9 [MDL=0.046]	15.1 [MDL=0.052]	22 [MDL=0.055]	24.7 [MDL=0.051]
IRON	6230 [MDL=1.2]	36600 [MDL=1.2]	28600 [MDL=1.2]	3870 [MDL=1.1]	37400 [MDL=1.2]	22100 [MDL=1.3]	50200 [MDL=1.2]
LEAD	3.6 [MDL=0.016]	7.4 [MDL=0.016]	4.2 [MDL=0.015]	0.98 [MDL=0.014]	13.4 [MDL=0.016]	5.5 [MDL=0.017]	6.7 [MDL=0.015]
MANGANESE	5.2 [MDL=0.058]	107 [MDL=0.056]	47.2 [MDL=0.055]	14 [MDL=0.05]	90.1 J [MDL=0.057]	28.4 J [MDL=0.06]	161 J [MDL=0.056]
MERCURY	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.016 U [MDL=0.016]	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]
MOLYBDENUM	0.11 J [MDL=0.078]	0.6 [MDL=0.076]	0.46 [MDL=0.073]	0.14 J [MDL=0.068]	0.52 [MDL=0.076]	0.63 [MDL=0.08]	0.8 [MDL=0.075]
NICKEL	5.4 [MDL=0.026]	27.6 [MDL=0.025]	24.6 [MDL=0.024]	0.64 [MDL=0.023]	40.7 [MDL=0.025]	10.7 [MDL=0.027]	36.2 [MDL=0.025]
SELENIUM	1.4 J [MDL=0.11]	3.3 J [MDL=0.11]	2.3 J [MDL=0.1]	0.16 J [MDL=0.096]	1.4 L [MDL=0.11]	0.98 L [MDL=0.11]	2.4 L [MDL=0.11]
SILVER	0.02 U [MDL=0.02]	0.019 U [MDL=0.019]	0.019 U [MDL=0.019]	0.017 U [MDL=0.017]	0.019 U [MDL=0.019]	0.024 B [MDL=0.02]	0.019 U [MDL=0.019]
THALLIUM	0.088 B [MDL=0.016]	0.094 B [MDL=0.016]	0.089 B [MDL=0.015]	0.014 U [MDL=0.014]	0.082 J [MDL=0.016]	0.11 J [MDL=0.017]	0.079 J [MDL=0.015]
VANADIUM	17.1 [MDL=0.05]	35.1 [MDL=0.049]	38.5 [MDL=0.048]	10.9 [MDL=0.044]	37.5 [MDL=0.05]	30.9 [MDL=0.052]	51.2 [MDL=0.049]
ZINC	8.9 J [MDL=0.25]	36.9 J [MDL=0.24]	34 J [MDL=0.23]	2.9 [MDL=0.21]	40.1 [MDL=0.24]	31.6 [MDL=0.25]	41.3 [MDL=0.24]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.49 J [MDL=0.33]	0.32 U [MDL=0.32]	0.31 J [MDL=0.31]	0.8 J [MDL=0.29]	0.33 U [MDL=0.33]	0.9 J [MDL=0.34]	0.32 U [MDL=0.32]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
1,4-DIOXANE	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]	24 U [MDL=24]	27 U [MDL=27]	28 U [MDL=28]	26 U [MDL=26]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	31 U [MDL=31]	30 U [MDL=30]	29 U [MDL=29]	27 U [MDL=27]	30 U [MDL=30]	32 U [MDL=32]	30 U [MDL=30]
2,4,6-TRICHLOROPHENOL	98 U [MDL=98]	96 U [MDL=96]	93 U [MDL=93]	86 U [MDL=86]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]
2,4-DICHLOROPHENOL	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	21 U [MDL=21]	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	21 U [MDL=21]	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]
2,4-DINITROPHENOL	98 U [MDL=98]	96 U [MDL=96]	93 U [MDL=93]	86 U [MDL=86]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]
2,4-DINITROTOLUENE	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
2,6-DINITROTOLUENE	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	25 U [MDL=25]	27 U [MDL=27]	25 U [MDL=25]
2-CHLORONAPHTHALENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	4 U [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
2-CHLOROPHENOL	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	98 U [MDL=98]	96 U [MDL=96]	93 U [MDL=93]	86 U [MDL=86]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	9.8 U [MDL=9.8]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]
2-NITROPHENOL	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	22 U [MDL=22]	21 U [MDL=21]	19 U [MDL=19]	22 U [MDL=22]	23 U [MDL=23]	21 U [MDL=21]
3-NITROANILINE	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	98 U [MDL=98]	96 U [MDL=96]	93 U [MDL=93]	86 U [MDL=86]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	25 U [MDL=25]	27 U [MDL=27]	25 U [MDL=25]
4-CHLOROANILINE	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]	22 U [MDL=22]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]
4-METHYLPHENOL	98 U [MDL=98]	96 U [MDL=96]	93 U [MDL=93]	86 U [MDL=86]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]
4-NITROANILINE	32 U [MDL=32]	31 U [MDL=31]	30 U [MDL=30]	28 U [MDL=28]	31 U [MDL=31]	33 U [MDL=33]	31 U [MDL=31]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-790 D-SB-790-11 9/8/2010	SB-790 D-SB-790-13 9/8/2010	SB-790 D-SB-790-15 9/8/2010	SB-790 D-SB-790-SS 9/8/2010	SB-791 D-SB-791-03 9/9/2010	SB-791 D-SB-791-05 9/9/2010	SB-791 D-SB-791-07 9/9/2010
4-NITROPHENOL	98 U [MDL=98]	96 U [MDL=96]	93 U [MDL=93]	86 U [MDL=86]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	9.9 U [MDL=9.9]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	9.8 U [MDL=9.8]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	13 U [MDL=13]	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]	24 U [MDL=24]	27 U [MDL=27]	28 U [MDL=28]	26 U [MDL=26]
BIS(2-CHLOROETHYL)ETHER	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.1 U [MDL=2.1]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	140 [MDL=23]	22 U [MDL=22]	20 U [MDL=20]	23 U [MDL=23]	52 J [MDL=24]	23 U [MDL=23]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	13 U [MDL=13]	12 U [MDL=12]
CAPROLACTAM	46 U [MDL=46]	44 U [MDL=44]	43 U [MDL=43]	40 U [MDL=40]	45 U [MDL=45]	47 U [MDL=47]	44 U [MDL=44]
CARBAZOLE	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	4 U [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
DIETHYL PHTHALATE	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]
DIMETHYL PHTHALATE	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]	22 U [MDL=22]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	18 U [MDL=18]	17 U [MDL=17]	16 U [MDL=16]	18 U [MDL=18]	19 U [MDL=19]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.5 U [MDL=2.5]	2.7 U [MDL=2.7]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
HEXACHLOROCYCLOPENTADIENE	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
HEXACHLOROETHANE	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	9.6 U [MDL=9.6]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	2.7 U [MDL=2.7]	2.8 U [MDL=2.8]	2.6 U [MDL=2.6]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	25 U [MDL=25]	27 U [MDL=27]	25 U [MDL=25]
PENTACHLOROPHENOL	98 U [MDL=98]	96 U [MDL=96]	93 U [MDL=93]	86 U [MDL=86]	97 U [MDL=97]	100 U [MDL=100]	95 U [MDL=95]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	33 U [MDL=33]	32 U [MDL=32]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]	34 U [MDL=34]	32 U [MDL=32]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.57 U [MDL=0.57]	0.55 U [MDL=0.55]	0.51 U [MDL=0.51]	0.57 U [MDL=0.57]	0.56 U [MDL=0.56]	0.67 U [MDL=0.67]	0.53 U [MDL=0.53]
1,1,1-TRICHLOROETHANE	0.52 U [MDL=0.52]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.52 U [MDL=0.52]	0.5 U [MDL=0.5]	0.61 U [MDL=0.61]	0.48 U [MDL=0.48]
1,1,2,2-TETRACHLOROETHANE	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-790	SB-790	SB-790	SB-790	SB-791	SB-791	SB-791
SAMPLE ID	D-SB-790-11	D-SB-790-13	D-SB-790-15	D-SB-790-SS	D-SB-791-03	D-SB-791-05	D-SB-791-07
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/9/2010	9/9/2010	9/9/2010
1,1-DICHLOROETHANE	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]
1,1-DICHLOROETHENE	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]	0.56 U [MDL=0.56]	0.44 U [MDL=0.44]
1,1-DICHLOROPROPENE	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.26 U [MDL=0.26]
1,2,3-TRICHLOROBENZENE	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]
1,2,3-TRICHLOROPROPANE	0.83 U [MDL=0.83]	0.8 U [MDL=0.8]	0.75 U [MDL=0.75]	0.83 U [MDL=0.83]	0.81 U [MDL=0.81]	0.97 U [MDL=0.97]	0.77 U [MDL=0.77]
1,2,3-TRIMETHYLBENZENE	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.18 U [MDL=0.18]	0.15 U [MDL=0.15]
1,2,4-TRICHLOROBENZENE	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.23 U [MDL=0.23]
1,2,4-TRIMETHYLBENZENE	0.6 U [MDL=0.6]	0.58 U [MDL=0.58]	0.54 U [MDL=0.54]	0.6 U [MDL=0.6]	0.58 U [MDL=0.58]	0.7 U [MDL=0.7]	0.55 U [MDL=0.55]
1,2-DIBROMO-3-CHLOROPROPANE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]
1,2-DIBROMOETHANE	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.41 U [MDL=0.41]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.54 U [MDL=0.54]	0.43 U [MDL=0.43]
1,2-DICHLOROBENZENE	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]
1,2-DICHLOROETHANE	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]
1,2-DICHLOROPROPANE	0.64 U [MDL=0.64]	0.61 U [MDL=0.61]	0.57 U [MDL=0.57]	0.64 U [MDL=0.64]	0.62 U [MDL=0.62]	0.75 U [MDL=0.75]	0.59 U [MDL=0.59]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.3 U [MDL=0.3]
1,3-DICHLOROPROPANE	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]
1,4-DICHLOROBENZENE	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	0.55 U [MDL=0.55]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	0.71 U [MDL=0.71]	0.56 U [MDL=0.56]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.87 U [MDL=0.87]	0.84 U [MDL=0.84]	0.78 U [MDL=0.78]	0.87 U [MDL=0.87]	0.84 U [MDL=0.84]	1 U [MDL=1]	0.8 U [MDL=0.8]
2-BUTANONE	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	4.9 J [MDL=1.3]	14 [MDL=1.5]	3.1 J [MDL=1.2]
2-CHLOROETHYL VINYL ETHER	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]
2-CHLOROTOLUENE	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.43 U [MDL=0.43]	0.34 U [MDL=0.34]
2-HEXANONE	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	0.52 U [MDL=0.52]	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	0.68 U [MDL=0.68]	0.54 U [MDL=0.54]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]
4-ISOPROPYLTOLUENE	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.18 U [MDL=0.18]
4-METHYL-2-PENTANONE	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.59 B [MDL=0.48]	0.58 U [MDL=0.58]	0.46 U [MDL=0.46]
ACETONE	150 U [MDL=150]	110 [MDL=5.6]	19 B [MDL=5.2]	110 [MDL=5.8]	49 B [MDL=5.6]	400 J [MDL=6.8]	220 B [MDL=160]
BENZENE	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.25 U [MDL=0.25]	0.2 U [MDL=0.2]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.36 U [MDL=0.36]	0.28 U [MDL=0.28]
BROMOCHLOROMETHANE	0.66 U [MDL=0.66]	0.63 U [MDL=0.63]	0.59 U [MDL=0.59]	0.65 U [MDL=0.65]	0.64 U [MDL=0.64]	0.77 U [MDL=0.77]	0.61 U [MDL=0.61]
BROMODICHLOROMETHANE	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.3 U [MDL=0.3]	0.24 U [MDL=0.24]
BROMOFORM	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.36 U [MDL=0.36]	0.28 U [MDL=0.28]
BROMOMETHANE	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	0.58 U [MDL=0.58]	0.46 U [MDL=0.46]
CARBON DISULFIDE	0.41 U [MDL=0.41]	0.39 U [MDL=0.39]	0.36 U [MDL=0.36]	0.41 U [MDL=0.41]	0.99 B [MDL=0.39]	1.6 B [MDL=0.48]	0.86 B [MDL=0.38]
CARBON TETRACHLORIDE	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.32 U [MDL=0.32]
CHLOROBENZENE	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.36 U [MDL=0.36]	0.28 U [MDL=0.28]
CHLORODIBROMOMETHANE	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.59 U [MDL=0.59]	0.47 U [MDL=0.47]
CHLOROETHANE	0.79 U [MDL=0.79]	0.76 U [MDL=0.76]	0.71 U [MDL=0.71]	0.79 U [MDL=0.79]	0.77 U [MDL=0.77]	0.93 U [MDL=0.93]	0.73 U [MDL=0.73]
CHLOROFORM	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]
CHLOROMETHANE	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]
CIS-1,2-DICHLOROETHENE	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]
CIS-1,3-DICHLOROPROPENE	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	0.52 U [MDL=0.52]	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	0.68 U [MDL=0.68]	0.54 U [MDL=0.54]
DICHLORODIFLUOROMETHANE	0.46 U [MDL=0.46]	0.44 U [MDL=0.44]	0.41 U [MDL=0.41]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.54 U [MDL=0.54]	0.43 U [MDL=0.43]
DIISOPROPYL ETHER	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-790	SB-790	SB-790	SB-790	SB-791	SB-791	SB-791
SAMPLE ID	D-SB-790-11	D-SB-790-13	D-SB-790-15	D-SB-790-SS	D-SB-791-03	D-SB-791-05	D-SB-791-07
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/9/2010	9/9/2010	9/9/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]
ETHYLBENZENE	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.28 U [MDL=0.28]	0.22 U [MDL=0.22]
HEXACHLOROBUTADIENE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.99 U [MDL=0.99]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1 U [MDL=1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.14 U [MDL=0.14]
M+P-XYLENES	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.99 U [MDL=0.99]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1 U [MDL=1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.4 U [MDL=0.4]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.4 U [MDL=0.4]	0.39 UJ [MDL=0.39]	0.46 UJ [MDL=0.46]	0.37 UJ [MDL=0.37]
METHYLENE CHLORIDE	0.62 U [MDL=0.62]	0.6 U [MDL=0.6]	0.55 U [MDL=0.55]	0.62 U [MDL=0.62]	0.84 B [MDL=0.6]	1.1 B [MDL=0.72]	0.9 B [MDL=0.57]
NAPHTHALENE	0.18 U [MDL=0.18]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.18 U [MDL=0.18]	1.6 B [MDL=0.17]	1.1 B [MDL=0.21]	0.75 B [MDL=0.16]
N-BUTYLBENZENE	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.25 U [MDL=0.25]	0.2 U [MDL=0.2]
N-PROPYLBENZENE	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.43 U [MDL=0.43]	0.34 U [MDL=0.34]
O-XYLENE	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.3 U [MDL=0.3]
SEC-BUTYLBENZENE	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.19 U [MDL=0.19]	0.15 U [MDL=0.15]
STYRENE	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.16 U [MDL=0.16]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.32 UJ [MDL=0.32]
TERT-BUTYLBENZENE	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]
TERTIARY-BUTYL ALCOHOL	7 UR [MDL=7]	6.8 UR [MDL=6.8]	6.3 UR [MDL=6.3]	7 UR [MDL=7]	48 B [MDL=6.8]	8.2 UR [MDL=8.2]	47 B [MDL=6.5]
TETRACHLOROETHENE	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]	0.56 U [MDL=0.56]	0.44 U [MDL=0.44]
TOLUENE	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.23 U [MDL=0.23]
TOTAL XYLENES	0.62 U [MDL=0.62]	0.6 U [MDL=0.6]	0.55 U [MDL=0.55]	0.62 U [MDL=0.62]	0.6 U [MDL=0.6]	0.72 U [MDL=0.72]	0.57 U [MDL=0.57]
TRANS-1,2-DICHLOROETHENE	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]
TRANS-1,3-DICHLOROPROPENE	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.48 U [MDL=0.48]	0.58 U [MDL=0.58]	0.46 U [MDL=0.46]
TRICHLOROETHENE	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.39 U [MDL=0.39]	0.38 U [MDL=0.38]	0.45 U [MDL=0.45]	0.36 U [MDL=0.36]
TRICHLOROFLUOROMETHANE	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]
VINYL ACETATE	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.27 U [MDL=0.27]	0.21 U [MDL=0.21]
VINYL CHLORIDE	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	0.42 U [MDL=0.42]	0.33 U [MDL=0.33]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	8.6 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
ACENAPHTHENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	17 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
ACENAPHTHYLENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	4 U [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
ANTHRACENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	16 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
BAP EQUIVALENT-HALFND	4.1 U [MDL=NaN]	4 U [MDL=NaN]	3.8 U [MDL=NaN]	18.5181 [MDL=NaN]	60.191 [MDL=NaN]	4.2 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-POS	4.1 U [MDL=NaN]	4 U [MDL=NaN]	3.8 U [MDL=NaN]	16.4 [MDL=NaN]	58.191 [MDL=NaN]	4.2 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	46 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
BENZO(A)PYRENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	15 [MDL=3.5]	44 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
BENZO(B)FLUORANTHENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	14 [MDL=3.5]	65 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
BENZO(G,H,I)PERYLENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	33 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
BENZO(K)FLUORANTHENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	24 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
CHRYSENE	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	51 [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	4 U [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
FLUORANTHENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	8.5 [MDL=3.5]	95 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
FLUORENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	15 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
INDENO(1,2,3-CD)PYRENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	28 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
NAPHTHALENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	13 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
PHENANTHRENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	3.5 U [MDL=3.5]	76 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]
PYRENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.8 U [MDL=3.8]	9.6 [MDL=3.5]	75 [MDL=4]	4.2 U [MDL=4.2]	3.9 U [MDL=3.9]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-790	SB-790	SB-790	SB-790	SB-791	SB-791	SB-791
SAMPLE ID	D-SB-790-11	D-SB-790-13	D-SB-790-15	D-SB-790-SS	D-SB-791-03	D-SB-791-05	D-SB-791-07
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/9/2010	9/9/2010	9/9/2010
TOTAL PAHS	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	47.1 [MDL=NaN]	606.6 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	25 U [MDL=25]	27 U [MDL=27]	25 U [MDL=25]
AROCLOR-1221	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]
AROCLOR-1232	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]	15 U [MDL=15]	17 U [MDL=17]	18 U [MDL=18]	17 U [MDL=17]
AROCLOR-1242	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]	22 U [MDL=22]	20 U [MDL=20]
AROCLOR-1254	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]	22 U [MDL=22]	20 U [MDL=20]
AROCLOR-1260	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]	22 U [MDL=22]	20 U [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.76 U [MDL=0.76]	0.74 U [MDL=0.74]	0.72 UJ [MDL=0.72]	0.66 U [MDL=0.66]	1.5 U [MDL=1.5]	0.79 U [MDL=0.79]	0.73 U [MDL=0.73]
4,4'-DDE	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.42 U [MDL=0.42]	0.94 U [MDL=0.94]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]
4,4'-DDT	0.78 U [MDL=0.78]	0.76 U [MDL=0.76]	0.73 U [MDL=0.73]	0.68 U [MDL=0.68]	1.5 U [MDL=1.5]	0.8 U [MDL=0.8]	0.75 U [MDL=0.75]
ALDRIN	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	2.9 U [MDL=2.9]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]
ALPHA-BHC	0.9 U [MDL=0.9]	0.88 U [MDL=0.88]	0.85 U [MDL=0.85]	0.78 U [MDL=0.78]	1.8 U [MDL=1.8]	0.93 U [MDL=0.93]	0.87 U [MDL=0.87]
ALPHA-CHLORDANE	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	2.3 U [MDL=2.3]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]
BETA-BHC	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	2.7 U [MDL=2.7]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]
DELTA-BHC	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	2.9 U [MDL=2.9]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]
DIELDRIN	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	0.55 U [MDL=0.55]	0.5 U [MDL=0.5]	1.1 U [MDL=1.1]	0.6 U [MDL=0.6]	0.56 U [MDL=0.56]
ENDOSULFAN I	0.64 U [MDL=0.64]	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]	0.56 U [MDL=0.56]	1.3 U [MDL=1.3]	0.66 U [MDL=0.66]	0.62 U [MDL=0.62]
ENDOSULFAN II	1 U [MDL=1]	0.98 U [MDL=0.98]	0.96 U [MDL=0.96]	0.88 U [MDL=0.88]	2 U [MDL=2]	1 U [MDL=1]	0.97 U [MDL=0.97]
ENDOSULFAN SULFATE	1.1 U [MDL=1.1]	1 U [MDL=1]	1 U [MDL=1]	0.93 U [MDL=0.93]	2.1 U [MDL=2.1]	1.1 U [MDL=1.1]	1 U [MDL=1]
ENDRIN	0.62 U [MDL=0.62]	0.6 U [MDL=0.6]	0.58 UJ [MDL=0.58]	0.54 U [MDL=0.54]	1.2 U [MDL=1.2]	0.64 U [MDL=0.64]	0.59 U [MDL=0.59]
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	2.4 U [MDL=2.4]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.78 U [MDL=0.78]	0.76 U [MDL=0.76]	0.73 U [MDL=0.73]	0.68 U [MDL=0.68]	1.5 U [MDL=1.5]	0.8 U [MDL=0.8]	0.75 U [MDL=0.75]
GAMMA-BHC (LINDANE)	0.91 UJ [MDL=0.91]	0.89 UJ [MDL=0.89]	0.86 U [MDL=0.86]	0.79 UJ [MDL=0.79]	1.8 U [MDL=1.8]	0.94 U [MDL=0.94]	0.88 U [MDL=0.88]
GAMMA-CHLORDANE	0.52 U [MDL=0.52]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	1 U [MDL=1]	0.53 U [MDL=0.53]	0.5 U [MDL=0.5]
HEPTACHLOR	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 UJ [MDL=1.3]	1.2 U [MDL=1.2]	2.7 UJ [MDL=2.7]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-790	SB-790	SB-790	SB-790	SB-791	SB-791	SB-791
SAMPLE ID	D-SB-790-11	D-SB-790-13	D-SB-790-15	D-SB-790-SS	D-SB-791-03	D-SB-791-05	D-SB-791-07
SAMPLE DATE	9/8/2010	9/8/2010	9/8/2010	9/8/2010	9/9/2010	9/9/2010	9/9/2010
HEPTACHLOR EPOXIDE	0.98 U [MDL=0.98]	0.96 U [MDL=0.96]	0.93 U [MDL=0.93]	0.86 U [MDL=0.86]	1.9 U [MDL=1.9]	1 U [MDL=1]	0.95 U [MDL=0.95]
METHOXYCHLOR	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.7 UJ [MDL=1.7]	1.6 UJ [MDL=1.6]	3.6 UJ [MDL=3.6]	1.9 UJ [MDL=1.9]	1.8 UJ [MDL=1.8]
TOXAPHENE	23 U [MDL=23]	23 U [MDL=23]	22 U [MDL=22]	20 U [MDL=20]	46 U [MDL=46]	24 U [MDL=24]	23 U [MDL=23]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3400 J [MDL=3.4]	3400 U [MDL=3.4]	3300 U [MDL=3.3]	33000 [MDL=3]	41000 [MDL=3.4]	22000 [MDL=3.6]	5400 J [MDL=3.3]
GASOLINE RANGE ORGANICS	57 U [MDL=57]	55 U [MDL=55]	54 U [MDL=54]	49 U [MDL=49]	56 U [MDL=56]	59 U [MDL=59]	55 U [MDL=55]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-791	SB-791	SB-791	SB-791	SB-791	SB-792	SB-792
SAMPLE ID	D-SB-791-09	D-SB-791-11	D-SB-791-13	D-SB-791-15	D-SB-791-SS	D-SB-792-03	D-SB-792-05
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
METALS (MG/KG)							
ANTIMONY	0.027 UL [MDL=0.027]	0.11 B [MDL=0.028]	0.18 B [MDL=0.029]	0.68 J [MDL=0.03]	0.025 UL [MDL=0.025]	0.28 UL [MDL=0.28]	0.23 B [MDL=0.029]
ARSENIC	5 L [MDL=0.071]	3.9 L [MDL=0.072]	2.8 L [MDL=0.074]	8.2 L [MDL=0.077]	0.72 L [MDL=0.066]	5.4 L [MDL=0.072]	4.4 L [MDL=0.075]
BARIUM	7.4 [MDL=0.053]	7.3 [MDL=0.053]	7.2 [MDL=0.055]	14.3 [MDL=0.057]	3.9 [MDL=0.049]	40.6 [MDL=0.54]	16.7 [MDL=0.056]
BERYLLIUM	0.82 J [MDL=0.054]	1 J [MDL=0.054]	1.3 J [MDL=0.056]	3.5 J [MDL=0.058]	0.055 J [MDL=0.05]	1.5 J [MDL=0.055]	1.9 J [MDL=0.057]
CADMIUM	0.017 B [MDL=0.0089]	0.015 B [MDL=0.009]	0.017 B [MDL=0.0093]	0.025 B [MDL=0.0096]	0.0082 UL [MDL=0.0082]	0.24 B [MDL=0.0091]	0.026 B [MDL=0.0094]
CHROMIUM	2.2 [MDL=0.046]	15.9 [MDL=0.046]	20.6 [MDL=0.048]	56.1 [MDL=0.049]	8.6 [MDL=0.042]	19.6 [MDL=0.047]	22.3 [MDL=0.048]
COBALT	3.4 [MDL=0.0043]	3.7 [MDL=0.0044]	5.9 [MDL=0.0045]	13.5 [MDL=0.0047]	0.5 [MDL=0.004]	33 [MDL=0.0044]	7 [MDL=0.0046]
COPPER	4.7 [MDL=0.049]	6.1 [MDL=0.05]	12.5 [MDL=0.051]	30.2 [MDL=0.053]	3.2 [MDL=0.045]	31.1 [MDL=0.05]	20.4 [MDL=0.052]
IRON	1420 [MDL=1.1]	17100 [MDL=1.2]	26600 [MDL=1.2]	87200 [MDL=12.4]	4450 [MDL=1.1]	18800 [MDL=1.2]	35700 [MDL=1.2]
LEAD	5.6 [MDL=0.015]	5.6 [MDL=0.015]	4.9 [MDL=0.015]	18.4 [MDL=0.016]	1.1 [MDL=0.014]	54.1 [MDL=0.15]	5.2 [MDL=0.016]
MANGANESE	7.2 J [MDL=0.054]	7.4 J [MDL=0.054]	11.7 J [MDL=0.056]	23.8 J [MDL=0.058]	9.4 J [MDL=0.05]	88.8 J [MDL=0.055]	53.1 J [MDL=0.057]
MERCURY	0.017 U [MDL=0.017]	0.017 U [MDL=0.017]	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]	0.016 U [MDL=0.016]	1.3 [MDL=0.018]	0.018 U [MDL=0.018]
MOLYBDENUM	0.072 U [MDL=0.072]	0.28 [MDL=0.073]	0.61 [MDL=0.075]	1.5 [MDL=0.078]	0.14 B [MDL=0.067]	0.53 [MDL=0.074]	0.65 [MDL=0.076]
NICKEL	5.3 [MDL=0.024]	9.3 [MDL=0.024]	17.7 [MDL=0.025]	27.9 [MDL=0.026]	0.76 [MDL=0.022]	37 [MDL=0.025]	18.7 [MDL=0.025]
SELENIUM	7.2 L [MDL=0.1]	4.9 L [MDL=0.1]	1.4 L [MDL=0.11]	1.3 L [MDL=0.11]	0.11 J [MDL=0.095]	2 L [MDL=0.11]	0.84 L [MDL=0.11]
SILVER	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]	0.019 U [MDL=0.019]	0.02 U [MDL=0.02]	0.017 U [MDL=0.017]	1.9 [MDL=0.019]	0.019 U [MDL=0.019]
THALLIUM	0.064 J [MDL=0.015]	0.06 J [MDL=0.015]	0.051 J [MDL=0.015]	0.1 J [MDL=0.016]	0.014 U [MDL=0.014]	0.15 U [MDL=0.15]	0.099 J [MDL=0.016]
VANADIUM	2.1 [MDL=0.047]	23.5 [MDL=0.047]	44.3 [MDL=0.049]	102 [MDL=0.051]	12.2 [MDL=0.043]	29 [MDL=0.048]	46 [MDL=0.05]
ZINC	8.7 [MDL=0.23]	11.1 [MDL=0.23]	17.8 [MDL=0.24]	37.2 [MDL=0.25]	3.1 B [MDL=0.21]	111 [MDL=0.23]	33.6 [MDL=0.24]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.39 J [MDL=0.31]	0.32 J [MDL=0.31]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.54 J [MDL=0.29]	0.32 U [MDL=0.32]	0.56 J [MDL=0.33]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
1,4-DIOXANE	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]	27 U [MDL=27]	23 U [MDL=23]	26 U [MDL=26]	27 U [MDL=27]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	29 U [MDL=29]	29 U [MDL=29]	30 U [MDL=30]	31 U [MDL=31]	26 U [MDL=26]	29 U [MDL=29]	30 U [MDL=30]
2,4,6-TRICHLOROPHENOL	92 U [MDL=92]	93 U [MDL=93]	95 U [MDL=95]	99 U [MDL=99]	85 U [MDL=85]	94 U [MDL=94]	97 U [MDL=97]
2,4-DICHLOROPHENOL	23 U [MDL=23]	23 U [MDL=23]	24 U [MDL=24]	25 U [MDL=25]	21 U [MDL=21]	23 U [MDL=23]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	23 U [MDL=23]	23 U [MDL=23]	24 U [MDL=24]	25 U [MDL=25]	21 U [MDL=21]	23 U [MDL=23]	24 U [MDL=24]
2,4-DINITROPHENOL	92 U [MDL=92]	93 U [MDL=93]	95 U [MDL=95]	99 U [MDL=99]	85 U [MDL=85]	94 U [MDL=94]	97 U [MDL=97]
2,4-DINITROTOLUENE	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
2,6-DINITROTOLUENE	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]	26 U [MDL=26]	22 U [MDL=22]	25 U [MDL=25]	25 U [MDL=25]
2-CHLORONAPHTHALENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
2-CHLOROPHENOL	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	92 U [MDL=92]	93 U [MDL=93]	95 U [MDL=95]	99 U [MDL=99]	85 U [MDL=85]	94 U [MDL=94]	97 U [MDL=97]
2-NITROANILINE	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	9.6 U [MDL=9.6]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	22 U [MDL=22]	19 U [MDL=19]	21 U [MDL=21]	22 U [MDL=22]
3-NITROANILINE	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	17 U [MDL=17]	19 U [MDL=19]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	92 U [MDL=92]	93 U [MDL=93]	95 U [MDL=95]	99 U [MDL=99]	85 U [MDL=85]	94 U [MDL=94]	97 U [MDL=97]
4-BROMOPHENYL PHENYL ETHER	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	14 U [MDL=14]	15 U [MDL=15]	16 U [MDL=16]
4-CHLORO-3-METHYLPHENOL	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]	26 U [MDL=26]	22 U [MDL=22]	25 U [MDL=25]	25 U [MDL=25]
4-CHLOROANILINE	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	18 U [MDL=18]	20 U [MDL=20]	21 U [MDL=21]
4-CHLOROPHENYL PHENYL ETHER	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	14 U [MDL=14]	15 U [MDL=15]	16 U [MDL=16]
4-METHYLPHENOL	92 U [MDL=92]	93 U [MDL=93]	95 U [MDL=95]	99 U [MDL=99]	85 U [MDL=85]	94 U [MDL=94]	97 U [MDL=97]
4-NITROANILINE	30 U [MDL=30]	30 U [MDL=30]	31 U [MDL=31]	32 U [MDL=32]	27 U [MDL=27]	30 U [MDL=30]	31 U [MDL=31]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-791 D-SB-791-09 9/9/2010	SB-791 D-SB-791-11 9/9/2010	SB-791 D-SB-791-13 9/9/2010	SB-791 D-SB-791-15 9/9/2010	SB-791 D-SB-791-SS 9/9/2010	SB-792 D-SB-792-03 9/9/2010	SB-792 D-SB-792-05 9/9/2010
4-NITROPHENOL	92 U [MDL=92]	93 U [MDL=93]	95 U [MDL=95]	99 U [MDL=99]	85 U [MDL=85]	94 U [MDL=94]	97 U [MDL=97]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	9.7 U [MDL=9.7]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	9.6 U [MDL=9.6]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	15 U [MDL=15]	13 U [MDL=13]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]	27 U [MDL=27]	23 U [MDL=23]	26 U [MDL=26]	27 U [MDL=27]
BIS(2-CHLOROETHYL)ETHER	2.3 U [MDL=2.3]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.1 U [MDL=2.1]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	22 U [MDL=22]	22 U [MDL=22]	23 J [MDL=23]	23 U [MDL=23]	20 U [MDL=20]	22 U [MDL=22]	23 U [MDL=23]
BUTYL BENZYL PHTHALATE	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	42 U [MDL=42]	43 U [MDL=43]	44 U [MDL=44]	46 U [MDL=46]	39 U [MDL=39]	43 U [MDL=43]	45 U [MDL=45]
CARBAZOLE	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
DIETHYL PHTHALATE	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	17 U [MDL=17]	19 U [MDL=19]	19 U [MDL=19]
DIMETHYL PHTHALATE	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	18 U [MDL=18]	20 U [MDL=20]	21 U [MDL=21]
DI-N-BUTYL PHTHALATE	17 U [MDL=17]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	16 U [MDL=16]	18 U [MDL=18]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.2 U [MDL=2.2]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
HEXACHLOROCYCLOPENTADIENE	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
HEXACHLOROETHANE	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	9.5 U [MDL=9.5]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	14 U [MDL=14]	15 U [MDL=15]	16 U [MDL=16]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]	2.3 U [MDL=2.3]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]
N-NITROSODIMETHYLAMINE	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	17 U [MDL=17]	19 U [MDL=19]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
N-NITROSODIPHENYLAMINE	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]	26 U [MDL=26]	22 U [MDL=22]	25 U [MDL=25]	25 U [MDL=25]
PENTACHLOROPHENOL	92 U [MDL=92]	93 U [MDL=93]	95 U [MDL=95]	99 U [MDL=99]	85 U [MDL=85]	94 UR [MDL=94]	97 U [MDL=97]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	29 U [MDL=29]	32 U [MDL=32]	33 U [MDL=33]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.62 U [MDL=0.62]	0.53 U [MDL=0.53]	0.65 U [MDL=0.65]	0.57 U [MDL=0.57]	0.64 U [MDL=0.64]	0.52 U [MDL=0.52]	0.55 U [MDL=0.55]
1,1,1-TRICHLOROETHANE	0.56 U [MDL=0.56]	0.48 U [MDL=0.48]	0.59 U [MDL=0.59]	0.51 U [MDL=0.51]	0.58 U [MDL=0.58]	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]
1,1,2,2-TETRACHLOROETHANE	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-791	SB-791	SB-791	SB-791	SB-791	SB-792	SB-792
SAMPLE ID	D-SB-791-09	D-SB-791-11	D-SB-791-13	D-SB-791-15	D-SB-791-SS	D-SB-792-03	D-SB-792-05
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
1,1-DICHLOROETHANE	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]
1,1-DICHLOROETHENE	0.52 U [MDL=0.52]	0.45 U [MDL=0.45]	0.54 U [MDL=0.54]	0.48 U [MDL=0.48]	0.54 U [MDL=0.54]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]
1,1-DICHLOROPROPENE	0.3 U [MDL=0.3]	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]
1,2,3-TRICHLOROBENZENE	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.35 U [MDL=0.35]	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]
1,2,3-TRICHLOROPROPANE	0.9 U [MDL=0.9]	0.77 U [MDL=0.77]	0.94 U [MDL=0.94]	0.82 U [MDL=0.82]	0.93 U [MDL=0.93]	0.76 U [MDL=0.76]	0.8 U [MDL=0.8]
1,2,3-TRIMETHYLBENZENE	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.18 U [MDL=0.18]	0.16 U [MDL=0.16]	0.18 U [MDL=0.18]	0.21 J [MDL=0.14]	0.15 U [MDL=0.15]
1,2,4-TRICHLOROBENZENE	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
1,2,4-TRIMETHYLBENZENE	0.65 U [MDL=0.65]	0.56 U [MDL=0.56]	0.68 U [MDL=0.68]	0.59 U [MDL=0.59]	0.67 U [MDL=0.67]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]
1,2-DIBROMO-3-CHLOROPROPANE	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]
1,2-DIBROMOETHANE	0.5 U [MDL=0.5]	0.43 U [MDL=0.43]	0.52 U [MDL=0.52]	0.46 U [MDL=0.46]	0.52 U [MDL=0.52]	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]
1,2-DICHLOROBENZENE	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]
1,2-DICHLOROETHANE	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,2-DICHLOROPROPANE	0.69 U [MDL=0.69]	0.59 U [MDL=0.59]	0.72 U [MDL=0.72]	0.63 U [MDL=0.63]	0.71 U [MDL=0.71]	0.58 U [MDL=0.58]	0.62 U [MDL=0.62]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.35 U [MDL=0.35]	0.3 U [MDL=0.3]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.36 U [MDL=0.36]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
1,3-DICHLOROPROPANE	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
1,4-DICHLOROBENZENE	0.66 U [MDL=0.66]	0.57 U [MDL=0.57]	0.69 U [MDL=0.69]	0.6 U [MDL=0.6]	0.68 U [MDL=0.68]	0.56 U [MDL=0.56]	0.59 U [MDL=0.59]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.94 U [MDL=0.94]	0.8 U [MDL=0.8]	0.98 U [MDL=0.98]	0.86 U [MDL=0.86]	0.97 U [MDL=0.97]	0.79 U [MDL=0.79]	0.84 U [MDL=0.84]
2-BUTANONE	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	4 J [MDL=1.5]	1.3 U [MDL=1.3]	1.7 J [MDL=1.5]	52 [MDL=1.2]	3.7 J [MDL=1.3]
2-CHLOROETHYL VINYL ETHER	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]
2-CHLOROTOLUENE	0.4 U [MDL=0.4]	0.34 U [MDL=0.34]	0.42 U [MDL=0.42]	0.37 U [MDL=0.37]	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]
2-HEXANONE	0.63 U [MDL=0.63]	0.54 U [MDL=0.54]	0.66 U [MDL=0.66]	0.58 U [MDL=0.58]	0.65 U [MDL=0.65]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.41 U [MDL=0.41]	0.35 U [MDL=0.35]	0.43 U [MDL=0.43]	0.37 U [MDL=0.37]	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]
4-ISOPROPYLTOLUENE	0.21 U [MDL=0.21]	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.19 U [MDL=0.19]	0.22 U [MDL=0.22]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]
4-METHYL-2-PENTANONE	0.54 U [MDL=0.54]	0.46 U [MDL=0.46]	0.56 U [MDL=0.56]	0.49 U [MDL=0.49]	0.56 U [MDL=0.56]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]
ACETONE	68 B [MDL=6.3]	5.4 U [MDL=5.4]	60 B [MDL=6.6]	11 B [MDL=5.8]	14 B [MDL=6.5]	240 J [MDL=5.3]	160 B [MDL=5.6]
BENZENE	0.23 U [MDL=0.23]	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.21 U [MDL=0.21]	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.35 U [MDL=0.35]	0.3 U [MDL=0.3]	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
BROMOCHLOROMETHANE	0.71 U [MDL=0.71]	0.61 U [MDL=0.61]	0.74 U [MDL=0.74]	0.65 U [MDL=0.65]	0.74 U [MDL=0.74]	0.6 U [MDL=0.6]	0.63 U [MDL=0.63]
BROMODICHLOROMETHANE	0.28 U [MDL=0.28]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.29 U [MDL=0.29]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]
BROMOFORM	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.35 U [MDL=0.35]	0.3 U [MDL=0.3]	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
BROMOMETHANE	0.54 U [MDL=0.54]	0.46 U [MDL=0.46]	0.56 U [MDL=0.56]	0.49 U [MDL=0.49]	0.56 U [MDL=0.56]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]
CARBON DISULFIDE	0.94 B [MDL=0.44]	0.38 U [MDL=0.38]	4.3 B [MDL=0.46]	0.4 U [MDL=0.4]	0.65 J [MDL=0.46]	2 B [MDL=0.37]	0.87 B [MDL=0.39]
CARBON TETRACHLORIDE	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]
CHLOROBENZENE	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.35 U [MDL=0.35]	0.3 U [MDL=0.3]	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]
CHLORODIBROMOMETHANE	0.55 U [MDL=0.55]	0.47 U [MDL=0.47]	0.58 U [MDL=0.58]	0.5 U [MDL=0.5]	0.57 U [MDL=0.57]	0.46 U [MDL=0.46]	0.49 U [MDL=0.49]
CHLOROETHANE	0.86 U [MDL=0.86]	0.74 U [MDL=0.74]	0.9 U [MDL=0.9]	0.79 U [MDL=0.79]	0.89 U [MDL=0.89]	0.72 U [MDL=0.72]	0.77 U [MDL=0.77]
CHLOROFORM	0.29 U [MDL=0.29]	0.25 U [MDL=0.25]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]
CHLOROMETHANE	0.41 U [MDL=0.41]	0.35 U [MDL=0.35]	0.43 U [MDL=0.43]	0.37 U [MDL=0.37]	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]
CIS-1,2-DICHLOROETHENE	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]
CIS-1,3-DICHLOROPROPENE	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.63 U [MDL=0.63]	0.54 U [MDL=0.54]	0.66 U [MDL=0.66]	0.58 U [MDL=0.58]	0.65 U [MDL=0.65]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]
DICHLORODIFLUOROMETHANE	0.5 U [MDL=0.5]	0.43 U [MDL=0.43]	0.52 U [MDL=0.52]	0.46 U [MDL=0.46]	0.52 U [MDL=0.52]	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]
DIISOPROPYL ETHER	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	1.4 U [MDL=1.4]	1.6 U [MDL=1.6]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-791 D-SB-791-09 9/9/2010	SB-791 D-SB-791-11 9/9/2010	SB-791 D-SB-791-13 9/9/2010	SB-791 D-SB-791-15 9/9/2010	SB-791 D-SB-791-SS 9/9/2010	SB-792 D-SB-792-03 9/9/2010	SB-792 D-SB-792-05 9/9/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.22 U [MDL=0.22]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.2 U [MDL=0.2]	0.23 U [MDL=0.23]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]
ETHYLBENZENE	0.26 U [MDL=0.26]	0.22 U [MDL=0.22]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]
HEXACHLOROBUTADIENE	1.2 U [MDL=1.2]	1 U [MDL=1]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1 U [MDL=1]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.17 U [MDL=0.17]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]
M+P-XYLENES	1.2 U [MDL=1.2]	1 U [MDL=1]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1 U [MDL=1]	1.1 U [MDL=1.1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.43 UJ [MDL=0.43]	0.37 UJ [MDL=0.37]	0.45 UJ [MDL=0.45]	0.39 UJ [MDL=0.39]	0.45 U [MDL=0.45]	0.36 UJ [MDL=0.36]	0.38 UJ [MDL=0.38]
METHYLENE CHLORIDE	0.98 B [MDL=0.67]	0.81 B [MDL=0.57]	0.82 B [MDL=0.7]	0.9 B [MDL=0.61]	0.69 U [MDL=0.69]	0.79 B [MDL=0.56]	0.78 B [MDL=0.6]
NAPHTHALENE	0.93 B [MDL=0.19]	0.79 B [MDL=0.16]	1 B [MDL=0.2]	0.83 B [MDL=0.17]	0.2 U [MDL=0.2]	2.1 B [MDL=0.16]	0.8 B [MDL=0.17]
N-BUTYLBENZENE	0.23 U [MDL=0.23]	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.21 U [MDL=0.21]	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]
N-PROPYLBENZENE	0.4 U [MDL=0.4]	0.34 U [MDL=0.34]	0.42 U [MDL=0.42]	0.37 U [MDL=0.37]	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]
O-XYLENE	0.35 U [MDL=0.35]	0.3 U [MDL=0.3]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.36 U [MDL=0.36]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
SEC-BUTYLBENZENE	0.18 U [MDL=0.18]	0.15 U [MDL=0.15]	0.19 U [MDL=0.19]	0.16 U [MDL=0.16]	0.19 U [MDL=0.19]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]
STYRENE	0.15 U [MDL=0.15]	0.13 U [MDL=0.13]	0.16 J [MDL=0.16]	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]
TERT-BUTYLBENZENE	0.29 U [MDL=0.29]	0.25 U [MDL=0.25]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]
TERTIARY-BUTYL ALCOHOL	53 B [MDL=7.6]	45 B [MDL=6.5]	58 B [MDL=7.9]	48 B [MDL=6.9]	7.9 UR [MDL=7.9]	47 B [MDL=6.4]	50 B [MDL=6.8]
TETRACHLOROETHENE	0.52 U [MDL=0.52]	0.45 U [MDL=0.45]	0.54 U [MDL=0.54]	0.48 U [MDL=0.48]	0.54 U [MDL=0.54]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]
TOLUENE	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.71 J [MDL=0.23]	0.24 U [MDL=0.24]
TOTAL XYLENES	0.67 U [MDL=0.67]	0.57 U [MDL=0.57]	0.7 U [MDL=0.7]	0.61 U [MDL=0.61]	0.69 U [MDL=0.69]	0.56 U [MDL=0.56]	0.6 U [MDL=0.6]
TRANS-1,2-DICHLOROETHENE	0.41 U [MDL=0.41]	0.35 U [MDL=0.35]	0.43 U [MDL=0.43]	0.37 U [MDL=0.37]	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]
TRANS-1,3-DICHLOROPROPENE	0.54 U [MDL=0.54]	0.46 U [MDL=0.46]	0.56 U [MDL=0.56]	0.49 U [MDL=0.49]	0.56 U [MDL=0.56]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]
TRICHLOROETHENE	0.42 U [MDL=0.42]	0.36 U [MDL=0.36]	0.44 U [MDL=0.44]	0.38 U [MDL=0.38]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]	0.38 U [MDL=0.38]
TRICHLOROFLUOROMETHANE	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.36 U [MDL=0.36]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]
VINYL ACETATE	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]	0.26 U [MDL=0.26]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]
VINYL CHLORIDE	0.39 U [MDL=0.39]	0.33 U [MDL=0.33]	0.41 U [MDL=0.41]	0.36 U [MDL=0.36]	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
ACENAPHTHENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	8.2 [MDL=3.9]	4 U [MDL=4]
ACENAPHTHYLENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
ANTHRACENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
BAP EQUIVALENT-HALFND	3.8 U [MDL=NaN]	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]	4.1 U [MDL=NaN]	3.5 U [MDL=NaN]	5.1073 [MDL=NaN]	4 U [MDL=NaN]
BAP EQUIVALENT-POS	3.8 U [MDL=NaN]	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]	4.1 U [MDL=NaN]	3.5 U [MDL=NaN]	0.7978 [MDL=NaN]	4 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
BENZO(A)PYRENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
BENZO(B)FLUORANTHENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	7.9 [MDL=3.9]	4 U [MDL=4]
BENZO(G,H,I)PERYLENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
BENZO(K)FLUORANTHENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
CHRYSENE	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	7.8 [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
FLUORANTHENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	8.4 [MDL=3.5]	11 [MDL=3.9]	4 U [MDL=4]
FLUORENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
INDENO(1,2,3-CD)PYRENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
NAPHTHALENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
PHENANTHRENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	3.5 U [MDL=3.5]	3.9 U [MDL=3.9]	4 U [MDL=4]
PYRENE	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4.1 U [MDL=4.1]	8.2 [MDL=3.5]	8.1 [MDL=3.9]	4 U [MDL=4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-791 D-SB-791-09 9/9/2010	SB-791 D-SB-791-11 9/9/2010	SB-791 D-SB-791-13 9/9/2010	SB-791 D-SB-791-15 9/9/2010	SB-791 D-SB-791-SS 9/9/2010	SB-792 D-SB-792-03 9/9/2010	SB-792 D-SB-792-05 9/9/2010
TOTAL PAHS	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	16.6 [MDL=NaN]	43 [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]	26 U [MDL=26]	22 U [MDL=22]	25 U [MDL=25]	25 U [MDL=25]
AROCLOR-1221	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	17 U [MDL=17]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1232	16 U [MDL=16]	16 U [MDL=16]	17 U [MDL=17]	17 U [MDL=17]	15 U [MDL=15]	16 U [MDL=16]	17 U [MDL=17]
AROCLOR-1242	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	14 U [MDL=14]	15 U [MDL=15]	16 U [MDL=16]
AROCLOR-1248	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	18 U [MDL=18]	20 U [MDL=20]	21 U [MDL=21]
AROCLOR-1254	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	18 U [MDL=18]	20 U [MDL=20]	21 U [MDL=21]
AROCLOR-1260	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	18 U [MDL=18]	20 U [MDL=20]	21 U [MDL=21]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.71 U [MDL=0.71]	0.72 U [MDL=0.72]	0.74 U [MDL=0.74]	0.77 U [MDL=0.77]	0.66 U [MDL=0.66]	0.72 U [MDL=0.72]	0.75 U [MDL=0.75]
4,4'-DDE	0.45 U [MDL=0.45]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.48 U [MDL=0.48]	0.41 U [MDL=0.41]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]
4,4'-DDT	0.72 U [MDL=0.72]	0.73 U [MDL=0.73]	0.75 U [MDL=0.75]	0.78 U [MDL=0.78]	0.67 U [MDL=0.67]	0.74 U [MDL=0.74]	0.76 U [MDL=0.76]
ALDRIN	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
ALPHA-BHC	0.84 U [MDL=0.84]	0.84 U [MDL=0.84]	0.87 U [MDL=0.87]	0.9 U [MDL=0.9]	0.77 U [MDL=0.77]	0.85 U [MDL=0.85]	0.88 U [MDL=0.88]
ALPHA-CHLORDANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	0.99 U [MDL=0.99]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
BETA-BHC	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.3 J [MDL=1.3]	1.3 U [MDL=1.3]
DELTA-BHC	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
DIELDRIN	0.54 U [MDL=0.54]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]	0.58 U [MDL=0.58]	0.5 U [MDL=0.5]	0.55 U [MDL=0.55]	0.57 U [MDL=0.57]
ENDOSULFAN I	0.59 U [MDL=0.59]	0.6 U [MDL=0.6]	0.62 U [MDL=0.62]	0.64 U [MDL=0.64]	0.55 U [MDL=0.55]	0.61 U [MDL=0.61]	0.63 U [MDL=0.63]
ENDOSULFAN II	0.94 U [MDL=0.94]	0.95 U [MDL=0.95]	0.97 U [MDL=0.97]	1 U [MDL=1]	0.87 U [MDL=0.87]	0.96 U [MDL=0.96]	0.99 U [MDL=0.99]
ENDOSULFAN SULFATE	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]	0.92 U [MDL=0.92]	1 U [MDL=1]	1.1 U [MDL=1.1]
ENDRIN	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.59 U [MDL=0.59]	0.62 U [MDL=0.62]	0.53 U [MDL=0.53]	0.58 U [MDL=0.58]	0.6 U [MDL=0.6]
ENDRIN ALDEHYDE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.72 U [MDL=0.72]	0.73 U [MDL=0.73]	0.75 U [MDL=0.75]	0.78 U [MDL=0.78]	0.67 U [MDL=0.67]	0.74 U [MDL=0.74]	0.76 U [MDL=0.76]
GAMMA-BHC (LINDANE)	0.85 U [MDL=0.85]	0.86 U [MDL=0.86]	0.88 U [MDL=0.88]	0.91 U [MDL=0.91]	0.78 U [MDL=0.78]	0.87 U [MDL=0.87]	0.89 U [MDL=0.89]
GAMMA-CHLORDANE	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]	0.5 U [MDL=0.5]	0.52 U [MDL=0.52]	0.44 U [MDL=0.44]	0.49 U [MDL=0.49]	0.51 U [MDL=0.51]
HEPTACHLOR	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.4 UJ [MDL=1.4]	1.2 UJ [MDL=1.2]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-791	SB-791	SB-791	SB-791	SB-791	SB-792	SB-792
SAMPLE ID	D-SB-791-09	D-SB-791-11	D-SB-791-13	D-SB-791-15	D-SB-791-SS	D-SB-792-03	D-SB-792-05
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
HEPTACHLOR EPOXIDE	0.92 U [MDL=0.92]	0.93 U [MDL=0.93]	0.95 U [MDL=0.95]	0.99 U [MDL=0.99]	0.85 U [MDL=0.85]	0.94 U [MDL=0.94]	0.97 U [MDL=0.97]
METHOXYCHLOR	1.7 UJ [MDL=1.7]	1.7 UJ [MDL=1.7]	1.8 UJ [MDL=1.8]	1.9 UJ [MDL=1.9]	1.6 UJ [MDL=1.6]	1.8 UJ [MDL=1.8]	1.8 UJ [MDL=1.8]
TOXAPHENE	22 U [MDL=22]	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	20 U [MDL=20]	22 U [MDL=22]	23 U [MDL=23]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3200 U [MDL=3.2]	3200 U [MDL=3.2]	3300 U [MDL=3.3]	3500 U [MDL=3.5]	11000 [MDL=3]	83000 [MDL=16]	8000 J [MDL=3.4]
GASOLINE RANGE ORGANICS	53 U [MDL=53]	53 U [MDL=53]	55 U [MDL=55]	57 U [MDL=57]	49 U [MDL=49]	54 U [MDL=54]	56 U [MDL=56]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-792	SB-792	SB-792	SB-792	SB-792	SB-792	SB-793
SAMPLE ID	D-SB-792-07	D-SB-792-09	D-SB-792-11	D-SB-792-13	D-SB-792-15	D-SB-792-SS	D-SB-793-03
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
METALS (MG/KG)							
ANTIMONY	0.21 B [MDL=0.029]	0.22 B [MDL=0.028]	0.14 B [MDL=0.028]	0.83 J [MDL=0.03]	0.043 B [MDL=0.028]	0.11 B [MDL=0.026]	0.3 B [MDL=0.029]
ARSENIC	2.9 L [MDL=0.074]	3.8 L [MDL=0.073]	3.3 L [MDL=0.072]	5 J [MDL=0.078]	0.65 L [MDL=0.072]	2.3 L [MDL=0.067]	5.6 L [MDL=0.076]
BARIUM	12.2 [MDL=0.055]	10.3 [MDL=0.054]	11.5 [MDL=0.053]	10.3 [MDL=0.058]	9 [MDL=0.053]	23.6 [MDL=0.049]	26.5 [MDL=0.056]
BERYLLIUM	1.7 J [MDL=0.056]	2.7 J [MDL=0.055]	2.1 J [MDL=0.054]	6.4 J [MDL=0.059]	0.99 J [MDL=0.054]	0.59 J [MDL=0.051]	2.2 J [MDL=0.057]
CADMIUM	0.0093 UL [MDL=0.0093]	0.02 B [MDL=0.0091]	0.019 B [MDL=0.009]	0.027 B [MDL=0.0098]	0.02 B [MDL=0.009]	0.081 B [MDL=0.0084]	0.3 B [MDL=0.0095]
CHROMIUM	17.9 [MDL=0.048]	24.8 [MDL=0.047]	26.3 [MDL=0.046]	54.8 [MDL=0.05]	12.1 [MDL=0.046]	11.6 [MDL=0.043]	20.1 [MDL=0.049]
COBALT	7.1 [MDL=0.0045]	12.1 [MDL=0.0045]	8.7 [MDL=0.0044]	13.6 [MDL=0.0048]	5.4 [MDL=0.0044]	4 [MDL=0.0041]	15.7 [MDL=0.0046]
COPPER	13 [MDL=0.051]	18.2 [MDL=0.05]	17.8 [MDL=0.05]	47.9 [MDL=0.054]	6.3 [MDL=0.05]	9.4 [MDL=0.046]	32.8 [MDL=0.053]
IRON	27100 [MDL=1.2]	42300 [MDL=1.2]	34100 [MDL=1.2]	134000 [MDL=12.5]	6810 [MDL=1.2]	9890 [MDL=1.1]	25900 [MDL=1.2]
LEAD	3.3 [MDL=0.016]	2.9 [MDL=0.015]	6.7 [MDL=0.015]	15.9 [MDL=0.016]	2.4 [MDL=0.015]	9.8 [MDL=0.014]	26.4 [MDL=0.016]
MANGANESE	40.2 J [MDL=0.056]	30 J [MDL=0.055]	20.8 J [MDL=0.054]	31.1 J [MDL=0.59]	5.8 J [MDL=0.054]	124 J [MDL=0.051]	69.5 J [MDL=0.057]
MERCURY	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.019 U [MDL=0.019]	0.017 U [MDL=0.017]	0.17 [MDL=0.016]	0.47 [MDL=0.018]
MOLYBDENUM	0.57 [MDL=0.075]	0.74 [MDL=0.074]	0.54 [MDL=0.073]	1.5 [MDL=0.079]	0.11 B [MDL=0.073]	0.5 [MDL=0.068]	0.49 [MDL=0.077]
NICKEL	19 [MDL=0.025]	30.1 [MDL=0.025]	16.1 [MDL=0.024]	37.5 [MDL=0.026]	8.5 [MDL=0.024]	7.7 [MDL=0.023]	34.2 [MDL=0.026]
SELENIUM	0.99 L [MDL=0.11]	1.1 L [MDL=0.11]	1 L [MDL=0.1]	0.97 L [MDL=0.11]	0.93 L [MDL=0.1]	0.61 L [MDL=0.097]	3 L [MDL=0.11]
SILVER	0.019 U [MDL=0.019]	0.019 U [MDL=0.019]	0.021 B [MDL=0.019]	0.02 B [MDL=0.02]	0.019 U [MDL=0.019]	0.18 [MDL=0.017]	0.37 [MDL=0.02]
THALLIUM	0.064 J [MDL=0.016]	0.06 J [MDL=0.015]	0.06 J [MDL=0.015]	0.068 J [MDL=0.016]	0.057 J [MDL=0.015]	0.038 J [MDL=0.014]	0.069 J [MDL=0.016]
VANADIUM	35.9 [MDL=0.049]	67.2 [MDL=0.048]	55.7 [MDL=0.047]	111 [MDL=0.051]	14.9 [MDL=0.047]	16.6 [MDL=0.044]	30.8 [MDL=0.05]
ZINC	19 [MDL=0.24]	31.2 [MDL=0.23]	24.1 [MDL=0.23]	45.2 [MDL=0.25]	12.8 [MDL=0.23]	28.4 [MDL=0.22]	68.6 [MDL=0.24]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.32 J [MDL=0.29]	0.42 J [MDL=0.33]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
1,4-DIOXANE	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	28 U [MDL=28]	25 U [MDL=25]	24 U [MDL=24]	27 U [MDL=27]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	10 U [MDL=10]	12 U [MDL=12]
2,4,5-TRICHLOROPHENOL	30 U [MDL=30]	29 U [MDL=29]	29 U [MDL=29]	31 U [MDL=31]	29 U [MDL=29]	27 U [MDL=27]	31 U [MDL=31]
2,4,6-TRICHLOROPHENOL	96 U [MDL=96]	94 U [MDL=94]	93 U [MDL=93]	100 U [MDL=100]	93 U [MDL=93]	86 U [MDL=86]	98 U [MDL=98]
2,4-DICHLOROPHENOL	24 U [MDL=24]	23 U [MDL=23]	23 U [MDL=23]	25 U [MDL=25]	23 U [MDL=23]	22 U [MDL=22]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	23 U [MDL=23]	23 U [MDL=23]	25 U [MDL=25]	23 U [MDL=23]	22 U [MDL=22]	24 U [MDL=24]
2,4-DINITROPHENOL	96 U [MDL=96]	94 U [MDL=94]	93 U [MDL=93]	100 U [MDL=100]	93 U [MDL=93]	86 U [MDL=86]	98 U [MDL=98]
2,4-DINITROTOLUENE	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
2,6-DINITROTOLUENE	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	24 U [MDL=24]	23 U [MDL=23]	26 U [MDL=26]
2-CHLORONAPHTHALENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
2-CHLOROPHENOL	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	96 U [MDL=96]	94 U [MDL=94]	93 U [MDL=93]	100 U [MDL=100]	93 U [MDL=93]	86 U [MDL=86]	98 U [MDL=98]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	9.8 U [MDL=9.8]	11 U [MDL=11]
2-NITROPHENOL	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	21 U [MDL=21]	21 U [MDL=21]	23 U [MDL=23]	21 U [MDL=21]	19 U [MDL=19]	22 U [MDL=22]
3-NITROANILINE	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]	17 U [MDL=17]	20 U [MDL=20]
4,6-DINITRO-2-METHYLPHENOL	96 U [MDL=96]	94 U [MDL=94]	93 U [MDL=93]	100 U [MDL=100]	93 U [MDL=93]	86 U [MDL=86]	98 U [MDL=98]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	16 U [MDL=16]
4-CHLORO-3-METHYLPHENOL	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	24 U [MDL=24]	23 U [MDL=23]	26 U [MDL=26]
4-CHLOROANILINE	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	16 U [MDL=16]
4-METHYLPHENOL	96 U [MDL=96]	94 U [MDL=94]	93 U [MDL=93]	100 U [MDL=100]	93 U [MDL=93]	86 U [MDL=86]	98 U [MDL=98]
4-NITROANILINE	31 U [MDL=31]	30 U [MDL=30]	30 U [MDL=30]	33 U [MDL=33]	30 U [MDL=30]	28 U [MDL=28]	32 U [MDL=32]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-792 D-SB-792-07 9/9/2010	SB-792 D-SB-792-09 9/9/2010	SB-792 D-SB-792-11 9/9/2010	SB-792 D-SB-792-13 9/9/2010	SB-792 D-SB-792-15 9/9/2010	SB-792 D-SB-792-SS 9/9/2010	SB-793 D-SB-793-03 9/9/2010
4-NITROPHENOL	96 U [MDL=96]	94 U [MDL=94]	93 U [MDL=93]	100 U [MDL=100]	93 U [MDL=93]	86 U [MDL=86]	98 U [MDL=98]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	9.9 U [MDL=9.9]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	9.8 U [MDL=9.8]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	15 U [MDL=15]	14 U [MDL=14]	13 U [MDL=13]	15 U [MDL=15]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	28 U [MDL=28]	25 U [MDL=25]	24 U [MDL=24]	27 U [MDL=27]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.3 U [MDL=2.3]	2.5 U [MDL=2.5]	2.3 U [MDL=2.3]	2.2 U [MDL=2.2]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	22 U [MDL=22]	22 U [MDL=22]	110 [MDL=24]	22 U [MDL=22]	20 U [MDL=20]	30 J [MDL=23]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	13 U [MDL=13]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]
CAPROLACTAM	44 U [MDL=44]	43 U [MDL=43]	43 U [MDL=43]	46 U [MDL=46]	43 U [MDL=43]	40 U [MDL=40]	45 U [MDL=45]
CARBAZOLE	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
DIETHYL PHTHALATE	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]	17 U [MDL=17]	20 U [MDL=20]
DIMETHYL PHTHALATE	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	18 U [MDL=18]	17 U [MDL=17]	19 U [MDL=19]	17 U [MDL=17]	16 U [MDL=16]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.6 U [MDL=2.6]
HEXACHLOROBUTADIENE	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
HEXACHLOROCYCLOPENTADIENE	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
HEXACHLOROETHANE	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	10 U [MDL=10]	9.7 U [MDL=9.7]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	16 U [MDL=16]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.8 U [MDL=2.8]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.7 U [MDL=2.7]
N-NITROSODIMETHYLAMINE	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]	17 U [MDL=17]	20 U [MDL=20]
N-NITROSO-DI-N-PROPYLAMINE	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
N-NITROSODIPHENYLAMINE	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	24 U [MDL=24]	23 U [MDL=23]	26 U [MDL=26]
PENTACHLOROPHENOL	96 U [MDL=96]	94 U [MDL=94]	93 U [MDL=93]	100 U [MDL=100]	93 U [MDL=93]	86 U [MDL=86]	98 U [MDL=98]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	34 U [MDL=34]	31 U [MDL=31]	29 U [MDL=29]	33 U [MDL=33]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.52 U [MDL=0.52]	0.52 U [MDL=0.52]	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]	0.57 U [MDL=0.57]
1,1,1-TRICHLOROETHANE	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	0.49 U [MDL=0.49]	0.51 U [MDL=0.51]	0.53 U [MDL=0.53]	0.52 U [MDL=0.52]	0.51 U [MDL=0.51]
1,1,2,2-TETRACHLOROETHANE	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-792	SB-792	SB-792	SB-792	SB-792	SB-792	SB-793
SAMPLE ID	D-SB-792-07	D-SB-792-09	D-SB-792-11	D-SB-792-13	D-SB-792-15	D-SB-792-SS	D-SB-793-03
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
1,1-DICHLOROETHANE	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]
1,1-DICHLOROETHENE	0.44 U [MDL=0.44]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]	0.48 U [MDL=0.48]	0.48 U [MDL=0.48]
1,1-DICHLOROPROPENE	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]
1,2,3-TRICHLOROBENZENE	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	0.35 U [MDL=0.35]
1,2,3-TRICHLOROPROPANE	0.75 U [MDL=0.75]	0.76 U [MDL=0.76]	0.78 U [MDL=0.78]	0.82 U [MDL=0.82]	0.84 U [MDL=0.84]	0.83 U [MDL=0.83]	0.82 U [MDL=0.82]
1,2,3-TRIMETHYLBENZENE	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]
1,2,4-TRICHLOROBENZENE	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]
1,2,4-TRIMETHYLBENZENE	0.54 U [MDL=0.54]	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]	0.6 U [MDL=0.6]
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
1,2-DIBROMOETHANE	0.42 U [MDL=0.42]	0.42 U [MDL=0.42]	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]
1,2-DICHLOROBENZENE	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]
1,2-DICHLOROETHANE	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
1,2-DICHLOROPROPANE	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]	0.6 U [MDL=0.6]	0.63 U [MDL=0.63]	0.65 U [MDL=0.65]	0.64 U [MDL=0.64]	0.63 U [MDL=0.63]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]
1,3-DICHLOROPROPANE	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
1,4-DICHLOROBENZENE	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]	0.57 U [MDL=0.57]	0.6 U [MDL=0.6]	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.79 U [MDL=0.79]	0.79 U [MDL=0.79]	0.82 U [MDL=0.82]	0.86 U [MDL=0.86]	0.88 U [MDL=0.88]	0.87 U [MDL=0.87]	0.86 U [MDL=0.86]
2-BUTANONE	1.6 J [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	2 J [MDL=1.3]	7.6 J [MDL=1.3]	22 [MDL=1.3]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
2-CHLOROTOLUENE	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]
2-HEXANONE	0.53 U [MDL=0.53]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.59 U [MDL=0.59]	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]
4-ISOPROPYLTOLUENE	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]
4-METHYL-2-PENTANONE	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.49 U [MDL=0.49]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]
ACETONE	18 B [MDL=5.3]	310 J [MDL=5.3]	130 B [MDL=5.5]	38 B [MDL=5.8]	170 B [MDL=5.9]	43 B [MDL=5.8]	100 B [MDL=5.8]
BENZENE	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]
BROMOCHLOROMETHANE	0.59 U [MDL=0.59]	0.6 U [MDL=0.6]	0.62 U [MDL=0.62]	0.65 U [MDL=0.65]	0.67 U [MDL=0.67]	0.66 U [MDL=0.66]	0.65 U [MDL=0.65]
BROMODICHLOROMETHANE	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]
BROMOFORM	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]
BROMOMETHANE	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.49 U [MDL=0.49]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]
CARBON DISULFIDE	0.83 B [MDL=0.37]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.4 U [MDL=0.4]	0.41 U [MDL=0.41]	1.4 B [MDL=0.41]	1.8 B [MDL=0.4]
CARBON TETRACHLORIDE	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]
CHLOROBENZENE	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]
CHLORODIBROMOMETHANE	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]	0.48 U [MDL=0.48]	0.5 U [MDL=0.5]	0.52 U [MDL=0.52]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]
CHLOROETHANE	0.72 U [MDL=0.72]	0.73 U [MDL=0.73]	0.75 U [MDL=0.75]	0.79 U [MDL=0.79]	0.81 U [MDL=0.81]	0.8 U [MDL=0.8]	0.79 U [MDL=0.79]
CHLOROFORM	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]
CHLOROMETHANE	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]
CIS-1,2-DICHLOROETHENE	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]
CIS-1,3-DICHLOROPROPENE	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.53 U [MDL=0.53]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.59 U [MDL=0.59]	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]
DICHLORODIFLUOROMETHANE	0.42 U [MDL=0.42]	0.42 U [MDL=0.42]	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]
DIISOPROPYL ETHER	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-792	SB-792	SB-792	SB-792	SB-792	SB-792	SB-793
SAMPLE ID	D-SB-792-07	D-SB-792-09	D-SB-792-11	D-SB-792-13	D-SB-792-15	D-SB-792-SS	D-SB-793-03
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]
ETHYLBENZENE	0.22 U [MDL=0.22]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]
HEXACHLOROBUTADIENE	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]
M+P-XYLENES	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.36 UJ [MDL=0.36]	0.36 UJ [MDL=0.36]	0.37 UJ [MDL=0.37]	0.39 UJ [MDL=0.39]	0.4 UJ [MDL=0.4]	0.4 UJ [MDL=0.4]	0.39 UJ [MDL=0.39]
METHYLENE CHLORIDE	0.82 B [MDL=0.56]	1 B [MDL=0.57]	1.1 B [MDL=0.58]	0.77 B [MDL=0.61]	1.9 B [MDL=0.63]	0.72 B [MDL=0.62]	0.93 B [MDL=0.61]
NAPHTHALENE	0.75 B [MDL=0.16]	0.76 B [MDL=0.16]	0.8 B [MDL=0.16]	0.79 B [MDL=0.17]	0.87 B [MDL=0.18]	0.85 B [MDL=0.18]	1.1 B [MDL=0.17]
N-BUTYLBENZENE	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]
N-PROPYLBENZENE	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]
O-XYLENE	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]
SEC-BUTYLBENZENE	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]
STYRENE	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]
TERT-AMYL METHYL ETHER	0.31 U [MDL=0.31]	0.31 UJ [MDL=0.31]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.35 UJ [MDL=0.35]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]
TERT-BUTYLBENZENE	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]
TERTIARY-BUTYL ALCOHOL	44 B [MDL=6.4]	45 B [MDL=6.4]	6.6 UR [MDL=6.6]	48 B [MDL=6.9]	49 B [MDL=7.1]	49 B [MDL=7]	50 B [MDL=7]
TETRACHLOROETHENE	0.44 U [MDL=0.44]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]	0.48 U [MDL=0.48]	0.48 U [MDL=0.48]
TOLUENE	0.41 J [MDL=0.23]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.38 J [MDL=0.25]	0.25 U [MDL=0.25]
TOTAL XYLENES	0.56 U [MDL=0.56]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.61 U [MDL=0.61]	0.63 U [MDL=0.63]	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]
TRANS-1,2-DICHLOROETHENE	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]
TRANS-1,3-DICHLOROPROPENE	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.49 U [MDL=0.49]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]
TRICHLOROETHENE	0.35 U [MDL=0.35]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.39 U [MDL=0.39]	0.39 U [MDL=0.39]	0.38 U [MDL=0.38]
TRICHLOROFLUOROMETHANE	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
VINYL ACETATE	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]
VINYL CHLORIDE	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
ACENAPHTHENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
ACENAPHTHYLENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
ANTHRACENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
BAP EQUIVALENT-HALFND	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	4.1 U [MDL=NaN]	3.8 U [MDL=NaN]	4.1652 [MDL=NaN]	22.569 [MDL=NaN]
BAP EQUIVALENT-POS	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	4.1 U [MDL=NaN]	3.8 U [MDL=NaN]	0.0072 [MDL=NaN]	20.569 [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	17 [MDL=4]
BENZO(A)PYRENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	16 [MDL=4]
BENZO(B)FLUORANTHENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	18 [MDL=4]
BENZO(G,H,I)PERYLENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	10 [MDL=4]
BENZO(K)FLUORANTHENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	13 [MDL=4]
CHRYSENE	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	7.2 [MDL=1.2]	19 [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
FLUORANTHENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	8.4 [MDL=3.6]	36 [MDL=4]
FLUORENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
INDENO(1,2,3-CD)PYRENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	9.2 [MDL=4]
NAPHTHALENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	4 U [MDL=4]
PHENANTHRENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.6 U [MDL=3.6]	22 [MDL=4]
PYRENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	8 [MDL=3.6]	27 [MDL=4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-792	SB-792	SB-792	SB-792	SB-792	SB-792	SB-793
SAMPLE ID	D-SB-792-07	D-SB-792-09	D-SB-792-11	D-SB-792-13	D-SB-792-15	D-SB-792-SS	D-SB-793-03
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
TOTAL PAHS	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	23.6 [MDL=NaN]	187.2 [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	24 U [MDL=24]	23 U [MDL=23]	26 U [MDL=26]
AROCLOR-1221	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	19 U [MDL=19]	17 U [MDL=17]	20 U [MDL=20]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]	18 U [MDL=18]	16 U [MDL=16]	15 U [MDL=15]	17 U [MDL=17]
AROCLOR-1242	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	16 U [MDL=16]
AROCLOR-1248	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]
AROCLOR-1254	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]
AROCLOR-1260	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	21 U [MDL=21]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.72 U [MDL=0.72]	0.78 U [MDL=0.78]	0.72 U [MDL=0.72]	1.3 U [MDL=1.3]	0.76 U [MDL=0.76]
4,4'-DDE	0.47 U [MDL=0.47]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	0.84 U [MDL=0.84]	0.48 U [MDL=0.48]
4,4'-DDT	0.75 U [MDL=0.75]	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.79 U [MDL=0.79]	0.73 U [MDL=0.73]	1.4 U [MDL=1.4]	0.77 U [MDL=0.77]
ALDRIN	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	2.6 U [MDL=2.6]	1.5 U [MDL=1.5]
ALPHA-BHC	0.87 U [MDL=0.87]	0.86 U [MDL=0.86]	0.84 U [MDL=0.84]	0.91 U [MDL=0.91]	0.85 U [MDL=0.85]	1.6 U [MDL=1.6]	0.89 U [MDL=0.89]
ALPHA-CHLORDANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	2 U [MDL=2]	1.1 U [MDL=1.1]
BETA-BHC	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	2.4 U [MDL=2.4]	1.3 U [MDL=1.3]
DELTA-BHC	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	2.6 U [MDL=2.6]	1.5 U [MDL=1.5]
DIELDRIN	0.56 U [MDL=0.56]	0.55 U [MDL=0.55]	0.54 U [MDL=0.54]	0.59 U [MDL=0.59]	0.54 U [MDL=0.54]	1 U [MDL=1]	0.57 U [MDL=0.57]
ENDOSULFAN I	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]	0.65 U [MDL=0.65]	0.6 U [MDL=0.6]	1.1 U [MDL=1.1]	0.64 U [MDL=0.64]
ENDOSULFAN II	0.98 U [MDL=0.98]	0.96 U [MDL=0.96]	0.95 U [MDL=0.95]	1 U [MDL=1]	0.95 U [MDL=0.95]	1.8 U [MDL=1.8]	1 U [MDL=1]
ENDOSULFAN SULFATE	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.9 U [MDL=1.9]	1.1 U [MDL=1.1]
ENDRIN	0.6 U [MDL=0.6]	0.59 U [MDL=0.59]	0.58 U [MDL=0.58]	0.63 U [MDL=0.63]	0.58 U [MDL=0.58]	1.1 U [MDL=1.1]	0.61 U [MDL=0.61]
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	2.2 U [MDL=2.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.75 U [MDL=0.75]	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.79 U [MDL=0.79]	0.73 U [MDL=0.73]	1.4 U [MDL=1.4]	0.77 U [MDL=0.77]
GAMMA-BHC (LINDANE)	0.89 U [MDL=0.89]	0.87 U [MDL=0.87]	0.86 U [MDL=0.86]	0.93 U [MDL=0.93]	0.86 U [MDL=0.86]	1.6 U [MDL=1.6]	0.9 U [MDL=0.9]
GAMMA-CHLORDANE	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]	0.49 U [MDL=0.49]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.9 U [MDL=0.9]	0.51 U [MDL=0.51]
HEPTACHLOR	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]	2.4 UJ [MDL=2.4]	1.3 UJ [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-792	SB-792	SB-792	SB-792	SB-792	SB-792	SB-793
SAMPLE ID	D-SB-792-07	D-SB-792-09	D-SB-792-11	D-SB-792-13	D-SB-792-15	D-SB-792-SS	D-SB-793-03
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
HEPTACHLOR EPOXIDE	0.96 U [MDL=0.96]	0.94 U [MDL=0.94]	0.93 U [MDL=0.93]	1 U [MDL=1]	0.93 U [MDL=0.93]	1.7 U [MDL=1.7]	0.98 U [MDL=0.98]
METHOXYCHLOR	1.8 UJ [MDL=1.8]	1.8 UJ [MDL=1.8]	1.7 UJ [MDL=1.7]	1.9 UJ [MDL=1.9]	1.7 UJ [MDL=1.7]	3.2 UJ [MDL=3.2]	1.8 UJ [MDL=1.8]
TOXAPHENE	23 U [MDL=23]	22 U [MDL=22]	22 U [MDL=22]	24 U [MDL=24]	22 U [MDL=22]	41 U [MDL=41]	23 U [MDL=23]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	7800 J [MDL=3.4]	4100 J [MDL=3.3]	4500 J [MDL=3.2]	4800 J [MDL=3.5]	8900 J [MDL=3.2]	36000 [MDL=3]	47000 [MDL=3.4]
GASOLINE RANGE ORGANICS	55 U [MDL=55]	54 U [MDL=54]	53 U [MDL=53]	58 U [MDL=58]	53 U [MDL=53]	49 U [MDL=49]	56 U [MDL=56]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-793	SB-793	SB-793	SB-793	SB-793	SB-793	SB-793
SAMPLE ID	D-SB-793-05	D-SB-793-07	D-SB-793-09	D-SB-793-11	D-SB-793-13	D-SB-793-15	D-SB-793-SS
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
METALS (MG/KG)							
ANTIMONY	0.12 B [MDL=0.03]	0.15 B [MDL=0.029]	0.3 B [MDL=0.029]	0.28 B [MDL=0.029]	0.17 B [MDL=0.028]	0.12 B [MDL=0.029]	0.2 B [MDL=0.027]
ARSENIC	3.6 L [MDL=0.076]	4.1 L [MDL=0.076]	3.6 J [MDL=0.074]	4.6 J [MDL=0.074]	2.7 J [MDL=0.073]	2.1 J [MDL=0.076]	4.5 L [MDL=0.071]
BARIUM	15.6 [MDL=0.057]	10.7 [MDL=0.056]	15.7 [MDL=0.055]	12.7 [MDL=0.055]	12.6 [MDL=0.054]	14.8 [MDL=0.056]	27.4 [MDL=0.053]
BERYLLIUM	0.92 J [MDL=0.058]	1.4 J [MDL=0.057]	2.6 J [MDL=0.056]	2.3 J [MDL=0.056]	1.5 J [MDL=0.055]	1.4 J [MDL=0.058]	1.5 J [MDL=0.054]
CADMIUM	0.0096 UL [MDL=0.0096]	0.0095 UL [MDL=0.0095]	0.028 B [MDL=0.0093]	0.022 B [MDL=0.0093]	0.024 B [MDL=0.0092]	0.017 B [MDL=0.0096]	0.094 B [MDL=0.0089]
CHROMIUM	18.7 [MDL=0.049]	23.5 [MDL=0.049]	27.3 J [MDL=0.048]	26.5 J [MDL=0.048]	18 J [MDL=0.047]	17.8 J [MDL=0.049]	21.6 [MDL=0.046]
COBALT	5.3 [MDL=0.0047]	4.7 [MDL=0.0046]	18.2 J [MDL=0.0045]	15 J [MDL=0.0045]	11 J [MDL=0.0045]	11.9 J [MDL=0.0047]	7.7 [MDL=0.0043]
COPPER	21.5 [MDL=0.053]	26.2 [MDL=0.052]	27.8 J [MDL=0.051]	27.5 J [MDL=0.051]	15.8 J [MDL=0.051]	21.3 J [MDL=0.053]	21.5 [MDL=0.049]
IRON	27600 [MDL=1.2]	29300 [MDL=1.2]	35600 J [MDL=1.2]	33500 J [MDL=1.2]	22400 J [MDL=1.2]	15400 J [MDL=1.2]	21500 [MDL=1.1]
LEAD	4.7 [MDL=0.016]	3.7 [MDL=0.016]	4 [MDL=0.015]	6.8 [MDL=0.015]	6.5 [MDL=0.015]	4.9 [MDL=0.016]	15.8 [MDL=0.015]
MANGANESE	15.2 J [MDL=0.058]	20.4 J [MDL=0.057]	69.4 J [MDL=0.056]	20.5 J [MDL=0.056]	10.2 J [MDL=0.055]	7.1 J [MDL=0.058]	39.3 J [MDL=0.054]
MERCURY	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.069 J [MDL=0.017]
MOLYBDENUM	0.55 [MDL=0.078]	0.4 [MDL=0.077]	0.59 [MDL=0.075]	0.65 [MDL=0.075]	0.44 [MDL=0.074]	0.24 B [MDL=0.077]	0.45 [MDL=0.072]
NICKEL	10.2 [MDL=0.026]	10.9 [MDL=0.026]	39.4 J [MDL=0.025]	28.5 J [MDL=0.025]	18.7 J [MDL=0.025]	23.3 J [MDL=0.026]	15 [MDL=0.024]
SELENIUM	0.73 L [MDL=0.11]	0.81 L [MDL=0.11]	1.3 L [MDL=0.11]	1 L [MDL=0.11]	0.97 L [MDL=0.11]	1.3 L [MDL=0.11]	1.7 L [MDL=0.1]
SILVER	0.02 U [MDL=0.02]	0.02 U [MDL=0.02]	0.019 U [MDL=0.019]	0.024 B [MDL=0.019]	0.019 U [MDL=0.019]	0.02 U [MDL=0.02]	0.24 K [MDL=0.018]
THALLIUM	0.069 J [MDL=0.016]	0.044 J [MDL=0.016]	0.1 J [MDL=0.015]	0.093 J [MDL=0.015]	0.091 J [MDL=0.015]	0.14 [MDL=0.016]	0.053 J [MDL=0.015]
VANADIUM	41.9 [MDL=0.05]	39.1 [MDL=0.05]	46 J [MDL=0.049]	54.7 J [MDL=0.049]	35.1 J [MDL=0.048]	28.1 J [MDL=0.05]	43.3 [MDL=0.047]
ZINC	20.3 [MDL=0.25]	17.5 [MDL=0.24]	43.3 L [MDL=0.24]	35.6 L [MDL=0.24]	24 L [MDL=0.24]	29 L [MDL=0.25]	49 [MDL=0.23]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.33 U [MDL=0.33]	0.48 J [MDL=0.33]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.62 J [MDL=0.31]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
1,4-DIOXANE	27 U [MDL=27]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	27 U [MDL=27]	25 U [MDL=25]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	31 U [MDL=31]	31 U [MDL=31]	30 U [MDL=30]	30 U [MDL=30]	29 U [MDL=29]	31 U [MDL=31]	29 U [MDL=29]
2,4,6-TRICHLOROPHENOL	98 U [MDL=98]	98 U [MDL=98]	95 U [MDL=95]	95 U [MDL=95]	94 U [MDL=94]	98 U [MDL=98]	91 U [MDL=91]
2,4-DICHLOROPHENOL	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]	23 U [MDL=23]
2,4-DINITROPHENOL	98 U [MDL=98]	98 U [MDL=98]	95 U [MDL=95]	95 U [MDL=95]	94 U [MDL=94]	98 U [MDL=98]	91 U [MDL=91]
2,4-DINITROTOLUENE	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
2,6-DINITROTOLUENE	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]	24 U [MDL=24]
2-CHLORONAPHTHALENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
2-CHLOROPHENOL	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	98 U [MDL=98]	98 U [MDL=98]	95 U [MDL=95]	95 U [MDL=95]	94 U [MDL=94]	98 U [MDL=98]	91 U [MDL=91]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
2-NITROPHENOL	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	22 U [MDL=22]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	22 U [MDL=22]	21 U [MDL=21]
3-NITROANILINE	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]
4,6-DINITRO-2-METHYLPHENOL	98 U [MDL=98]	98 U [MDL=98]	95 U [MDL=95]	95 U [MDL=95]	94 U [MDL=94]	98 U [MDL=98]	91 U [MDL=91]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]	24 U [MDL=24]
4-CHLOROANILINE	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
4-METHYLPHENOL	98 U [MDL=98]	98 U [MDL=98]	95 U [MDL=95]	95 U [MDL=95]	94 U [MDL=94]	98 U [MDL=98]	91 U [MDL=91]
4-NITROANILINE	32 U [MDL=32]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-793 D-SB-793-05 9/9/2010	SB-793 D-SB-793-07 9/9/2010	SB-793 D-SB-793-09 9/9/2010	SB-793 D-SB-793-11 9/9/2010	SB-793 D-SB-793-13 9/9/2010	SB-793 D-SB-793-15 9/9/2010	SB-793 D-SB-793-SS 9/9/2010
4-NITROPHENOL	98 U [MDL=98]	98 U [MDL=98]	95 U [MDL=95]	95 U [MDL=95]	94 U [MDL=94]	98 U [MDL=98]	91 U [MDL=91]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	15 U [MDL=15]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	27 U [MDL=27]	25 U [MDL=25]
BIS(2-CHLOROETHYL)ETHER	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	23 U [MDL=23]	32 J [MDL=23]	23 U [MDL=23]	22 U [MDL=22]	23 U [MDL=23]	22 U [MDL=22]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	28 J [MDL=12]	11 U [MDL=11]
CAPROLACTAM	46 U [MDL=46]	45 U [MDL=45]	44 U [MDL=44]	44 U [MDL=44]	43 U [MDL=43]	45 U [MDL=45]	42 U [MDL=42]
CARBAZOLE	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
DIETHYL PHTHALATE	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]
DIMETHYL PHTHALATE	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	17 U [MDL=17]
DI-N-OCTYL PHTHALATE	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]
HEXACHLOROBUTADIENE	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
HEXACHLOROCYCLOPENTADIENE	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
HEXACHLOROETHANE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.7 U [MDL=2.7]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]	2.5 U [MDL=2.5]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]
N-NITROSO-DI-N-PROPYLAMINE	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]	24 U [MDL=24]
PENTACHLOROPHENOL	98 U [MDL=98]	98 U [MDL=98]	95 U [MDL=95]	95 U [MDL=95]	94 U [MDL=94]	98 U [MDL=98]	91 U [MDL=91]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	33 U [MDL=33]	33 U [MDL=33]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]	31 U [MDL=31]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.54 U [MDL=0.54]	0.59 U [MDL=0.59]	0.54 U [MDL=0.54]	0.58 U [MDL=0.58]	0.56 U [MDL=0.56]	0.56 U [MDL=0.56]	0.52 U [MDL=0.52]
1,1,1-TRICHLOROETHANE	0.49 U [MDL=0.49]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.52 U [MDL=0.52]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]	0.47 U [MDL=0.47]
1,1,2,2-TETRACHLOROETHANE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-793 D-SB-793-05 9/9/2010	SB-793 D-SB-793-07 9/9/2010	SB-793 D-SB-793-09 9/9/2010	SB-793 D-SB-793-11 9/9/2010	SB-793 D-SB-793-13 9/9/2010	SB-793 D-SB-793-15 9/9/2010	SB-793 D-SB-793-SS 9/9/2010
1,1-DICHLOROETHANE	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]
1,1-DICHLOROETHENE	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	1.1 J [MDL=0.45]	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	0.44 U [MDL=0.44]
1,1-DICHLOROPROPENE	0.26 U [MDL=0.26]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]
1,2,3-TRICHLOROBENZENE	0.33 U [MDL=0.33]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]
1,2,3-TRICHLOROPROPANE	0.79 U [MDL=0.79]	0.86 U [MDL=0.86]	0.78 U [MDL=0.78]	0.83 U [MDL=0.83]	0.81 U [MDL=0.81]	0.81 U [MDL=0.81]	0.76 U [MDL=0.76]
1,2,3-TRIMETHYLBENZENE	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]
1,2,4-TRICHLOROBENZENE	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]
1,2,4-TRIMETHYLBENZENE	0.57 U [MDL=0.57]	0.62 U [MDL=0.62]	0.57 U [MDL=0.57]	0.6 U [MDL=0.6]	0.59 U [MDL=0.59]	0.58 U [MDL=0.58]	0.55 U [MDL=0.55]
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]
1,2-DIBROMOETHANE	0.44 U [MDL=0.44]	0.48 U [MDL=0.48]	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.45 U [MDL=0.45]	0.42 U [MDL=0.42]
1,2-DICHLOROBENZENE	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]
1,2-DICHLOROETHANE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]
1,2-DICHLOROPROPANE	0.6 U [MDL=0.6]	0.66 U [MDL=0.66]	0.6 U [MDL=0.6]	0.64 U [MDL=0.64]	0.62 U [MDL=0.62]	0.62 U [MDL=0.62]	0.58 U [MDL=0.58]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]
1,3-DICHLOROPROPANE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]
1,4-DICHLOROBENZENE	0.58 U [MDL=0.58]	0.63 U [MDL=0.63]	0.57 U [MDL=0.57]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]	0.59 U [MDL=0.59]	0.56 U [MDL=0.56]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.82 U [MDL=0.82]	0.9 U [MDL=0.9]	0.82 U [MDL=0.82]	0.87 U [MDL=0.87]	0.85 U [MDL=0.85]	0.84 U [MDL=0.84]	0.79 U [MDL=0.79]
2-BUTANONE	1.2 U [MDL=1.2]	5.1 J [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	12 [MDL=1.2]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]
2-CHLOROTOLUENE	0.35 U [MDL=0.35]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]
2-HEXANONE	0.55 U [MDL=0.55]	0.6 U [MDL=0.6]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]	0.56 U [MDL=0.56]	0.53 U [MDL=0.53]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.36 U [MDL=0.36]	0.39 U [MDL=0.39]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]
4-ISOPROPYLTOLUENE	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]
4-METHYL-2-PENTANONE	0.47 U [MDL=0.47]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]
ACETONE	29 B [MDL=5.5]	190 B [MDL=6]	5.5 U [MDL=5.5]	5.8 U [MDL=5.8]	5.7 U [MDL=5.7]	5.6 U [MDL=5.6]	130 B [MDL=5.3]
BENZENE	0.2 U [MDL=0.2]	0.22 U [MDL=0.22]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]
BROMOCHLOROMETHANE	0.62 U [MDL=0.62]	0.68 U [MDL=0.68]	0.62 U [MDL=0.62]	0.66 U [MDL=0.66]	0.64 U [MDL=0.64]	0.64 U [MDL=0.64]	0.6 U [MDL=0.6]
BROMODICHLOROMETHANE	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]
BROMOFORM	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]
BROMOMETHANE	0.47 U [MDL=0.47]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]
CARBON DISULFIDE	0.81 B [MDL=0.38]	1 B [MDL=0.42]	0.38 U [MDL=0.38]	0.41 U [MDL=0.41]	0.4 U [MDL=0.4]	0.39 U [MDL=0.39]	1.7 B [MDL=0.37]
CARBON TETRACHLORIDE	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]
CHLOROBENZENE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]
CHLORODIBROMOMETHANE	0.48 U [MDL=0.48]	0.52 U [MDL=0.52]	0.48 U [MDL=0.48]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]	0.47 U [MDL=0.47]
CHLOROETHANE	0.75 U [MDL=0.75]	0.82 U [MDL=0.82]	0.75 U [MDL=0.75]	0.8 U [MDL=0.8]	0.78 U [MDL=0.78]	0.77 U [MDL=0.77]	0.73 U [MDL=0.73]
CHLOROFORM	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]
CHLOROMETHANE	0.36 U [MDL=0.36]	0.39 U [MDL=0.39]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]
CIS-1,2-DICHLOROETHENE	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]
CIS-1,3-DICHLOROPROPENE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.55 U [MDL=0.55]	0.6 U [MDL=0.6]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]	0.56 U [MDL=0.56]	0.53 U [MDL=0.53]
DICHLORODIFLUOROMETHANE	0.44 U [MDL=0.44]	0.48 U [MDL=0.48]	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.45 U [MDL=0.45]	0.42 U [MDL=0.42]
DIISOPROPYL ETHER	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-793 D-SB-793-05 9/9/2010	SB-793 D-SB-793-07 9/9/2010	SB-793 D-SB-793-09 9/9/2010	SB-793 D-SB-793-11 9/9/2010	SB-793 D-SB-793-13 9/9/2010	SB-793 D-SB-793-15 9/9/2010	SB-793 D-SB-793-SS 9/9/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]
ETHYLBENZENE	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]
HEXACHLOROBUTADIENE	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]
M+P-XYLENES	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.38 UJ [MDL=0.38]	0.41 UJ [MDL=0.41]	0.37 UJ [MDL=0.37]	0.4 UJ [MDL=0.4]	0.39 UJ [MDL=0.39]	0.38 UJ [MDL=0.38]	0.36 UJ [MDL=0.36]
METHYLENE CHLORIDE	0.83 B [MDL=0.59]	1.2 B [MDL=0.64]	0.76 B [MDL=0.58]	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]	1 B [MDL=0.57]
NAPHTHALENE	0.75 B [MDL=0.17]	0.84 B [MDL=0.18]	0.76 B [MDL=0.17]	0.18 U [MDL=0.18]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]	2.2 B [MDL=0.16]
N-BUTYLBENZENE	0.2 U [MDL=0.2]	0.22 U [MDL=0.22]	0.2 U [MDL=0.2]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]
N-PROPYLBENZENE	0.35 U [MDL=0.35]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]
O-XYLENE	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]
SEC-BUTYLBENZENE	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]
STYRENE	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.34 UJ [MDL=0.34]	0.96 J [MDL=0.33]	0.33 UJ [MDL=0.33]	0.31 U [MDL=0.31]
TERT-BUTYLBENZENE	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]
TERTIARY-BUTYL ALCOHOL	47 B [MDL=6.6]	51 B [MDL=7.2]	46 B [MDL=6.6]	7 UR [MDL=7]	6.9 UR [MDL=6.9]	6.8 UR [MDL=6.8]	46 B [MDL=6.4]
TETRACHLOROETHENE	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	0.44 U [MDL=0.44]
TOLUENE	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]
TOTAL XYLENES	0.59 U [MDL=0.59]	0.64 U [MDL=0.64]	0.58 U [MDL=0.58]	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]	0.57 U [MDL=0.57]
TRANS-1,2-DICHLOROETHENE	0.36 U [MDL=0.36]	0.39 U [MDL=0.39]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]
TRANS-1,3-DICHLOROPROPENE	0.47 U [MDL=0.47]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]
TRICHLOROETHENE	0.37 U [MDL=0.37]	0.4 U [MDL=0.4]	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]
TRICHLOROFLUOROMETHANE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.35 J [MDL=0.32]	0.31 U [MDL=0.31]	0.3 U [MDL=0.3]	0.29 U [MDL=0.29]
VINYL ACETATE	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]
VINYL CHLORIDE	0.34 U [MDL=0.34]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
ACENAPHTHENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
ACENAPHTHYLENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
ANTHRACENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
BAP EQUIVALENT-HALFND	4.1 U [MDL=NaN]	4 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]	4 U [MDL=NaN]	16.795 [MDL=NaN]
BAP EQUIVALENT-POS	4.1 U [MDL=NaN]	4 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]	4 U [MDL=NaN]	14.895 [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	12 [MDL=3.8]
BENZO(A)PYRENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	11 [MDL=3.8]
BENZO(B)FLUORANTHENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	17 [MDL=3.8]
BENZO(G,H,I)PERYLENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	10 [MDL=3.8]
BENZO(K)FLUORANTHENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	11 [MDL=3.8]
CHRYSENE	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	15 [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
FLUORANTHENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	20 [MDL=3.8]
FLUORENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
INDENO(1,2,3-CD)PYRENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	8.7 [MDL=3.8]
NAPHTHALENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.8 U [MDL=3.8]
PHENANTHRENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	12 [MDL=3.8]
PYRENE	4.1 U [MDL=4.1]	4 U [MDL=4]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	16 [MDL=3.8]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-793 D-SB-793-05 9/9/2010	SB-793 D-SB-793-07 9/9/2010	SB-793 D-SB-793-09 9/9/2010	SB-793 D-SB-793-11 9/9/2010	SB-793 D-SB-793-13 9/9/2010	SB-793 D-SB-793-15 9/9/2010	SB-793 D-SB-793-SS 9/9/2010
TOTAL PAHS	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	132.7 [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]	24 U [MDL=24]
AROCLOR-1221	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]
AROCLOR-1232	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]
AROCLOR-1254	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]
AROCLOR-1260	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	7.6 U [MDL=7.6]	0.76 U [MDL=0.76]	0.74 U [MDL=0.74]	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.76 U [MDL=0.76]	3.5 U [MDL=3.5]
4,4'-DDE	4.8 U [MDL=4.8]	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]	0.46 U [MDL=0.46]	0.48 U [MDL=0.48]	2.2 U [MDL=2.2]
4,4'-DDT	7.8 U [MDL=7.8]	0.77 U [MDL=0.77]	0.75 U [MDL=0.75]	0.75 U [MDL=0.75]	0.74 U [MDL=0.74]	0.77 U [MDL=0.77]	3.6 U [MDL=3.6]
ALDRIN	15 U [MDL=15]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	6.9 U [MDL=6.9]
ALPHA-BHC	9 U [MDL=9]	0.89 U [MDL=0.89]	0.87 UJ [MDL=0.87]	0.87 UJ [MDL=0.87]	0.86 UJ [MDL=0.86]	0.9 UJ [MDL=0.9]	4.2 UJ [MDL=4.2]
ALPHA-CHLORDANE	12 U [MDL=12]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	5.4 U [MDL=5.4]
BETA-BHC	14 U [MDL=14]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	6.3 U [MDL=6.3]
DELTA-BHC	15 U [MDL=15]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	6.9 U [MDL=6.9]
DIELDRIN	5.8 U [MDL=5.8]	0.57 U [MDL=0.57]	0.56 U [MDL=0.56]	0.56 U [MDL=0.56]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	2.7 U [MDL=2.7]
ENDOSULFAN I	6.4 U [MDL=6.4]	0.63 U [MDL=0.63]	0.62 U [MDL=0.62]	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]	0.64 U [MDL=0.64]	3 U [MDL=3]
ENDOSULFAN II	10 U [MDL=10]	1 U [MDL=1]	0.98 U [MDL=0.98]	0.98 U [MDL=0.98]	0.96 U [MDL=0.96]	1 U [MDL=1]	4.7 U [MDL=4.7]
ENDOSULFAN SULFATE	11 U [MDL=11]	1.1 U [MDL=1.1]	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]	5 U [MDL=5]
ENDRIN	6.2 U [MDL=6.2]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]	0.59 U [MDL=0.59]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]	2.9 U [MDL=2.9]
ENDRIN ALDEHYDE	12 U [MDL=12]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	5.7 U [MDL=5.7]
ENDRIN KETONE	7.8 U [MDL=7.8]	0.77 U [MDL=0.77]	0.75 U [MDL=0.75]	0.75 U [MDL=0.75]	0.74 U [MDL=0.74]	0.77 U [MDL=0.77]	3.6 U [MDL=3.6]
GAMMA-BHC (LINDANE)	9.1 U [MDL=9.1]	0.9 U [MDL=0.9]	0.88 U [MDL=0.88]	0.88 U [MDL=0.88]	0.87 U [MDL=0.87]	0.91 U [MDL=0.91]	4.2 U [MDL=4.2]
GAMMA-CHLORDANE	5.2 U [MDL=5.2]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]	0.5 U [MDL=0.5]	0.49 U [MDL=0.49]	0.52 U [MDL=0.52]	2.4 U [MDL=2.4]
HEPTACHLOR	14 UJ [MDL=14]	1.3 UJ [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	6.3 UJ [MDL=6.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-793	SB-793	SB-793	SB-793	SB-793	SB-793	SB-793
SAMPLE ID	D-SB-793-05	D-SB-793-07	D-SB-793-09	D-SB-793-11	D-SB-793-13	D-SB-793-15	D-SB-793-SS
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
HEPTACHLOR EPOXIDE	9.8 U [MDL=9.8]	0.98 U [MDL=0.98]	0.95 U [MDL=0.95]	0.95 U [MDL=0.95]	0.94 U [MDL=0.94]	0.98 U [MDL=0.98]	4.6 U [MDL=4.6]
METHOXYCHLOR	18 UJ [MDL=18]	1.8 UJ [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	8.6 UJ [MDL=8.6]
TOXAPHENE	230 U [MDL=230]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]	22 U [MDL=22]	23 U [MDL=23]	110 U [MDL=110]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	7900 J [MDL=3.4]	5300 J [MDL=3.4]	7700 J [MDL=3.3]	4000 J [MDL=3.3]	3300 U [MDL=3.3]	3400 U [MDL=3.4]	40000 [MDL=3.2]
GASOLINE RANGE ORGANICS	57 U [MDL=57]	56 U [MDL=56]	55 U [MDL=55]	55 U [MDL=55]	54 U [MDL=54]	56 U [MDL=56]	53 U [MDL=53]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-794	SB-794	SB-794	SB-794	SB-794	SB-794	SB-794
SAMPLE ID	D-SB-794-03	D-SB-794-05	D-SB-794-07	D-SB-794-09	D-SB-794-11	D-SB-794-13	D-SB-794-15
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
METALS (MG/KG)							
ANTIMONY	0.28 B [MDL=0.14]	0.18 B [MDL=0.03]	0.3 B [MDL=0.03]	0.075 B [MDL=0.028]	0.074 B [MDL=0.028]	0.36 J [MDL=0.029]	0.17 B [MDL=0.028]
ARSENIC	5.5 J [MDL=0.073]	7 J [MDL=0.077]	6.1 J [MDL=0.077]	5.6 J [MDL=0.071]	1.5 J [MDL=0.073]	7 J [MDL=0.075]	2.3 J [MDL=0.073]
BARIUM	40.2 [MDL=0.27]	11.3 [MDL=0.057]	8.1 [MDL=0.057]	11.6 [MDL=0.053]	15.3 [MDL=0.054]	20.9 [MDL=0.056]	14.7 [MDL=0.054]
BERYLLIUM	2.3 J [MDL=0.055]	1 J [MDL=0.058]	1.1 J [MDL=0.058]	0.46 J [MDL=0.054]	0.78 J [MDL=0.055]	2.7 J [MDL=0.057]	1.4 J [MDL=0.055]
CADMIUM	0.2 B [MDL=0.0092]	0.02 B [MDL=0.0097]	0.0097 UL [MDL=0.0097]	0.009 UL [MDL=0.009]	0.014 B [MDL=0.0092]	0.033 B [MDL=0.0095]	0.02 B [MDL=0.0092]
CHROMIUM	19.4 J [MDL=0.047]	25.9 J [MDL=0.05]	29.7 J [MDL=0.05]	8.1 J [MDL=0.046]	9.6 J [MDL=0.047]	26.4 J [MDL=0.049]	22.6 J [MDL=0.047]
COBALT	30 J [MDL=0.0045]	4.4 J [MDL=0.0047]	6 J [MDL=0.0047]	3 J [MDL=0.0044]	6 J [MDL=0.0045]	14.6 J [MDL=0.0046]	10.6 J [MDL=0.0045]
COPPER	27.7 J [MDL=0.051]	23.1 J [MDL=0.053]	29.7 J [MDL=0.053]	6.6 J [MDL=0.05]	6.5 J [MDL=0.051]	20.6 J [MDL=0.052]	11 J [MDL=0.051]
IRON	30900 J [MDL=1.2]	36000 J [MDL=1.2]	46500 J [MDL=1.2]	4650 J [MDL=1.2]	9930 J [MDL=1.2]	41800 J [MDL=1.2]	23400 J [MDL=1.2]
LEAD	33.3 [MDL=0.077]	4.8 [MDL=0.016]	4.6 [MDL=0.016]	4.1 [MDL=0.015]	4.1 [MDL=0.015]	8.1 [MDL=0.016]	3 [MDL=0.015]
MANGANESE	326 J [MDL=0.055]	28.2 J [MDL=0.058]	44.9 J [MDL=0.058]	5.9 J [MDL=0.054]	20 J [MDL=0.055]	50.8 J [MDL=0.057]	20.6 J [MDL=0.055]
MERCURY	0.7 [MDL=0.018]	0.019 U [MDL=0.019]	0.019 U [MDL=0.019]	0.017 U [MDL=0.017]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]
MOLYBDENUM	0.63 [MDL=0.074]	0.53 [MDL=0.078]	0.57 [MDL=0.078]	0.073 U [MDL=0.073]	0.09 B [MDL=0.074]	0.63 [MDL=0.076]	0.32 [MDL=0.074]
NICKEL	40.8 J [MDL=0.025]	14 J [MDL=0.026]	16.7 J [MDL=0.026]	4.7 J [MDL=0.024]	12.1 J [MDL=0.025]	35.2 J [MDL=0.025]	23.5 J [MDL=0.025]
SELENIUM	1.8 L [MDL=0.11]	0.49 J [MDL=0.11]	0.63 L [MDL=0.11]	2.1 L [MDL=0.1]	1.3 L [MDL=0.11]	4.5 L [MDL=0.11]	1.5 L [MDL=0.11]
SILVER	0.88 [MDL=0.019]	0.02 U [MDL=0.02]	0.02 U [MDL=0.02]	0.018 U [MDL=0.018]	0.019 U [MDL=0.019]	0.026 B [MDL=0.019]	0.021 B [MDL=0.019]
THALLIUM	0.077 U [MDL=0.077]	0.05 J [MDL=0.016]	0.036 J [MDL=0.016]	0.11 J [MDL=0.015]	0.094 J [MDL=0.015]	0.11 J [MDL=0.016]	0.096 J [MDL=0.015]
VANADIUM	29.9 J [MDL=0.048]	48.7 J [MDL=0.051]	55 J [MDL=0.051]	7.9 J [MDL=0.047]	15.5 J [MDL=0.048]	45.7 J [MDL=0.05]	31.1 J [MDL=0.048]
ZINC	94.1 L [MDL=0.24]	21.7 L [MDL=0.25]	19.2 L [MDL=0.25]	7 L [MDL=0.23]	15.4 L [MDL=0.24]	45.2 L [MDL=0.24]	26.2 L [MDL=0.23]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.45 J [MDL=0.34]	0.33 J [MDL=0.31]	0.36 J [MDL=0.32]	0.44 J [MDL=0.33]	0.59 J [MDL=0.32]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
1,4-DIOXANE	26 UJ [MDL=26]	27 U [MDL=27]	27 U [MDL=27]	25 U [MDL=25]	26 U [MDL=26]	27 U [MDL=27]	26 U [MDL=26]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 UJ [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	29 UJ [MDL=29]	31 U [MDL=31]	31 U [MDL=31]	29 U [MDL=29]	29 U [MDL=29]	30 U [MDL=30]	29 U [MDL=29]
2,4,6-TRICHLOROPHENOL	94 UJ [MDL=94]	99 U [MDL=99]	99 U [MDL=99]	92 U [MDL=92]	94 U [MDL=94]	97 U [MDL=97]	94 U [MDL=94]
2,4-DICHLOROPHENOL	24 UJ [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	24 UJ [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	23 U [MDL=23]
2,4-DINITROPHENOL	94 UJ [MDL=94]	99 U [MDL=99]	99 U [MDL=99]	92 U [MDL=92]	94 U [MDL=94]	97 U [MDL=97]	94 U [MDL=94]
2,4-DINITROTOLUENE	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
2,6-DINITROTOLUENE	25 UJ [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]
2-CHLORONAPHTHALENE	3.9 UJ [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
2-CHLOROPHENOL	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	94 UJ [MDL=94]	99 U [MDL=99]	99 U [MDL=99]	92 U [MDL=92]	94 U [MDL=94]	97 U [MDL=97]	94 U [MDL=94]
2-NITROANILINE	11 UJ [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	21 UJ [MDL=21]	22 U [MDL=22]	22 U [MDL=22]	21 U [MDL=21]	21 U [MDL=21]	22 U [MDL=22]	21 U [MDL=21]
3-NITROANILINE	19 UJ [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	94 UJ [MDL=94]	99 U [MDL=99]	99 U [MDL=99]	92 U [MDL=92]	94 U [MDL=94]	97 U [MDL=97]	94 U [MDL=94]
4-BROMOPHENYL PHENYL ETHER	15 UJ [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	25 UJ [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]
4-CHLOROANILINE	20 UJ [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	15 UJ [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
4-METHYLPHENOL	94 UJ [MDL=94]	99 U [MDL=99]	99 U [MDL=99]	92 U [MDL=92]	94 U [MDL=94]	97 U [MDL=97]	94 U [MDL=94]
4-NITROANILINE	31 UJ [MDL=31]	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	31 U [MDL=31]	32 U [MDL=32]	31 U [MDL=31]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-794 D-SB-794-03 9/9/2010	SB-794 D-SB-794-05 9/9/2010	SB-794 D-SB-794-07 9/9/2010	SB-794 D-SB-794-09 9/9/2010	SB-794 D-SB-794-11 9/9/2010	SB-794 D-SB-794-13 9/9/2010	SB-794 D-SB-794-15 9/9/2010
4-NITROPHENOL	94 UJ [MDL=94]	99 U [MDL=99]	99 U [MDL=99]	92 U [MDL=92]	94 U [MDL=94]	97 UR [MDL=97]	94 U [MDL=94]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 UJ [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 UJ [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	14 UJ [MDL=14]	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	15 U [MDL=15]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	26 UJ [MDL=26]	27 U [MDL=27]	27 U [MDL=27]	25 U [MDL=25]	26 U [MDL=26]	27 U [MDL=27]	26 U [MDL=26]
BIS(2-CHLOROETHYL)ETHER	2.4 UJ [MDL=2.4]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	22 UJ [MDL=22]	24 U [MDL=24]	24 U [MDL=24]	23 J [MDL=22]	22 U [MDL=22]	27 J [MDL=23]	22 U [MDL=22]
BUTYL BENZYL PHTHALATE	12 UJ [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	44 UJ [MDL=44]	46 U [MDL=46]	46 U [MDL=46]	43 U [MDL=43]	43 U [MDL=43]	45 U [MDL=45]	43 U [MDL=43]
CARBAZOLE	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	35 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
DIETHYL PHTHALATE	19 UJ [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
DIMETHYL PHTHALATE	20 UJ [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	18 UJ [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.5 UJ [MDL=2.5]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
HEXACHLOROCYCLOPENTADIENE	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
HEXACHLOROETHANE	11 UJ [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	15 UJ [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.6 UJ [MDL=2.6]	2.7 U [MDL=2.7]	2.7 U [MDL=2.7]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]
N-NITROSODIMETHYLAMINE	19 UJ [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
N-NITROSODIPHENYLAMINE	25 UJ [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]
PENTACHLOROPHENOL	94 UJ [MDL=94]	99 U [MDL=99]	99 U [MDL=99]	92 U [MDL=92]	94 U [MDL=94]	97 U [MDL=97]	94 U [MDL=94]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	32 UJ [MDL=32]	34 U [MDL=34]	34 U [MDL=34]	31 U [MDL=31]	32 U [MDL=32]	33 U [MDL=33]	32 U [MDL=32]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.48 U [MDL=0.48]	0.52 U [MDL=0.52]	0.57 U [MDL=0.57]	0.53 U [MDL=0.53]	0.54 U [MDL=0.54]	0.54 U [MDL=0.54]	0.55 U [MDL=0.55]
1,1,1-TRICHLOROETHANE	0.44 U [MDL=0.44]	0.47 U [MDL=0.47]	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]	0.49 U [MDL=0.49]	0.49 U [MDL=0.49]
1,1,2,2-TETRACHLOROETHANE	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1 U [MDL=1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-794 D-SB-794-03 9/9/2010	SB-794 D-SB-794-05 9/9/2010	SB-794 D-SB-794-07 9/9/2010	SB-794 D-SB-794-09 9/9/2010	SB-794 D-SB-794-11 9/9/2010	SB-794 D-SB-794-13 9/9/2010	SB-794 D-SB-794-15 9/9/2010
1,1-DICHLOROETHANE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]
1,1-DICHLOROETHENE	0.4 U [MDL=0.4]	0.43 U [MDL=0.43]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]
1,1-DICHLOROPROPENE	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]
1,2,3-TRICHLOROBENZENE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]	0.33 U [MDL=0.33]
1,2,3-TRICHLOROPROPANE	0.7 U [MDL=0.7]	0.75 U [MDL=0.75]	0.83 U [MDL=0.83]	0.77 U [MDL=0.77]	0.78 U [MDL=0.78]	0.79 U [MDL=0.79]	0.79 U [MDL=0.79]
1,2,3-TRIMETHYLBENZENE	0.13 U [MDL=0.13]	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]
1,2,4-TRICHLOROBENZENE	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]
1,2,4-TRIMETHYLBENZENE	0.51 U [MDL=0.51]	0.54 U [MDL=0.54]	0.6 U [MDL=0.6]	0.55 U [MDL=0.55]	0.57 U [MDL=0.57]	0.57 U [MDL=0.57]	0.57 U [MDL=0.57]
1,2-DIBROMO-3-CHLOROPROPANE	1 U [MDL=1]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
1,2-DIBROMOETHANE	0.39 U [MDL=0.39]	0.42 U [MDL=0.42]	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.43 U [MDL=0.43]	0.44 U [MDL=0.44]	0.44 U [MDL=0.44]
1,2-DICHLOROBENZENE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]
1,2-DICHLOROETHANE	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
1,2-DICHLOROPROPANE	0.54 U [MDL=0.54]	0.57 U [MDL=0.57]	0.63 U [MDL=0.63]	0.59 U [MDL=0.59]	0.6 U [MDL=0.6]	0.6 U [MDL=0.6]	0.61 U [MDL=0.61]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
1,3-DICHLOROPROPANE	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
1,4-DICHLOROBENZENE	0.51 U [MDL=0.51]	0.55 U [MDL=0.55]	0.61 U [MDL=0.61]	0.56 U [MDL=0.56]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.73 U [MDL=0.73]	0.78 U [MDL=0.78]	0.86 U [MDL=0.86]	0.8 U [MDL=0.8]	0.82 U [MDL=0.82]	0.82 U [MDL=0.82]	0.83 U [MDL=0.83]
2-BUTANONE	3 J [MDL=1.1]	6.8 J [MDL=1.2]	1.7 J [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
2-CHLOROETHYL VINYL ETHER	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
2-CHLOROTOLUENE	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.35 U [MDL=0.35]	0.35 U [MDL=0.35]
2-HEXANONE	0.49 U [MDL=0.49]	0.52 U [MDL=0.52]	0.58 U [MDL=0.58]	0.54 U [MDL=0.54]	0.55 U [MDL=0.55]	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]
4-ISOPROPYLTOLUENE	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]
4-METHYL-2-PENTANONE	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]
ACETONE	31 B [MDL=4.9]	62 B [MDL=5.2]	15 B [MDL=5.8]	5.4 U [MDL=5.4]	5.5 U [MDL=5.5]	5.5 U [MDL=5.5]	8.1 B [MDL=5.6]
BENZENE	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]
BROMOCHLOROMETHANE	0.55 U [MDL=0.55]	0.59 U [MDL=0.59]	0.65 U [MDL=0.65]	0.61 U [MDL=0.61]	0.62 U [MDL=0.62]	0.62 U [MDL=0.62]	0.63 U [MDL=0.63]
BROMODICHLOROMETHANE	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]
BROMOFORM	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]
BROMOMETHANE	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]
CARBON DISULFIDE	0.99 B [MDL=0.34]	1 B [MDL=0.37]	0.87 B [MDL=0.4]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]	0.38 U [MDL=0.38]	0.39 U [MDL=0.39]
CARBON TETRACHLORIDE	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]
CHLOROBENZENE	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]
CHLORODIBROMOMETHANE	0.43 U [MDL=0.43]	0.46 U [MDL=0.46]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]	0.48 U [MDL=0.48]	0.48 U [MDL=0.48]
CHLOROETHANE	0.67 U [MDL=0.67]	0.72 U [MDL=0.72]	0.79 U [MDL=0.79]	0.73 U [MDL=0.73]	0.75 U [MDL=0.75]	0.75 U [MDL=0.75]	0.76 U [MDL=0.76]
CHLOROFORM	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]
CHLOROMETHANE	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]
CIS-1,2-DICHLOROETHENE	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]
CIS-1,3-DICHLOROPROPENE	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.49 U [MDL=0.49]	0.52 U [MDL=0.52]	0.58 U [MDL=0.58]	0.54 U [MDL=0.54]	0.55 U [MDL=0.55]	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]
DICHLORODIFLUOROMETHANE	0.39 U [MDL=0.39]	0.42 U [MDL=0.42]	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.43 U [MDL=0.43]	0.44 U [MDL=0.44]	0.44 U [MDL=0.44]
DIISOPROPYL ETHER	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-794 D-SB-794-03 9/9/2010	SB-794 D-SB-794-05 9/9/2010	SB-794 D-SB-794-07 9/9/2010	SB-794 D-SB-794-09 9/9/2010	SB-794 D-SB-794-11 9/9/2010	SB-794 D-SB-794-13 9/9/2010	SB-794 D-SB-794-15 9/9/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]
ETHYLBENZENE	0.2 U [MDL=0.2]	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]
HEXACHLOROBUTADIENE	0.93 U [MDL=0.93]	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.12 U [MDL=0.12]	0.13 U [MDL=0.13]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]
M+P-XYLENES	0.93 U [MDL=0.93]	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.33 UJ [MDL=0.33]	0.36 UJ [MDL=0.36]	0.4 UJ [MDL=0.4]	0.37 UJ [MDL=0.37]	0.37 U [MDL=0.37]	0.38 UJ [MDL=0.38]	0.38 UJ [MDL=0.38]
METHYLENE CHLORIDE	0.52 U [MDL=0.52]	0.56 U [MDL=0.56]	0.62 U [MDL=0.62]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.59 U [MDL=0.59]	0.59 U [MDL=0.59]
NAPHTHALENE	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.8 B [MDL=0.17]	0.72 B [MDL=0.16]	0.17 U [MDL=0.17]	0.75 B [MDL=0.17]	0.77 B [MDL=0.17]
N-BUTYLBENZENE	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]	0.2 U [MDL=0.2]
N-PROPYLBENZENE	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.35 U [MDL=0.35]	0.35 U [MDL=0.35]
O-XYLENE	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
SEC-BUTYLBENZENE	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]
STYRENE	0.12 U [MDL=0.12]	0.12 U [MDL=0.12]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	0.29 UJ [MDL=0.29]	0.31 UJ [MDL=0.31]	0.34 UJ [MDL=0.34]	0.32 UJ [MDL=0.32]	0.32 U [MDL=0.32]	0.32 UJ [MDL=0.32]	0.33 UJ [MDL=0.33]
TERT-BUTYLBENZENE	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]
TERTIARY-BUTYL ALCOHOL	5.9 UR [MDL=5.9]	6.3 UR [MDL=6.3]	7 UR [MDL=7]	45 B [MDL=6.5]	6.6 UR [MDL=6.6]	46 B [MDL=6.6]	6.7 UR [MDL=6.7]
TETRACHLOROETHENE	0.4 U [MDL=0.4]	0.43 U [MDL=0.43]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]
TOLUENE	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.24 U [MDL=0.24]
TOTAL XYLENES	0.52 U [MDL=0.52]	0.56 U [MDL=0.56]	0.62 U [MDL=0.62]	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	0.59 U [MDL=0.59]	0.59 U [MDL=0.59]
TRANS-1,2-DICHLOROETHENE	0.32 U [MDL=0.32]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]	0.36 U [MDL=0.36]
TRANS-1,3-DICHLOROPROPENE	0.42 U [MDL=0.42]	0.45 U [MDL=0.45]	0.5 U [MDL=0.5]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]
TRICHLOROETHENE	0.33 U [MDL=0.33]	0.35 U [MDL=0.35]	0.39 U [MDL=0.39]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]	0.37 U [MDL=0.37]
TRICHLOROFLUOROMETHANE	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
VINYL ACETATE	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.22 U [MDL=0.22]	0.22 U [MDL=0.22]
VINYL CHLORIDE	0.3 U [MDL=0.3]	0.32 U [MDL=0.32]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]	0.34 U [MDL=0.34]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	59 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
ACENAPHTHENE	39 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
ACENAPHTHYLENE	3.9 UJ [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
ANTHRACENE	48 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
BAP EQUIVALENT-HALFND	137.41 [MDL=NaN]	4.1 U [MDL=NaN]	4.1 U [MDL=NaN]	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]	4 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-POS	135.46 [MDL=NaN]	4.1 U [MDL=NaN]	4.1 U [MDL=NaN]	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]	4 U [MDL=NaN]	3.9 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	110 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
BENZO(A)PYRENE	100 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
BENZO(B)FLUORANTHENE	160 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
BENZO(G,H,I)PERYLENE	75 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
BENZO(K)FLUORANTHENE	63 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
CHRYSENE	130 J [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	3.9 UJ [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
FLUORANTHENE	210 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
FLUORENE	38 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
INDENO(1,2,3-CD)PYRENE	77 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
NAPHTHALENE	47 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
PHENANTHRENE	190 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]
PYRENE	170 J [MDL=3.9]	4.1 U [MDL=4.1]	4.1 U [MDL=4.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.9 U [MDL=3.9]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-794 D-SB-794-03 9/9/2010	SB-794 D-SB-794-05 9/9/2010	SB-794 D-SB-794-07 9/9/2010	SB-794 D-SB-794-09 9/9/2010	SB-794 D-SB-794-11 9/9/2010	SB-794 D-SB-794-13 9/9/2010	SB-794 D-SB-794-15 9/9/2010
TOTAL PAHS	1516 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	25 U [MDL=25]	26 U [MDL=26]	26 U [MDL=26]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]
AROCLOR-1221	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1232	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]	17 U [MDL=17]	16 U [MDL=16]
AROCLOR-1242	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]
AROCLOR-1248	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
AROCLOR-1254	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
AROCLOR-1260	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	3.7 U [MDL=3.7]	0.77 U [MDL=0.77]	0.77 U [MDL=0.77]	0.71 U [MDL=0.71]	0.73 U [MDL=0.73]	0.75 UJ [MDL=0.75]	0.73 UJ [MDL=0.73]
4,4'-DDE	2.3 U [MDL=2.3]	0.48 U [MDL=0.48]	0.48 U [MDL=0.48]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]	0.47 UJ [MDL=0.47]	0.46 UJ [MDL=0.46]
4,4'-DDT	3.7 U [MDL=3.7]	0.78 U [MDL=0.78]	0.78 U [MDL=0.78]	0.73 U [MDL=0.73]	0.74 U [MDL=0.74]	0.76 U [MDL=0.76]	0.74 U [MDL=0.74]
ALDRIN	7.1 U [MDL=7.1]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 UJ [MDL=1.5]	1.4 UJ [MDL=1.4]
ALPHA-BHC	4.3 UJ [MDL=4.3]	0.91 UJ [MDL=0.91]	0.91 UJ [MDL=0.91]	0.84 UJ [MDL=0.84]	0.86 UJ [MDL=0.86]	0.89 UJ [MDL=0.89]	0.86 UJ [MDL=0.86]
ALPHA-CHLORDANE	5.5 U [MDL=5.5]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 UJ [MDL=1.1]	1.1 UJ [MDL=1.1]
BETA-BHC	6.5 U [MDL=6.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]
DELTA-BHC	7.1 U [MDL=7.1]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.5 UJ [MDL=1.5]	1.4 UJ [MDL=1.4]
DIELDRIN	2.8 U [MDL=2.8]	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]	0.54 U [MDL=0.54]	0.55 U [MDL=0.55]	0.57 U [MDL=0.57]	0.55 U [MDL=0.55]
ENDOSULFAN I	3.1 U [MDL=3.1]	0.65 U [MDL=0.65]	0.65 U [MDL=0.65]	0.6 U [MDL=0.6]	0.61 U [MDL=0.61]	0.63 U [MDL=0.63]	0.61 U [MDL=0.61]
ENDOSULFAN II	4.8 U [MDL=4.8]	1 U [MDL=1]	1 U [MDL=1]	0.95 U [MDL=0.95]	0.96 U [MDL=0.96]	1 U [MDL=1]	0.96 U [MDL=0.96]
ENDOSULFAN SULFATE	5.1 U [MDL=5.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]	1 U [MDL=1]
ENDRIN	2.9 U [MDL=2.9]	0.62 U [MDL=0.62]	0.62 U [MDL=0.62]	0.58 U [MDL=0.58]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]
ENDRIN ALDEHYDE	5.9 U [MDL=5.9]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	3.7 U [MDL=3.7]	0.78 U [MDL=0.78]	0.78 U [MDL=0.78]	0.73 U [MDL=0.73]	0.74 U [MDL=0.74]	0.76 U [MDL=0.76]	0.74 U [MDL=0.74]
GAMMA-BHC (LINDANE)	4.4 U [MDL=4.4]	0.92 U [MDL=0.92]	0.92 U [MDL=0.92]	0.85 U [MDL=0.85]	0.87 U [MDL=0.87]	0.9 UJ [MDL=0.9]	0.87 UJ [MDL=0.87]
GAMMA-CHLORDANE	2.5 U [MDL=2.5]	0.52 U [MDL=0.52]	0.52 U [MDL=0.52]	0.48 U [MDL=0.48]	0.49 U [MDL=0.49]	0.51 UJ [MDL=0.51]	0.49 UJ [MDL=0.49]
HEPTACHLOR	6.5 U [MDL=6.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-794	SB-794	SB-794	SB-794	SB-794	SB-794	SB-794
SAMPLE ID	D-SB-794-03	D-SB-794-05	D-SB-794-07	D-SB-794-09	D-SB-794-11	D-SB-794-13	D-SB-794-15
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
HEPTACHLOR EPOXIDE	4.7 U [MDL=4.7]	0.99 U [MDL=0.99]	0.99 U [MDL=0.99]	0.92 U [MDL=0.92]	0.94 U [MDL=0.94]	0.97 UJ [MDL=0.97]	0.94 UJ [MDL=0.94]
METHOXYCHLOR	8.8 U [MDL=8.8]	1.9 U [MDL=1.9]	1.9 U [MDL=1.9]	1.7 U [MDL=1.7]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]
TOXAPHENE	110 U [MDL=110]	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]	22 U [MDL=22]	23 U [MDL=23]	22 U [MDL=22]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	70000 [MDL=3.3]	8400 J [MDL=3.5]	5100 J [MDL=3.5]	3200 UJ [MDL=3.2]	3300 UJ [MDL=3.3]	3400 UJ [MDL=3.4]	3300 UJ [MDL=3.3]
GASOLINE RANGE ORGANICS	54 U [MDL=54]	57 U [MDL=57]	57 U [MDL=57]	53 UJ [MDL=53]	54 UJ [MDL=54]	56 UJ [MDL=56]	54 UJ [MDL=54]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-794	SB-795	SB-795	SB-795	SB-795	SB-795	SB-795
SAMPLE ID	D-SB-794-SS	D-SB-795-03	D-SB-795-05	D-SB-795-07	D-SB-795-09	D-SB-795-11	D-SB-795-13
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
METALS (MG/KG)							
ANTIMONY	0.41 J [MDL=0.14]	0.29 B [MDL=0.029]	0.087 B [MDL=0.035]	0.24 B [MDL=0.03]	0.3 B [MDL=0.028]	0.085 B [MDL=0.029]	0.42 J [MDL=0.029]
ARSENIC	4.3 J [MDL=0.072]	5.8 J [MDL=0.075]	3.9 J [MDL=0.091]	5.7 J [MDL=0.077]	4.4 J [MDL=0.073]	2.3 J [MDL=0.074]	4.2 J [MDL=0.076]
BARIUM	54.4 [MDL=0.27]	25.3 [MDL=0.056]	20.5 [MDL=0.068]	23.7 [MDL=0.057]	12.6 [MDL=0.054]	12.2 [MDL=0.055]	15 [MDL=0.056]
BERYLLIUM	1.6 J [MDL=0.055]	6.6 J [MDL=0.057]	0.97 J [MDL=0.069]	4.2 J [MDL=0.059]	1.3 J [MDL=0.055]	0.38 J [MDL=0.056]	2.4 J [MDL=0.057]
CADMIUM	0.27 B [MDL=0.0091]	0.042 B [MDL=0.0094]	0.015 B [MDL=0.012]	0.11 B [MDL=0.0097]	0.012 B [MDL=0.0092]	0.0093 UL [MDL=0.0093]	0.02 B [MDL=0.0095]
CHROMIUM	16.2 J [MDL=0.047]	25.6 J [MDL=0.048]	16.7 J [MDL=0.059]	20.9 J [MDL=0.05]	21.7 J [MDL=0.047]	12.4 J [MDL=0.048]	32.7 J [MDL=0.049]
COBALT	14.1 J [MDL=0.0044]	27.3 J [MDL=0.0046]	6.7 J [MDL=0.0056]	20.7 J [MDL=0.0047]	7.7 J [MDL=0.0045]	1.7 J [MDL=0.0045]	11.8 J [MDL=0.0046]
COPPER	33.6 J [MDL=0.05]	40.9 J [MDL=0.052]	18.1 J [MDL=0.063]	32.9 J [MDL=0.054]	16.6 J [MDL=0.051]	10.9 J [MDL=0.051]	24.2 J [MDL=0.052]
IRON	20200 J [MDL=1.2]	39700 J [MDL=1.2]	20800 J [MDL=1.5]	37200 J [MDL=1.2]	27300 J [MDL=1.2]	9260 J [MDL=1.2]	39400 J [MDL=1.2]
LEAD	56.2 [MDL=0.076]	12.4 [MDL=0.016]	8.2 [MDL=0.019]	10.5 [MDL=0.016]	6.4 [MDL=0.015]	4.9 [MDL=0.016]	7.5 [MDL=0.016]
MANGANESE	183 J [MDL=0.055]	110 J [MDL=0.057]	28.1 J [MDL=0.069]	74.5 J [MDL=0.059]	74 J [MDL=0.055]	11.4 J [MDL=0.056]	52.1 J [MDL=0.057]
MERCURY	1.7 [MDL=0.017]	0.018 U [MDL=0.018]	0.022 U [MDL=0.022]	0.023 J [MDL=0.019]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]	0.018 U [MDL=0.018]
MOLYBDENUM	0.52 [MDL=0.073]	0.45 [MDL=0.076]	0.86 [MDL=0.093]	0.39 [MDL=0.078]	0.41 [MDL=0.074]	0.087 B [MDL=0.075]	0.58 [MDL=0.077]
NICKEL	21.3 J [MDL=0.024]	53.2 J [MDL=0.025]	13.3 J [MDL=0.031]	42.5 J [MDL=0.026]	20.2 J [MDL=0.025]	3.9 J [MDL=0.025]	30 J [MDL=0.026]
SELENIUM	1.2 L [MDL=0.1]	4.1 L [MDL=0.11]	0.69 J [MDL=0.13]	4.1 L [MDL=0.11]	1.4 L [MDL=0.11]	1.4 L [MDL=0.11]	1.5 L [MDL=0.11]
SILVER	1.4 [MDL=0.019]	0.028 B [MDL=0.019]	0.024 U [MDL=0.024]	0.034 B [MDL=0.02]	0.019 U [MDL=0.019]	0.019 U [MDL=0.019]	0.02 U [MDL=0.02]
THALLIUM	0.094 B [MDL=0.076]	0.079 J [MDL=0.016]	0.084 J [MDL=0.019]	0.09 J [MDL=0.016]	0.08 J [MDL=0.015]	0.12 [MDL=0.016]	0.14 [MDL=0.016]
VANADIUM	25.8 J [MDL=0.048]	42.7 J [MDL=0.05]	33.3 J [MDL=0.06]	32.7 J [MDL=0.051]	38.5 J [MDL=0.048]	14.6 J [MDL=0.049]	43.2 J [MDL=0.05]
ZINC	119 L [MDL=0.23]	123 L [MDL=0.24]	28.1 L [MDL=0.29]	108 L [MDL=0.25]	24.6 L [MDL=0.24]	5.6 L [MDL=0.24]	38 L [MDL=0.24]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.31 U [MDL=0.31]	0.43 J [MDL=0.33]	0.51 J [MDL=0.4]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.67 J [MDL=0.32]	0.62 J [MDL=0.33]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
1,4-DIOXANE	34 U [MDL=34]	27 U [MDL=27]	32 U [MDL=32]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]	27 U [MDL=27]
2,2'-OXYBIS(1-CHLOROPROPANE)	15 U [MDL=15]	12 U [MDL=12]	14 U [MDL=14]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]
2,4,5-TRICHLOROPHENOL	39 U [MDL=39]	30 U [MDL=30]	37 U [MDL=37]	31 U [MDL=31]	29 U [MDL=29]	30 U [MDL=30]	30 U [MDL=30]
2,4,6-TRICHLOROPHENOL	120 U [MDL=120]	97 U [MDL=97]	120 U [MDL=120]	100 U [MDL=100]	94 U [MDL=94]	96 U [MDL=96]	98 U [MDL=98]
2,4-DICHLOROPHENOL	31 U [MDL=31]	24 U [MDL=24]	29 U [MDL=29]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	31 U [MDL=31]	24 U [MDL=24]	29 U [MDL=29]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]
2,4-DINITROPHENOL	120 U [MDL=120]	97 U [MDL=97]	120 U [MDL=120]	100 U [MDL=100]	94 U [MDL=94]	96 U [MDL=96]	98 U [MDL=98]
2,4-DINITROTOLUENE	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
2,6-DINITROTOLUENE	33 U [MDL=33]	25 U [MDL=25]	31 U [MDL=31]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]
2-CHLORONAPHTHALENE	5.1 U [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
2-CHLOROPHENOL	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	120 U [MDL=120]	97 U [MDL=97]	120 U [MDL=120]	100 U [MDL=100]	94 U [MDL=94]	96 U [MDL=96]	98 U [MDL=98]
2-NITROANILINE	14 U [MDL=14]	11 U [MDL=11]	13 U [MDL=13]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2-NITROPHENOL	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	28 U [MDL=28]	22 U [MDL=22]	27 U [MDL=27]	22 U [MDL=22]	21 U [MDL=21]	22 U [MDL=22]	22 U [MDL=22]
3-NITROANILINE	25 U [MDL=25]	19 U [MDL=19]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]
4,6-DINITRO-2-METHYLPHENOL	120 U [MDL=120]	97 U [MDL=97]	120 U [MDL=120]	100 U [MDL=100]	94 U [MDL=94]	96 U [MDL=96]	98 U [MDL=98]
4-BROMOPHENYL PHENYL ETHER	20 U [MDL=20]	16 U [MDL=16]	19 U [MDL=19]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]
4-CHLORO-3-METHYLPHENOL	33 U [MDL=33]	25 U [MDL=25]	31 U [MDL=31]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]
4-CHLOROANILINE	26 U [MDL=26]	21 U [MDL=21]	25 U [MDL=25]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]
4-CHLOROPHENYL PHENYL ETHER	20 U [MDL=20]	16 U [MDL=16]	19 U [MDL=19]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]
4-METHYLPHENOL	120 U [MDL=120]	97 U [MDL=97]	120 U [MDL=120]	100 U [MDL=100]	94 U [MDL=94]	96 U [MDL=96]	98 U [MDL=98]
4-NITROANILINE	40 U [MDL=40]	31 U [MDL=31]	38 U [MDL=38]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	32 U [MDL=32]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-794 D-SB-794-SS 9/9/2010	SB-795 D-SB-795-03 9/9/2010	SB-795 D-SB-795-05 9/9/2010	SB-795 D-SB-795-07 9/9/2010	SB-795 D-SB-795-09 9/9/2010	SB-795 D-SB-795-11 9/9/2010	SB-795 D-SB-795-13 9/9/2010
4-NITROPHENOL	120 U [MDL=120]	97 U [MDL=97]	120 U [MDL=120]	100 U [MDL=100]	94 U [MDL=94]	96 U [MDL=96]	98 U [MDL=98]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	14 U [MDL=14]	11 U [MDL=11]	14 U [MDL=14]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	14 U [MDL=14]	11 U [MDL=11]	13 U [MDL=13]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	19 U [MDL=19]	15 U [MDL=15]	18 U [MDL=18]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	15 U [MDL=15]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	34 U [MDL=34]	27 U [MDL=27]	32 U [MDL=32]	27 U [MDL=27]	26 U [MDL=26]	26 U [MDL=26]	27 U [MDL=27]
BIS(2-CHLOROETHYL)ETHER	3.1 U [MDL=3.1]	2.4 U [MDL=2.4]	2.9 U [MDL=2.9]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	29 U [MDL=29]	23 J [MDL=23]	28 U [MDL=28]	24 U [MDL=24]	22 U [MDL=22]	25 J [MDL=23]	23 U [MDL=23]
BUTYL BENZYL PHTHALATE	15 U [MDL=15]	12 U [MDL=12]	15 U [MDL=15]	36 J [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	57 U [MDL=57]	45 U [MDL=45]	55 U [MDL=55]	46 U [MDL=46]	44 U [MDL=44]	44 U [MDL=44]	45 U [MDL=45]
CARBAZOLE	120 [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	110 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
DIETHYL PHTHALATE	25 U [MDL=25]	19 U [MDL=19]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]
DIMETHYL PHTHALATE	26 U [MDL=26]	21 U [MDL=21]	25 U [MDL=25]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]
DI-N-BUTYL PHTHALATE	23 U [MDL=23]	18 U [MDL=18]	22 U [MDL=22]	19 U [MDL=19]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	3.3 U [MDL=3.3]	2.5 U [MDL=2.5]	3.1 U [MDL=3.1]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]
HEXACHLOROBUTADIENE	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
HEXACHLOROCYCLOPENTADIENE	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
HEXACHLOROETHANE	14 U [MDL=14]	11 U [MDL=11]	13 U [MDL=13]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	20 U [MDL=20]	16 U [MDL=16]	19 U [MDL=19]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	3.4 U [MDL=3.4]	2.7 U [MDL=2.7]	3.2 U [MDL=3.2]	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.7 U [MDL=2.7]
N-NITROSODIMETHYLAMINE	25 U [MDL=25]	19 U [MDL=19]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]
N-NITROSO-DI-N-PROPYLAMINE	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
N-NITROSODIPHENYLAMINE	33 U [MDL=33]	25 U [MDL=25]	31 U [MDL=31]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]
PENTACHLOROPHENOL	120 U [MDL=120]	97 U [MDL=97]	120 U [MDL=120]	100 U [MDL=100]	94 U [MDL=94]	96 U [MDL=96]	98 U [MDL=98]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	42 U [MDL=42]	33 U [MDL=33]	40 U [MDL=40]	34 U [MDL=34]	32 U [MDL=32]	32 U [MDL=32]	33 U [MDL=33]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.5 U [MDL=0.5]	0.6 U [MDL=0.6]	0.72 U [MDL=0.72]	0.51 U [MDL=0.51]	0.57 U [MDL=0.57]	0.63 U [MDL=0.63]	0.62 U [MDL=0.62]
1,1,1-TRICHLOROETHANE	0.45 U [MDL=0.45]	0.54 U [MDL=0.54]	0.65 U [MDL=0.65]	0.46 U [MDL=0.46]	0.51 U [MDL=0.51]	0.57 U [MDL=0.57]	0.56 U [MDL=0.56]
1,1,2,2-TETRACHLOROETHANE	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1 U [MDL=1]	1.3 U [MDL=1.3]	1.5 U [MDL=1.5]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-794	SB-795	SB-795	SB-795	SB-795	SB-795	SB-795
SAMPLE ID	D-SB-794-SS	D-SB-795-03	D-SB-795-05	D-SB-795-07	D-SB-795-09	D-SB-795-11	D-SB-795-13
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
1,1-DICHLOROETHANE	0.29 U [MDL=0.29]	0.35 U [MDL=0.35]	0.42 U [MDL=0.42]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]
1,1-DICHLOROETHENE	0.42 U [MDL=0.42]	0.5 U [MDL=0.5]	0.61 U [MDL=0.61]	0.43 U [MDL=0.43]	0.48 U [MDL=0.48]	0.53 U [MDL=0.53]	0.52 U [MDL=0.52]
1,1-DICHLOROPROPENE	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.35 U [MDL=0.35]	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.3 U [MDL=0.3]	0.3 U [MDL=0.3]
1,2,3-TRICHLOROBENZENE	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.44 U [MDL=0.44]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.39 U [MDL=0.39]	0.38 U [MDL=0.38]
1,2,3-TRICHLOROPROPANE	0.72 U [MDL=0.72]	0.87 U [MDL=0.87]	1 U [MDL=1]	0.74 U [MDL=0.74]	0.83 U [MDL=0.83]	0.91 U [MDL=0.91]	0.9 U [MDL=0.9]
1,2,3-TRIMETHYLBENZENE	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.2 U [MDL=0.2]	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]
1,2,4-TRICHLOROBENZENE	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.22 U [MDL=0.22]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]
1,2,4-TRIMETHYLBENZENE	0.52 U [MDL=0.52]	0.63 U [MDL=0.63]	0.76 U [MDL=0.76]	0.53 U [MDL=0.53]	0.6 U [MDL=0.6]	0.66 U [MDL=0.66]	0.65 U [MDL=0.65]
1,2-DIBROMO-3-CHLOROPROPANE	1 U [MDL=1]	1.3 U [MDL=1.3]	1.5 U [MDL=1.5]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
1,2-DIBROMOETHANE	0.4 U [MDL=0.4]	0.48 U [MDL=0.48]	0.58 U [MDL=0.58]	0.41 U [MDL=0.41]	0.46 U [MDL=0.46]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]
1,2-DICHLOROBENZENE	0.29 U [MDL=0.29]	0.35 U [MDL=0.35]	0.42 U [MDL=0.42]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]
1,2-DICHLOROETHANE	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]
1,2-DICHLOROPROPANE	0.55 U [MDL=0.55]	0.67 U [MDL=0.67]	0.8 U [MDL=0.8]	0.57 U [MDL=0.57]	0.63 U [MDL=0.63]	0.7 U [MDL=0.7]	0.69 U [MDL=0.69]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.41 U [MDL=0.41]	0.29 U [MDL=0.29]	0.32 U [MDL=0.32]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]
1,3-DICHLOROPROPANE	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]
1,4-DICHLOROBENZENE	0.53 U [MDL=0.53]	0.64 U [MDL=0.64]	0.77 U [MDL=0.77]	0.54 U [MDL=0.54]	0.61 U [MDL=0.61]	0.67 U [MDL=0.67]	0.66 U [MDL=0.66]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.76 U [MDL=0.76]	0.91 U [MDL=0.91]	1.1 U [MDL=1.1]	0.77 U [MDL=0.77]	0.86 U [MDL=0.86]	0.95 U [MDL=0.95]	0.94 U [MDL=0.94]
2-BUTANONE	1.1 U [MDL=1.1]	1.9 J [MDL=1.4]	15 [MDL=1.6]	2.2 J [MDL=1.2]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
2-CHLOROETHYL VINYL ETHER	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.6 U [MDL=1.6]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
2-CHLOROTOLUENE	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.47 U [MDL=0.47]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.41 U [MDL=0.41]	0.4 U [MDL=0.4]
2-HEXANONE	0.51 U [MDL=0.51]	0.61 U [MDL=0.61]	0.73 U [MDL=0.73]	0.52 U [MDL=0.52]	0.58 U [MDL=0.58]	0.64 U [MDL=0.64]	0.63 U [MDL=0.63]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.48 U [MDL=0.48]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.42 U [MDL=0.42]	0.41 U [MDL=0.41]
4-ISOPROPYLTOLUENE	0.17 U [MDL=0.17]	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.17 U [MDL=0.17]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]
4-METHYL-2-PENTANONE	0.43 U [MDL=0.43]	0.52 U [MDL=0.52]	0.63 U [MDL=0.63]	0.44 U [MDL=0.44]	0.5 U [MDL=0.5]	0.55 U [MDL=0.55]	0.54 U [MDL=0.54]
ACETONE	21 B [MDL=5.1]	9.2 B [MDL=6.1]	70 B [MDL=7.3]	15 B [MDL=5.2]	5.8 U [MDL=5.8]	16 B [MDL=6.4]	6.3 U [MDL=6.3]
BENZENE	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.27 U [MDL=0.27]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]
BROMOCHLOROMETHANE	0.57 U [MDL=0.57]	0.69 U [MDL=0.69]	0.83 U [MDL=0.83]	0.58 U [MDL=0.58]	0.65 U [MDL=0.65]	0.72 U [MDL=0.72]	0.71 U [MDL=0.71]
BROMODICHLOROMETHANE	0.23 U [MDL=0.23]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.23 U [MDL=0.23]	0.26 U [MDL=0.26]	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]
BROMOFORM	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]
BROMOMETHANE	0.43 U [MDL=0.43]	0.52 U [MDL=0.52]	0.63 U [MDL=0.63]	0.44 U [MDL=0.44]	0.5 U [MDL=0.5]	0.55 U [MDL=0.55]	0.54 U [MDL=0.54]
CARBON DISULFIDE	1.1 B [MDL=0.35]	0.99 B [MDL=0.43]	2 B [MDL=0.51]	0.89 B [MDL=0.36]	0.85 B [MDL=0.4]	0.45 U [MDL=0.45]	0.91 B [MDL=0.44]
CARBON TETRACHLORIDE	0.3 U [MDL=0.3]	0.36 U [MDL=0.36]	0.43 U [MDL=0.43]	0.3 U [MDL=0.3]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]
CHLOROBENZENE	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.27 U [MDL=0.27]	0.3 U [MDL=0.3]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]
CHLORODIBROMOMETHANE	0.44 U [MDL=0.44]	0.53 U [MDL=0.53]	0.64 U [MDL=0.64]	0.45 U [MDL=0.45]	0.51 U [MDL=0.51]	0.56 U [MDL=0.56]	0.55 U [MDL=0.55]
CHLOROETHANE	0.69 U [MDL=0.69]	0.83 U [MDL=0.83]	1 U [MDL=1]	0.71 U [MDL=0.71]	0.79 U [MDL=0.79]	0.87 U [MDL=0.87]	0.86 U [MDL=0.86]
CHLOROFORM	0.23 U [MDL=0.23]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]
CHLOROMETHANE	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.48 U [MDL=0.48]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.42 U [MDL=0.42]	0.41 U [MDL=0.41]
CIS-1,2-DICHLOROETHENE	0.29 U [MDL=0.29]	0.35 U [MDL=0.35]	0.42 U [MDL=0.42]	0.3 U [MDL=0.3]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]
CIS-1,3-DICHLOROPROPENE	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.51 U [MDL=0.51]	0.61 U [MDL=0.61]	0.73 U [MDL=0.73]	0.52 U [MDL=0.52]	0.58 U [MDL=0.58]	0.64 U [MDL=0.64]	0.63 U [MDL=0.63]
DICHLORODIFLUOROMETHANE	0.4 U [MDL=0.4]	0.48 U [MDL=0.48]	0.58 U [MDL=0.58]	0.41 U [MDL=0.41]	0.46 U [MDL=0.46]	0.51 U [MDL=0.51]	0.5 U [MDL=0.5]
DIISOPROPYL ETHER	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.7 U [MDL=1.7]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.5 U [MDL=1.5]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-794 D-SB-794-SS 9/9/2010	SB-795 D-SB-795-03 9/9/2010	SB-795 D-SB-795-05 9/9/2010	SB-795 D-SB-795-07 9/9/2010	SB-795 D-SB-795-09 9/9/2010	SB-795 D-SB-795-11 9/9/2010	SB-795 D-SB-795-13 9/9/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.18 U [MDL=0.18]	0.21 U [MDL=0.21]	0.26 U [MDL=0.26]	0.18 U [MDL=0.18]	0.2 U [MDL=0.2]	0.22 U [MDL=0.22]	0.22 U [MDL=0.22]
ETHYLBENZENE	0.21 U [MDL=0.21]	0.25 U [MDL=0.25]	0.3 U [MDL=0.3]	0.21 U [MDL=0.21]	0.24 U [MDL=0.24]	0.26 U [MDL=0.26]	0.26 U [MDL=0.26]
HEXACHLOROBUTADIENE	0.96 U [MDL=0.96]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	0.99 U [MDL=0.99]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.13 U [MDL=0.13]	0.15 U [MDL=0.15]	0.19 U [MDL=0.19]	0.13 U [MDL=0.13]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.16 U [MDL=0.16]
M+P-XYLENES	0.96 U [MDL=0.96]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	0.99 U [MDL=0.99]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.35 UJ [MDL=0.35]	0.42 UJ [MDL=0.42]	0.5 UJ [MDL=0.5]	0.35 UJ [MDL=0.35]	0.4 UJ [MDL=0.4]	0.44 UJ [MDL=0.44]	0.43 UJ [MDL=0.43]
METHYLENE CHLORIDE	0.54 U [MDL=0.54]	2.7 B [MDL=0.65]	0.78 U [MDL=0.78]	0.55 U [MDL=0.55]	0.93 B [MDL=0.62]	1.2 B [MDL=0.68]	1.1 B [MDL=0.67]
NAPHTHALENE	0.15 U [MDL=0.15]	0.84 B [MDL=0.18]	1 B [MDL=0.22]	0.16 U [MDL=0.16]	0.8 B [MDL=0.17]	0.88 B [MDL=0.19]	0.86 B [MDL=0.19]
N-BUTYLBENZENE	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.27 U [MDL=0.27]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]
N-PROPYLBENZENE	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.47 U [MDL=0.47]	0.33 U [MDL=0.33]	0.37 U [MDL=0.37]	0.41 U [MDL=0.41]	0.4 U [MDL=0.4]
O-XYLENE	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.41 U [MDL=0.41]	0.29 U [MDL=0.29]	0.32 U [MDL=0.32]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]
SEC-BUTYLBENZENE	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.15 U [MDL=0.15]	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]
STYRENE	0.12 U [MDL=0.12]	0.15 U [MDL=0.15]	0.17 U [MDL=0.17]	0.12 U [MDL=0.12]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.15 U [MDL=0.15]
TERT-AMYL METHYL ETHER	0.3 UJ [MDL=0.3]	0.36 UJ [MDL=0.36]	0.43 UJ [MDL=0.43]	0.3 UJ [MDL=0.3]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]
TERT-BUTYLBENZENE	0.23 U [MDL=0.23]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]
TERTIARY-BUTYL ALCOHOL	6.1 UR [MDL=6.1]	51 B [MDL=7.4]	62 B [MDL=8.9]	43 B [MDL=6.2]	49 B [MDL=7]	54 B [MDL=7.7]	52 B [MDL=7.6]
TETRACHLOROETHENE	0.42 U [MDL=0.42]	0.5 U [MDL=0.5]	0.61 U [MDL=0.61]	0.43 U [MDL=0.43]	0.48 U [MDL=0.48]	0.53 U [MDL=0.53]	0.52 U [MDL=0.52]
TOLUENE	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.22 U [MDL=0.22]	0.25 U [MDL=0.25]	0.27 U [MDL=0.27]	0.27 U [MDL=0.27]
TOTAL XYLENES	0.54 U [MDL=0.54]	0.65 U [MDL=0.65]	0.78 U [MDL=0.78]	0.55 U [MDL=0.55]	0.62 U [MDL=0.62]	0.68 U [MDL=0.68]	0.67 U [MDL=0.67]
TRANS-1,2-DICHLOROETHENE	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.48 U [MDL=0.48]	0.34 U [MDL=0.34]	0.38 U [MDL=0.38]	0.42 U [MDL=0.42]	0.41 U [MDL=0.41]
TRANS-1,3-DICHLOROPROPENE	0.43 U [MDL=0.43]	0.52 U [MDL=0.52]	0.63 U [MDL=0.63]	0.44 U [MDL=0.44]	0.5 U [MDL=0.5]	0.55 U [MDL=0.55]	0.54 U [MDL=0.54]
TRICHLOROETHENE	0.34 U [MDL=0.34]	0.41 U [MDL=0.41]	0.49 U [MDL=0.49]	0.35 U [MDL=0.35]	0.39 U [MDL=0.39]	0.43 U [MDL=0.43]	0.42 U [MDL=0.42]
TRICHLOROFLUOROMETHANE	0.85 J [MDL=0.27]	0.33 U [MDL=0.33]	0.4 U [MDL=0.4]	0.28 U [MDL=0.28]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]
VINYL ACETATE	0.2 U [MDL=0.2]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.25 U [MDL=0.25]
VINYL CHLORIDE	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.45 U [MDL=0.45]	0.32 U [MDL=0.32]	0.36 U [MDL=0.36]	0.4 U [MDL=0.4]	0.39 U [MDL=0.39]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	69 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
ACENAPHTHENE	160 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
ACENAPHTHYLENE	5.1 U [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
ANTHRACENE	460 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
BAP EQUIVALENT-HALFND	713.89 [MDL=NaN]	19.62065 [MDL=NaN]	7.3153 [MDL=NaN]	4.1 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]	4 U [MDL=NaN]
BAP EQUIVALENT-POS	711.34 [MDL=NaN]	17 [MDL=NaN]	1.9 [MDL=NaN]	4.1 U [MDL=NaN]	3.9 U [MDL=NaN]	3.9 U [MDL=NaN]	4 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	740 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
BENZO(A)PYRENE	540 [MDL=5.1]	17 [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
BENZO(B)FLUORANTHENE	650 [MDL=5.1]	4 U [MDL=4]	19 [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
BENZO(G,H,I)PERYLENE	310 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
BENZO(K)FLUORANTHENE	370 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
CHRYSENE	640 [MDL=1.7]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	5.1 U [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
FLUORANTHENE	1700 [MDL=5.1]	10 [MDL=4]	10 [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
FLUORENE	210 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
INDENO(1,2,3-CD)PYRENE	280 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
NAPHTHALENE	82 [MDL=5.1]	11 [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
PHENANTHRENE	1600 [MDL=5.1]	9 [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]
PYRENE	1200 [MDL=5.1]	4 U [MDL=4]	4.9 U [MDL=4.9]	4.1 U [MDL=4.1]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-794 D-SB-794-SS 9/9/2010	SB-795 D-SB-795-03 9/9/2010	SB-795 D-SB-795-05 9/9/2010	SB-795 D-SB-795-07 9/9/2010	SB-795 D-SB-795-09 9/9/2010	SB-795 D-SB-795-11 9/9/2010	SB-795 D-SB-795-13 9/9/2010
TOTAL PAHS	9011 [MDL=NaN]	47 [MDL=NaN]	29 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	24 U [MDL=24]	25 U [MDL=25]	31 U [MDL=31]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]
AROCLOR-1221	19 U [MDL=19]	19 U [MDL=19]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	20 U [MDL=20]
AROCLOR-1232	16 U [MDL=16]	17 U [MDL=17]	21 U [MDL=21]	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	17 U [MDL=17]
AROCLOR-1242	15 U [MDL=15]	16 U [MDL=16]	19 U [MDL=19]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1248	20 U [MDL=20]	21 U [MDL=21]	25 U [MDL=25]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]
AROCLOR-1254	20 U [MDL=20]	21 U [MDL=21]	25 U [MDL=25]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]
AROCLOR-1260	20 J [MDL=20]	21 U [MDL=21]	25 U [MDL=25]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]
TOTAL AROCLOR	20 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	4 J [MDL=3.6]	0.75 UJ [MDL=0.75]	0.91 UJ [MDL=0.91]	0.77 UJ [MDL=0.77]	0.73 UJ [MDL=0.73]	0.74 UJ [MDL=0.74]	0.76 UJ [MDL=0.76]
4,4'-DDE	7.1 J [MDL=2.3]	0.47 UJ [MDL=0.47]	0.58 UJ [MDL=0.58]	0.49 UJ [MDL=0.49]	0.46 UJ [MDL=0.46]	0.47 UJ [MDL=0.47]	0.48 UJ [MDL=0.48]
4,4'-DDT	3.7 U [MDL=3.7]	0.76 U [MDL=0.76]	0.93 U [MDL=0.93]	0.78 U [MDL=0.78]	0.74 U [MDL=0.74]	0.75 U [MDL=0.75]	0.77 U [MDL=0.77]
ALDRIN	7 U [MDL=7]	1.5 UJ [MDL=1.5]	1.8 UJ [MDL=1.8]	1.5 UJ [MDL=1.5]	1.4 UJ [MDL=1.4]	1.4 UJ [MDL=1.4]	1.5 UJ [MDL=1.5]
ALPHA-BHC	4.3 UJ [MDL=4.3]	0.88 UJ [MDL=0.88]	1.1 UJ [MDL=1.1]	0.91 UJ [MDL=0.91]	0.86 UJ [MDL=0.86]	0.87 UJ [MDL=0.87]	0.89 UJ [MDL=0.89]
ALPHA-CHLORDANE	5.5 U [MDL=5.5]	1.1 UJ [MDL=1.1]	1.4 UJ [MDL=1.4]	1.2 UJ [MDL=1.2]	1.1 UJ [MDL=1.1]	1.1 UJ [MDL=1.1]	1.1 UJ [MDL=1.1]
BETA-BHC	6.4 U [MDL=6.4]	1.3 UJ [MDL=1.3]	1.6 UJ [MDL=1.6]	1.4 UJ [MDL=1.4]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]	1.3 UJ [MDL=1.3]
DELTA-BHC	7 U [MDL=7]	1.5 UJ [MDL=1.5]	1.8 UJ [MDL=1.8]	1.5 UJ [MDL=1.5]	1.4 UJ [MDL=1.4]	1.4 UJ [MDL=1.4]	1.5 UJ [MDL=1.5]
DIELDRIN	2.7 U [MDL=2.7]	0.57 U [MDL=0.57]	0.69 U [MDL=0.69]	0.59 U [MDL=0.59]	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]	0.57 U [MDL=0.57]
ENDOSULFAN I	3 U [MDL=3]	0.63 U [MDL=0.63]	0.77 U [MDL=0.77]	0.65 U [MDL=0.65]	0.61 U [MDL=0.61]	0.62 U [MDL=0.62]	0.63 U [MDL=0.63]
ENDOSULFAN II	4.8 U [MDL=4.8]	0.99 U [MDL=0.99]	1.2 U [MDL=1.2]	1 U [MDL=1]	0.97 U [MDL=0.97]	0.98 U [MDL=0.98]	1 U [MDL=1]
ENDOSULFAN SULFATE	5.1 U [MDL=5.1]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1 U [MDL=1]	1 U [MDL=1]	1.1 U [MDL=1.1]
ENDRIN	2.9 U [MDL=2.9]	0.61 U [MDL=0.61]	0.74 U [MDL=0.74]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.6 U [MDL=0.6]	0.61 U [MDL=0.61]
ENDRIN ALDEHYDE	5.8 U [MDL=5.8]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	3.7 U [MDL=3.7]	0.76 U [MDL=0.76]	0.93 U [MDL=0.93]	0.78 U [MDL=0.78]	0.74 U [MDL=0.74]	0.75 U [MDL=0.75]	0.77 U [MDL=0.77]
GAMMA-BHC (LINDANE)	4.3 U [MDL=4.3]	0.9 UJ [MDL=0.9]	1.1 UJ [MDL=1.1]	0.92 UJ [MDL=0.92]	0.87 UJ [MDL=0.87]	0.88 UJ [MDL=0.88]	0.9 UJ [MDL=0.9]
GAMMA-CHLORDANE	2.4 U [MDL=2.4]	0.51 UJ [MDL=0.51]	0.62 UJ [MDL=0.62]	0.52 UJ [MDL=0.52]	0.49 UJ [MDL=0.49]	0.5 UJ [MDL=0.5]	0.51 UJ [MDL=0.51]
HEPTACHLOR	6.4 U [MDL=6.4]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-794	SB-795	SB-795	SB-795	SB-795	SB-795	SB-795
SAMPLE ID	D-SB-794-SS	D-SB-795-03	D-SB-795-05	D-SB-795-07	D-SB-795-09	D-SB-795-11	D-SB-795-13
SAMPLE DATE	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010	9/9/2010
HEPTACHLOR EPOXIDE	4.7 U [MDL=4.7]	0.97 UJ [MDL=0.97]	1.2 UJ [MDL=1.2]	1 UJ [MDL=1]	0.94 UJ [MDL=0.94]	0.96 UJ [MDL=0.96]	0.98 UJ [MDL=0.98]
METHOXYCHLOR	8.7 U [MDL=8.7]	1.8 U [MDL=1.8]	2.2 U [MDL=2.2]	1.9 U [MDL=1.9]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]	1.8 U [MDL=1.8]
TOXAPHENE	110 U [MDL=110]	23 U [MDL=23]	28 U [MDL=28]	24 U [MDL=24]	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	39000 [MDL=3.3]	11000 J [MDL=3.4]	33000 [MDL=4.1]	4200 J [MDL=3.5]	5300 J [MDL=3.3]	4800 J [MDL=3.3]	8300 J [MDL=3.4]
GASOLINE RANGE ORGANICS	54 U [MDL=54]	56 UJ [MDL=56]	68 UJ [MDL=68]	57 UJ [MDL=57]	54 UJ [MDL=54]	55 UJ [MDL=55]	56 UJ [MDL=56]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-795	SB-795	SB-796	SB-796	SB-796	SB-796	SB-796
SAMPLE ID	D-SB-795-15	D-SB-795-SS	D-SB-796-03	D-SB-796-05	D-SB-796-07	D-SB-796-09	D-SB-796-11
SAMPLE DATE	9/9/2010	9/9/2010	9/10/2010	9/10/2010	9/10/2010	9/10/2010	9/10/2010
METALS (MG/KG)							
ANTIMONY	0.24 B [MDL=0.029]	0.085 B [MDL=0.027]	0.19 J [MDL=0.028]	0.2 J [MDL=0.033]	0.21 J [MDL=0.028]	0.19 J [MDL=0.028]	0.065 J [MDL=0.028]
ARSENIC	3.2 J [MDL=0.074]	2.6 J [MDL=0.071]	3.4 [MDL=0.072]	9.4 [MDL=0.085]	3.1 [MDL=0.072]	4.3 [MDL=0.072]	1.3 [MDL=0.072]
BARIUM	14 [MDL=0.055]	12.6 [MDL=0.053]	38.2 [MDL=0.053]	32.5 [MDL=0.063]	9.8 [MDL=0.054]	11.4 [MDL=0.053]	10.5 [MDL=0.053]
BERYLLIUM	1.7 J [MDL=0.056]	0.15 J [MDL=0.054]	1.3 [MDL=0.055]	2.3 [MDL=0.064]	1.3 [MDL=0.055]	2.3 [MDL=0.054]	0.91 [MDL=0.054]
CADMIUM	0.015 B [MDL=0.0093]	0.011 B [MDL=0.0089]	0.24 [MDL=0.0091]	0.016 B [MDL=0.011]	0.016 B [MDL=0.0091]	0.025 B [MDL=0.009]	0.023 B [MDL=0.009]
CHROMIUM	25.5 J [MDL=0.048]	26.2 J [MDL=0.046]	15.3 [MDL=0.046]	32.2 [MDL=0.055]	15.8 [MDL=0.047]	22.7 [MDL=0.046]	17.3 [MDL=0.046]
COBALT	10 J [MDL=0.0046]	1.4 J [MDL=0.0043]	9.3 [MDL=0.0044]	6.7 [MDL=0.0052]	3.5 [MDL=0.0044]	8.9 [MDL=0.0044]	3.9 [MDL=0.0044]
COPPER	17.7 J [MDL=0.052]	4.5 J [MDL=0.049]	16.7 [MDL=0.05]	51.9 [MDL=0.059]	17.4 [MDL=0.05]	30.3 [MDL=0.05]	9.4 [MDL=0.05]
IRON	28500 J [MDL=1.2]	10200 J [MDL=1.1]	15400 [MDL=1.2]	50200 [MDL=1.4]	28100 [MDL=1.2]	36700 [MDL=1.2]	11100 [MDL=1.2]
LEAD	4.4 [MDL=0.016]	2 [MDL=0.015]	17.1 [MDL=0.015]	9.6 [MDL=0.018]	3.4 [MDL=0.015]	3.3 [MDL=0.015]	2.8 [MDL=0.015]
MANGANESE	41.9 J [MDL=0.056]	15.6 J [MDL=0.054]	44.6 [MDL=0.055]	23.5 [MDL=0.064]	20 [MDL=0.055]	20.9 [MDL=0.054]	5 [MDL=0.054]
MERCURY	0.018 U [MDL=0.018]	0.091 J [MDL=0.017]	0.51 [MDL=0.017]	0.021 U [MDL=0.021]	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.017 U [MDL=0.017]
MOLYBDENUM	0.42 [MDL=0.075]	0.26 [MDL=0.072]	0.4 [MDL=0.073]	1.2 [MDL=0.086]	0.57 [MDL=0.074]	0.78 [MDL=0.073]	0.16 J [MDL=0.073]
NICKEL	24.5 J [MDL=0.025]	2.7 J [MDL=0.024]	17.3 [MDL=0.024]	12.1 [MDL=0.029]	10.1 [MDL=0.025]	28.3 [MDL=0.024]	8.5 [MDL=0.024]
SELENIUM	2.2 L [MDL=0.11]	0.29 J [MDL=0.1]	1.3 [MDL=0.1]	1.6 [MDL=0.12]	1.3 [MDL=0.11]	1.4 [MDL=0.1]	1 K [MDL=0.1]
SILVER	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]	0.31 [MDL=0.019]	0.038 J [MDL=0.022]	0.019 U [MDL=0.019]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]
THALLIUM	0.1 J [MDL=0.016]	0.015 U [MDL=0.015]	0.065 B [MDL=0.015]	0.13 B [MDL=0.018]	0.053 B [MDL=0.015]	0.057 B [MDL=0.015]	0.052 B [MDL=0.015]
VANADIUM	36.4 J [MDL=0.049]	19.4 J [MDL=0.047]	24.8 [MDL=0.048]	57.6 [MDL=0.056]	41.8 [MDL=0.048]	68.5 [MDL=0.047]	26.5 [MDL=0.047]
ZINC	30.6 L [MDL=0.24]	5.4 L [MDL=0.23]	95.4 [MDL=0.23]	44.8 [MDL=0.27]	10.3 [MDL=0.23]	27 [MDL=0.23]	11 [MDL=0.23]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.37 J [MDL=0.31]	0.56 J [MDL=0.31]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
1,4-DIOXANE	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]	30 U [MDL=30]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	13 U [MDL=13]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	30 U [MDL=30]	29 U [MDL=29]	29 U [MDL=29]	34 U [MDL=34]	29 U [MDL=29]	29 U [MDL=29]	29 U [MDL=29]
2,4,6-TRICHLOROPHENOL	96 U [MDL=96]	92 U [MDL=92]	93 U [MDL=93]	110 U [MDL=110]	93 U [MDL=93]	93 U [MDL=93]	92 U [MDL=92]
2,4-DICHLOROPHENOL	24 U [MDL=24]	23 U [MDL=23]	23 U [MDL=23]	27 U [MDL=27]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	23 U [MDL=23]	23 U [MDL=23]	27 U [MDL=27]	23 U [MDL=23]	23 U [MDL=23]	23 U [MDL=23]
2,4-DINITROPHENOL	96 U [MDL=96]	92 U [MDL=92]	93 U [MDL=93]	110 U [MDL=110]	93 U [MDL=93]	93 U [MDL=93]	92 U [MDL=92]
2,4-DINITROTOLUENE	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
2,6-DINITROTOLUENE	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	29 U [MDL=29]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]
2-CHLORONAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
2-CHLOROPHENOL	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2-METHYLPHENOL	96 U [MDL=96]	92 U [MDL=92]	93 U [MDL=93]	110 U [MDL=110]	93 U [MDL=93]	93 U [MDL=93]	92 U [MDL=92]
2-NITROANILINE	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
2-NITROPHENOL	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
3&4-METHYLPHENOL	--	--	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	21 U [MDL=21]	21 U [MDL=21]	25 U [MDL=25]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]
3-NITROANILINE	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	22 U [MDL=22]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]
4,6-DINITRO-2-METHYLPHENOL	96 U [MDL=96]	92 U [MDL=92]	93 U [MDL=93]	110 U [MDL=110]	93 U [MDL=93]	93 U [MDL=93]	92 U [MDL=92]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	18 U [MDL=18]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	29 U [MDL=29]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]
4-CHLOROANILINE	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	18 U [MDL=18]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
4-METHYLPHENOL	96 U [MDL=96]	92 U [MDL=92]	93 U [MDL=93]	110 U [MDL=110]	93 U [MDL=93]	93 U [MDL=93]	92 U [MDL=92]
4-NITROANILINE	31 U [MDL=31]	30 U [MDL=30]	30 U [MDL=30]	36 U [MDL=36]	30 U [MDL=30]	30 U [MDL=30]	30 U [MDL=30]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-795 D-SB-795-15 9/9/2010	SB-795 D-SB-795-SS 9/9/2010	SB-796 D-SB-796-03 9/10/2010	SB-796 D-SB-796-05 9/10/2010	SB-796 D-SB-796-07 9/10/2010	SB-796 D-SB-796-09 9/10/2010	SB-796 D-SB-796-11 9/10/2010
4-NITROPHENOL	96 U [MDL=96]	92 U [MDL=92]	93 U [MDL=93]	110 U [MDL=110]	93 U [MDL=93]	93 U [MDL=93]	92 U [MDL=92]
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	13 U [MDL=13]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	--	--	--	--	--	--	--
ATRAZINE	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BENZALDEHYDE	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	16 U [MDL=16]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	26 U [MDL=26]	25 U [MDL=25]	26 U [MDL=26]	30 U [MDL=30]	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.3 U [MDL=2.3]	2.7 U [MDL=2.7]	2.3 U [MDL=2.3]	2.3 U [MDL=2.3]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	22 U [MDL=22]	22 U [MDL=22]	27 J [MDL=26]	22 U [MDL=22]	22 U [MDL=22]	22 U [MDL=22]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	14 U [MDL=14]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	44 U [MDL=44]	42 U [MDL=42]	43 U [MDL=43]	51 U [MDL=51]	43 U [MDL=43]	43 U [MDL=43]	43 U [MDL=43]
CARBAZOLE	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
DIBENZOFURAN	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
DIETHYL PHTHALATE	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	22 U [MDL=22]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]
DIMETHYL PHTHALATE	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	17 U [MDL=17]	17 U [MDL=17]	21 U [MDL=21]	18 U [MDL=18]	17 U [MDL=17]	17 U [MDL=17]
DI-N-OCTYL PHTHALATE	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
HEXACHLOROBENZENE	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.9 U [MDL=2.9]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]
HEXACHLOROBUTADIENE	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
HEXACHLOROCYCLOPENTADIENE	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
HEXACHLOROETHANE	11 U [MDL=11]	10 U [MDL=10]	10 U [MDL=10]	12 U [MDL=12]	11 U [MDL=11]	10 U [MDL=10]	10 U [MDL=10]
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
ISOPHORONE	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	18 U [MDL=18]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
NAPHTHALENE	--	--	--	--	--	--	--
NITROBENZENE	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	3 U [MDL=3]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]
N-NITROSODIMETHYLAMINE	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	22 U [MDL=22]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]
N-NITROSO-DI-N-PROPYLAMINE	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
N-NITROSODIPHENYLAMINE	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	29 U [MDL=29]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]
PENTACHLOROPHENOL	96 U [MDL=96]	92 U [MDL=92]	93 U [MDL=93]	110 U [MDL=110]	93 U [MDL=93]	93 U [MDL=93]	92 U [MDL=92]
PHENANTHRENE	--	--	--	--	--	--	--
PHENOL	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]	37 U [MDL=37]	32 U [MDL=32]	31 U [MDL=31]	31 U [MDL=31]
PYRENE	--	--	--	--	--	--	--
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.64 U [MDL=0.64]	0.53 U [MDL=0.53]	0.48 U [MDL=0.48]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	0.55 U [MDL=0.55]	0.5 U [MDL=0.5]
1,1,1-TRICHLOROETHANE	0.58 U [MDL=0.58]	0.47 U [MDL=0.47]	0.43 U [MDL=0.43]	0.55 U [MDL=0.55]	0.53 U [MDL=0.53]	0.5 U [MDL=0.5]	0.45 U [MDL=0.45]
1,1,2,2-TETRACHLOROETHANE	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1 U [MDL=1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-795	SB-795	SB-796	SB-796	SB-796	SB-796	SB-796
SAMPLE ID	D-SB-795-15	D-SB-795-SS	D-SB-796-03	D-SB-796-05	D-SB-796-07	D-SB-796-09	D-SB-796-11
SAMPLE DATE	9/9/2010	9/9/2010	9/10/2010	9/10/2010	9/10/2010	9/10/2010	9/10/2010
1,1-DICHLOROETHANE	0.37 U [MDL=0.37]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]
1,1-DICHLOROETHENE	0.54 U [MDL=0.54]	0.44 U [MDL=0.44]	0.4 U [MDL=0.4]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.42 U [MDL=0.42]
1,1-DICHLOROPROPENE	0.31 U [MDL=0.31]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]
1,2,3-TRICHLOROBENZENE	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]
1,2,3-TRICHLOROPROPANE	0.93 U [MDL=0.93]	0.76 U [MDL=0.76]	0.69 U [MDL=0.69]	0.89 U [MDL=0.89]	0.85 U [MDL=0.85]	0.8 U [MDL=0.8]	0.73 U [MDL=0.73]
1,2,3-TRIMETHYLBENZENE	0.18 U [MDL=0.18]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]
1,2,4-TRICHLOROBENZENE	0.28 U [MDL=0.28]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]
1,2,4-TRIMETHYLBENZENE	0.67 U [MDL=0.67]	0.55 U [MDL=0.55]	0.5 U [MDL=0.5]	0.64 U [MDL=0.64]	0.61 U [MDL=0.61]	0.58 U [MDL=0.58]	0.52 U [MDL=0.52]
1,2-DIBROMO-3-CHLOROPROPANE	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1 U [MDL=1]
1,2-DIBROMOETHANE	0.52 U [MDL=0.52]	0.42 U [MDL=0.42]	0.38 U [MDL=0.38]	0.49 U [MDL=0.49]	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.4 U [MDL=0.4]
1,2-DICHLOROBENZENE	0.37 U [MDL=0.37]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]
1,2-DICHLOROETHANE	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]
1,2-DICHLOROPROPANE	0.71 U [MDL=0.71]	0.58 U [MDL=0.58]	0.53 U [MDL=0.53]	0.68 U [MDL=0.68]	0.65 U [MDL=0.65]	0.62 U [MDL=0.62]	0.56 U [MDL=0.56]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.36 U [MDL=0.36]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]
1,3-DICHLOROPROPANE	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]
1,4-DICHLOROBENZENE	0.68 U [MDL=0.68]	0.56 U [MDL=0.56]	0.51 U [MDL=0.51]	0.65 U [MDL=0.65]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.53 U [MDL=0.53]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.97 U [MDL=0.97]	0.8 U [MDL=0.8]	0.72 U [MDL=0.72]	0.93 U [MDL=0.93]	0.89 U [MDL=0.89]	0.84 U [MDL=0.84]	0.76 U [MDL=0.76]
2-BUTANONE	1.4 U [MDL=1.4]	17 [MDL=1.2]	2.7 J [MDL=1.1]	8.1 J [MDL=1.4]	1.3 U [MDL=1.3]	1.3 J [MDL=1.2]	1.1 U [MDL=1.1]
2-CHLOROETHYL VINYL ETHER	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]
2-CHLOROTOLUENE	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]
2-HEXANONE	0.65 U [MDL=0.65]	0.53 U [MDL=0.53]	0.48 U [MDL=0.48]	0.62 U [MDL=0.62]	0.6 U [MDL=0.6]	0.56 U [MDL=0.56]	0.51 U [MDL=0.51]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.4 U [MDL=0.4]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.33 U [MDL=0.33]
4-ISOPROPYLTOLUENE	0.22 U [MDL=0.22]	0.18 U [MDL=0.18]	0.16 U [MDL=0.16]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]
4-METHYL-2-PENTANONE	0.56 U [MDL=0.56]	0.46 U [MDL=0.46]	0.41 U [MDL=0.41]	0.53 U [MDL=0.53]	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]
ACETONE	6.5 U [MDL=6.5]	96 B [MDL=5.3]	35 B [MDL=4.8]	88 B [MDL=6.2]	16 B [MDL=6]	6.2 B [MDL=5.6]	5.1 U [MDL=5.1]
BENZENE	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]
BROMOCHLOROMETHANE	0.73 U [MDL=0.73]	0.6 U [MDL=0.6]	0.54 U [MDL=0.54]	0.7 U [MDL=0.7]	0.67 U [MDL=0.67]	0.63 U [MDL=0.63]	0.57 U [MDL=0.57]
BROMODICHLOROMETHANE	0.29 U [MDL=0.29]	0.24 U [MDL=0.24]	0.21 U [MDL=0.21]	0.28 U [MDL=0.28]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]
BROMOFORM	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]
BROMOMETHANE	0.56 U [MDL=0.56]	0.46 U [MDL=0.46]	0.41 U [MDL=0.41]	0.53 U [MDL=0.53]	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]
CARBON DISULFIDE	1 B [MDL=0.45]	1.9 B [MDL=0.37]	0.78 B [MDL=0.34]	1.5 B [MDL=0.43]	0.88 B [MDL=0.42]	0.81 B [MDL=0.39]	0.36 U [MDL=0.36]
CARBON TETRACHLORIDE	0.38 U [MDL=0.38]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]
CHLOROBENZENE	0.34 U [MDL=0.34]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]
CHLORODIBROMOMETHANE	0.57 U [MDL=0.57]	0.47 U [MDL=0.47]	0.42 U [MDL=0.42]	0.54 U [MDL=0.54]	0.52 U [MDL=0.52]	0.49 U [MDL=0.49]	0.44 U [MDL=0.44]
CHLOROETHANE	0.89 U [MDL=0.89]	0.73 U [MDL=0.73]	0.66 U [MDL=0.66]	0.85 U [MDL=0.85]	0.81 U [MDL=0.81]	0.77 U [MDL=0.77]	0.69 U [MDL=0.69]
CHLOROFORM	0.3 U [MDL=0.3]	0.25 U [MDL=0.25]	0.22 U [MDL=0.22]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]
CHLOROMETHANE	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.4 U [MDL=0.4]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.33 U [MDL=0.33]
CIS-1,2-DICHLOROETHENE	0.37 U [MDL=0.37]	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.35 U [MDL=0.35]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.29 U [MDL=0.29]
CIS-1,3-DICHLOROPROPENE	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.65 U [MDL=0.65]	0.53 U [MDL=0.53]	0.48 U [MDL=0.48]	0.62 U [MDL=0.62]	0.6 U [MDL=0.6]	0.56 U [MDL=0.56]	0.51 U [MDL=0.51]
DICHLORODIFLUOROMETHANE	0.52 U [MDL=0.52]	0.42 U [MDL=0.42]	0.38 U [MDL=0.38]	0.49 U [MDL=0.49]	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.4 U [MDL=0.4]
DIISOPROPYL ETHER	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-795 D-SB-795-15 9/9/2010	SB-795 D-SB-795-SS 9/9/2010	SB-796 D-SB-796-03 9/10/2010	SB-796 D-SB-796-05 9/10/2010	SB-796 D-SB-796-07 9/10/2010	SB-796 D-SB-796-09 9/10/2010	SB-796 D-SB-796-11 9/10/2010
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.23 U [MDL=0.23]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.2 U [MDL=0.2]	0.18 U [MDL=0.18]
ETHYLBENZENE	0.27 U [MDL=0.27]	0.22 U [MDL=0.22]	0.2 U [MDL=0.2]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]
HEXACHLOROBUTADIENE	1.2 U [MDL=1.2]	1 U [MDL=1]	0.92 U [MDL=0.92]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.97 U [MDL=0.97]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.12 U [MDL=0.12]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]
M+P-XYLENES	1.2 U [MDL=1.2]	1 U [MDL=1]	0.92 U [MDL=0.92]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.97 U [MDL=0.97]
METHYL ACETATE	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.44 UJ [MDL=0.44]	0.36 UJ [MDL=0.36]	0.33 UJ [MDL=0.33]	0.42 UJ [MDL=0.42]	0.41 UJ [MDL=0.41]	0.38 UJ [MDL=0.38]	0.35 UJ [MDL=0.35]
METHYLENE CHLORIDE	0.69 U [MDL=0.69]	2.1 B [MDL=0.57]	0.75 B [MDL=0.51]	0.98 B [MDL=0.66]	1 B [MDL=0.63]	1 B [MDL=0.6]	0.78 B [MDL=0.54]
NAPHTHALENE	0.92 B [MDL=0.2]	0.78 B [MDL=0.16]	0.7 B [MDL=0.15]	0.83 B [MDL=0.19]	0.83 B [MDL=0.18]	0.77 B [MDL=0.17]	0.69 B [MDL=0.15]
N-BUTYLBENZENE	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]
N-PROPYLBENZENE	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]	0.38 U [MDL=0.38]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]
O-XYLENE	0.36 U [MDL=0.36]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.28 U [MDL=0.28]
SEC-BUTYLBENZENE	0.19 U [MDL=0.19]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.18 U [MDL=0.18]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]
STYRENE	0.15 U [MDL=0.15]	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]
TERT-AMYL METHYL ETHER	0.38 UJ [MDL=0.38]	0.31 UJ [MDL=0.31]	0.28 U [MDL=0.28]	0.36 U [MDL=0.36]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]
TERT-BUTYLBENZENE	0.3 U [MDL=0.3]	0.25 U [MDL=0.25]	0.22 U [MDL=0.22]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]
TERTIARY-BUTYL ALCOHOL	54 B [MDL=7.8]	46 B [MDL=6.4]	41 B [MDL=5.8]	52 B [MDL=7.5]	50 B [MDL=7.2]	47 B [MDL=6.8]	43 B [MDL=6.1]
TETRACHLOROETHENE	0.54 U [MDL=0.54]	0.44 U [MDL=0.44]	0.4 U [MDL=0.4]	0.51 U [MDL=0.51]	0.49 U [MDL=0.49]	0.46 U [MDL=0.46]	0.42 U [MDL=0.42]
TOLUENE	0.28 U [MDL=0.28]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]
TOTAL XYLENES	0.69 U [MDL=0.69]	0.57 U [MDL=0.57]	0.51 U [MDL=0.51]	0.66 U [MDL=0.66]	0.63 U [MDL=0.63]	0.6 U [MDL=0.6]	0.54 U [MDL=0.54]
TRANS-1,2-DICHLOROETHENE	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.4 U [MDL=0.4]	0.39 U [MDL=0.39]	0.37 U [MDL=0.37]	0.33 U [MDL=0.33]
TRANS-1,3-DICHLOROPROPENE	0.56 U [MDL=0.56]	0.46 U [MDL=0.46]	0.41 U [MDL=0.41]	0.53 U [MDL=0.53]	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.44 U [MDL=0.44]
TRICHLOROETHENE	0.43 U [MDL=0.43]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]	0.41 U [MDL=0.41]	0.4 U [MDL=0.4]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]
TRICHLOROFLUOROMETHANE	0.35 U [MDL=0.35]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]
VINYL ACETATE	0.26 U [MDL=0.26]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.22 U [MDL=0.22]	0.2 U [MDL=0.2]
VINYL CHLORIDE	0.4 U [MDL=0.4]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
ACENAPHTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
ACENAPHTHYLENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
ANTHRACENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
BAP EQUIVALENT-HALFND	4 U [MDL=NaN]	38.856 [MDL=NaN]	74.721 [MDL=NaN]	4.5 U [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	3.8 U [MDL=NaN]
BAP EQUIVALENT-POS	4 U [MDL=NaN]	36.956 [MDL=NaN]	72.821 [MDL=NaN]	4.5 U [MDL=NaN]	3.9 U [MDL=NaN]	3.8 U [MDL=NaN]	3.8 U [MDL=NaN]
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	4 U [MDL=4]	16 [MDL=3.8]	36 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
BENZO(A)PYRENE	4 U [MDL=4]	29 [MDL=3.8]	58 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
BENZO(B)FLUORANTHENE	4 U [MDL=4]	33 [MDL=3.8]	66 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
BENZO(G,H,I)PERYLENE	4 U [MDL=4]	17 [MDL=3.8]	33 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
BENZO(K)FLUORANTHENE	4 U [MDL=4]	13 [MDL=3.8]	28 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
CHRYSENE	1.3 U [MDL=1.3]	26 [MDL=1.3]	41 [MDL=1.3]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
FLUORANTHENE	4 U [MDL=4]	36 [MDL=3.8]	42 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
FLUORENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
INDENO(1,2,3-CD)PYRENE	4 U [MDL=4]	29 [MDL=3.8]	43 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
NAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
PHENANTHRENE	4 U [MDL=4]	27 [MDL=3.8]	18 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]
PYRENE	4 U [MDL=4]	37 [MDL=3.8]	37 [MDL=3.8]	4.5 U [MDL=4.5]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-795	SB-795	SB-796	SB-796	SB-796	SB-796	SB-796
SAMPLE ID	D-SB-795-15	D-SB-795-SS	D-SB-796-03	D-SB-796-05	D-SB-796-07	D-SB-796-09	D-SB-796-11
SAMPLE DATE	9/9/2010	9/9/2010	9/10/2010	9/10/2010	9/10/2010	9/10/2010	9/10/2010
TOTAL PAHS	0 U [MDL=NaN]	263 [MDL=NaN]	402 [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PCBS (UG/KG)							
AROCLOR-1016	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]	29 U [MDL=29]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]
AROCLOR-1221	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	22 U [MDL=22]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]	19 U [MDL=19]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	18 U [MDL=18]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1254	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1260	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.74 UJ [MDL=0.74]	3.5 UJ [MDL=3.5]	1.4 U [MDL=1.4]	4.2 U [MDL=4.2]	0.72 U [MDL=0.72]	0.72 U [MDL=0.72]	0.72 U [MDL=0.72]
4,4'-DDE	0.47 UJ [MDL=0.47]	2.2 UJ [MDL=2.2]	0.91 U [MDL=0.91]	2.7 U [MDL=2.7]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.45 U [MDL=0.45]
4,4'-DDT	0.75 U [MDL=0.75]	3.6 U [MDL=3.6]	1.5 U [MDL=1.5]	4.3 U [MDL=4.3]	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.73 U [MDL=0.73]
ALDRIN	1.4 UJ [MDL=1.4]	6.9 UJ [MDL=6.9]	2.8 U [MDL=2.8]	8.2 U [MDL=8.2]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
ALPHA-BHC	0.87 UJ [MDL=0.87]	4.2 UJ [MDL=4.2]	1.7 U [MDL=1.7]	5 U [MDL=5]	0.85 U [MDL=0.85]	0.85 U [MDL=0.85]	0.84 U [MDL=0.84]
ALPHA-CHLORDANE	1.1 UJ [MDL=1.1]	5.4 UJ [MDL=5.4]	2.2 U [MDL=2.2]	6.4 U [MDL=6.4]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]
BETA-BHC	1.3 UJ [MDL=1.3]	6.3 UJ [MDL=6.3]	2.6 U [MDL=2.6]	7.5 U [MDL=7.5]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DELTA-BHC	1.4 UJ [MDL=1.4]	6.9 UJ [MDL=6.9]	2.8 U [MDL=2.8]	8.2 U [MDL=8.2]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]
DIELDRIN	0.56 U [MDL=0.56]	2.7 U [MDL=2.7]	1.1 U [MDL=1.1]	3.2 U [MDL=3.2]	0.55 U [MDL=0.55]	0.54 U [MDL=0.54]	0.54 U [MDL=0.54]
ENDOSULFAN I	0.62 U [MDL=0.62]	3 U [MDL=3]	1.2 U [MDL=1.2]	3.6 U [MDL=3.6]	0.61 U [MDL=0.61]	0.6 U [MDL=0.6]	0.6 U [MDL=0.6]
ENDOSULFAN II	0.98 U [MDL=0.98]	4.7 U [MDL=4.7]	1.9 U [MDL=1.9]	5.6 U [MDL=5.6]	0.96 U [MDL=0.96]	0.95 U [MDL=0.95]	0.95 U [MDL=0.95]
ENDOSULFAN SULFATE	1 U [MDL=1]	5 U [MDL=5]	2 U [MDL=2]	5.9 U [MDL=5.9]	1 U [MDL=1]	1 U [MDL=1]	1 U [MDL=1]
ENDRIN	0.6 U [MDL=0.6]	2.9 U [MDL=2.9]	1.2 U [MDL=1.2]	3.4 U [MDL=3.4]	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	5.7 U [MDL=5.7]	2.3 U [MDL=2.3]	6.8 U [MDL=6.8]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]
ENDRIN KETONE	0.75 U [MDL=0.75]	3.6 U [MDL=3.6]	1.5 U [MDL=1.5]	4.3 U [MDL=4.3]	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.73 U [MDL=0.73]
GAMMA-BHC (LINDANE)	0.89 UJ [MDL=0.89]	4.2 UJ [MDL=4.2]	1.7 U [MDL=1.7]	5.1 U [MDL=5.1]	0.86 U [MDL=0.86]	0.86 U [MDL=0.86]	0.85 U [MDL=0.85]
GAMMA-CHLORDANE	0.5 UJ [MDL=0.5]	2.4 UJ [MDL=2.4]	0.98 U [MDL=0.98]	2.9 U [MDL=2.9]	0.49 U [MDL=0.49]	0.49 U [MDL=0.49]	0.48 U [MDL=0.48]
HEPTACHLOR	1.3 U [MDL=1.3]	6.3 U [MDL=6.3]	2.6 U [MDL=2.6]	7.5 U [MDL=7.5]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-795	SB-795	SB-796	SB-796	SB-796	SB-796	SB-796
SAMPLE ID	D-SB-795-15	D-SB-795-SS	D-SB-796-03	D-SB-796-05	D-SB-796-07	D-SB-796-09	D-SB-796-11
SAMPLE DATE	9/9/2010	9/9/2010	9/10/2010	9/10/2010	9/10/2010	9/10/2010	9/10/2010
HEPTACHLOR EPOXIDE	0.96 UJ [MDL=0.96]	4.6 UJ [MDL=4.6]	1.9 U [MDL=1.9]	5.5 U [MDL=5.5]	0.93 U [MDL=0.93]	0.93 U [MDL=0.93]	0.92 U [MDL=0.92]
METHOXYCHLOR	1.8 U [MDL=1.8]	8.6 U [MDL=8.6]	3.5 U [MDL=3.5]	10 U [MDL=10]	1.8 U [MDL=1.8]	1.7 U [MDL=1.7]	1.7 U [MDL=1.7]
TOXAPHENE	23 U [MDL=23]	110 U [MDL=110]	44 U [MDL=44]	130 U [MDL=130]	22 U [MDL=22]	22 U [MDL=22]	22 U [MDL=22]
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3400 U [MDL=3.4]	34000 [MDL=3.2]	160000 [MDL=16]	57000 [MDL=7.7]	5600 J [MDL=3.3]	5600 J [MDL=3.2]	5000 J [MDL=3.2]
GASOLINE RANGE ORGANICS	55 UJ [MDL=55]	53 UJ [MDL=53]	53 U [MDL=53]	63 U [MDL=63]	54 U [MDL=54]	53 U [MDL=53]	53 U [MDL=53]
TPH (C06-C10)	--	--	--	--	--	--	--

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-796	SB-796	SB-796	SB-872	SB-872	SB-872	SB-872
SAMPLE ID	D-SB-796-13	D-SB-796-15	D-SB-796-SS	D-SB-872-0-1	D-SB-872-1-2	D-SB-872-2-4	D-SB-872-4-6
SAMPLE DATE	9/10/2010	9/10/2010	9/10/2010	4/24/2012	4/24/2012	4/24/2012	4/24/2012
METALS (MG/KG)							
ANTIMONY	0.029 U [MDL=0.029]	0.2 J [MDL=0.027]	0.37 J [MDL=0.14]	0.39 UL [MDL=0.39]	0.43 UL [MDL=0.43]	0.54 B [MDL=0.34]	0.44 UL [MDL=0.44]
ARSENIC	0.43 J [MDL=0.076]	7.3 [MDL=0.071]	4.9 [MDL=0.074]	2.1 [MDL=0.3]	2.2 [MDL=0.33]	4 [MDL=0.26]	3.7 [MDL=0.34]
BARIUM	6.7 [MDL=0.056]	9.7 [MDL=0.053]	34.3 [MDL=0.27]	11 J [MDL=0.071]	10 J [MDL=0.078]	13 J [MDL=0.062]	15 J [MDL=0.08]
BERYLLIUM	0.48 [MDL=0.057]	0.71 [MDL=0.054]	2.1 [MDL=0.056]	0.043 U [MDL=0.043]	1.1 [MDL=0.047]	3.6 [MDL=0.038]	2 [MDL=0.048]
CADMIUM	0.025 B [MDL=0.0095]	0.02 B [MDL=0.0089]	0.053 J [MDL=0.0093]	0.17 J [MDL=0.036]	0.068 J [MDL=0.04]	0.28 J [MDL=0.031]	0.1 J [MDL=0.041]
CHROMIUM	3.7 [MDL=0.049]	3.5 [MDL=0.046]	19.3 [MDL=0.048]	11 [MDL=0.2]	19 [MDL=0.22]	25 [MDL=0.17]	18 [MDL=0.23]
COBALT	2.4 [MDL=0.0046]	3.6 [MDL=0.0043]	10.9 [MDL=0.0045]	1.3 [MDL=0.16]	6 [MDL=0.18]	11 [MDL=0.14]	12 [MDL=0.18]
COPPER	6.2 [MDL=0.052]	23.2 [MDL=0.049]	26.6 [MDL=0.051]	3.7 [MDL=0.74]	9.6 [MDL=0.82]	30 [MDL=0.65]	13 [MDL=0.83]
IRON	1050 [MDL=1.2]	1610 [MDL=1.1]	22900 [MDL=1.2]	--	--	--	--
LEAD	1.4 [MDL=0.016]	1.8 [MDL=0.015]	29.8 [MDL=0.078]	2.2 [MDL=0.19]	4.2 [MDL=0.21]	12 [MDL=0.17]	6.2 [MDL=0.21]
MANGANESE	2.9 [MDL=0.057]	3.6 [MDL=0.054]	80.2 [MDL=0.056]	--	--	--	--
MERCURY	0.018 U [MDL=0.018]	0.017 U [MDL=0.017]	0.56 [MDL=0.018]	0.017 U [MDL=0.017]	0.015 U [MDL=0.015]	0.18 [MDL=0.016]	0.075 B [MDL=0.02]
MOLYBDENUM	0.077 U [MDL=0.077]	0.078 J [MDL=0.072]	0.61 [MDL=0.075]	1.2 J [MDL=0.27]	0.30 U [MDL=0.3]	0.24 U [MDL=0.24]	0.30 U [MDL=0.3]
NICKEL	4.1 [MDL=0.026]	5.7 [MDL=0.024]	24.6 [MDL=0.025]	4.1 [MDL=0.27]	16 [MDL=0.3]	30 [MDL=0.24]	29 [MDL=0.3]
SELENIUM	0.72 K [MDL=0.11]	0.94 K [MDL=0.1]	2.2 [MDL=0.11]	0.45 U [MDL=0.45]	0.50 U [MDL=0.5]	0.39 U [MDL=0.39]	0.51 U [MDL=0.51]
SILVER	0.02 U [MDL=0.02]	0.029 J [MDL=0.018]	0.35 [MDL=0.019]	0.10 U [MDL=0.1]	0.11 U [MDL=0.11]	0.087 UL [MDL=0.087]	0.11 U [MDL=0.11]
THALLIUM	0.041 B [MDL=0.016]	0.08 B [MDL=0.015]	0.078 U [MDL=0.078]	0.55 U [MDL=0.55]	0.61 U [MDL=0.61]	0.48 U [MDL=0.48]	0.62 U [MDL=0.62]
VANADIUM	4.2 [MDL=0.05]	2.6 [MDL=0.047]	28.8 [MDL=0.049]	15 [MDL=0.12]	34 [MDL=0.13]	46 [MDL=0.1]	33 [MDL=0.14]
ZINC	7.3 [MDL=0.24]	12.4 [MDL=0.23]	46.1 [MDL=0.24]	17 [MDL=1]	20 [MDL=1.1]	68 [MDL=0.87]	67 [MDL=1.1]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.36 J [MDL=0.32]	0.28 U [MDL=0.28]	0.30 U [MDL=0.3]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	93 J [MDL=63]
1,4-DIOXANE	27 U [MDL=27]	25 U [MDL=25]	26 U [MDL=26]	46 U [MDL=46]	48 U [MDL=48]	64 U [MDL=64]	52 U [MDL=52]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	20 U [MDL=20]	21 U [MDL=21]	28 U [MDL=28]	22 U [MDL=22]
2,4,5-TRICHLOROPHENOL	30 U [MDL=30]	29 U [MDL=29]	30 U [MDL=30]	52 U [MDL=52]	55 U [MDL=55]	73 U [MDL=73]	59 U [MDL=59]
2,4,6-TRICHLOROPHENOL	98 U [MDL=98]	91 U [MDL=91]	96 U [MDL=96]	170 U [MDL=170]	180 U [MDL=180]	230 U [MDL=230]	190 U [MDL=190]
2,4-DICHLOROPHENOL	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	41 U [MDL=41]	44 U [MDL=44]	58 U [MDL=58]	47 U [MDL=47]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	41 U [MDL=41]	44 U [MDL=44]	150 J [MDL=58]	120 J [MDL=47]
2,4-DINITROPHENOL	98 U [MDL=98]	91 U [MDL=91]	96 U [MDL=96]	170 U [MDL=170]	180 U [MDL=180]	230 U [MDL=230]	190 U [MDL=190]
2,4-DINITROTOLUENE	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	63 U [MDL=63]
2,6-DINITROTOLUENE	26 U [MDL=26]	24 U [MDL=24]	25 U [MDL=25]	44 U [MDL=44]	46 U [MDL=46]	61 U [MDL=61]	49 U [MDL=49]
2-CHLORONAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	6.8 U [MDL=6.8]	7.2 U [MDL=7.2]	9.6 U [MDL=9.6]	7.8 U [MDL=7.8]
2-CHLOROPHENOL	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	63 U [MDL=63]
2-METHYLNAPHTHALENE	--	--	--	6.8 U [MDL=6.8]	13 J [MDL=7.2]	72 [MDL=9.6]	590 [MDL=7.8]
2-METHYLPHENOL	98 U [MDL=98]	91 U [MDL=91]	96 U [MDL=96]	170 U [MDL=170]	180 U [MDL=180]	230 U [MDL=230]	190 U [MDL=190]
2-NITROANILINE	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	19 U [MDL=19]	20 U [MDL=20]	27 U [MDL=27]	21 U [MDL=21]
2-NITROPHENOL	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	63 U [MDL=63]
3&4-METHYLPHENOL	--	--	--	41 U [MDL=41]	44 U [MDL=44]	58 U [MDL=58]	47 U [MDL=47]
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	21 U [MDL=21]	22 U [MDL=22]	37 U [MDL=37]	39 U [MDL=39]	52 U [MDL=52]	42 U [MDL=42]
3-NITROANILINE	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	33 U [MDL=33]	35 U [MDL=35]	47 U [MDL=47]	38 U [MDL=38]
4,6-DINITRO-2-METHYLPHENOL	98 U [MDL=98]	91 U [MDL=91]	96 U [MDL=96]	170 U [MDL=170]	180 U [MDL=180]	230 U [MDL=230]	190 U [MDL=190]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	27 U [MDL=27]	28 U [MDL=28]	38 U [MDL=38]	31 U [MDL=31]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	24 U [MDL=24]	25 U [MDL=25]	44 U [MDL=44]	46 U [MDL=46]	61 U [MDL=61]	49 U [MDL=49]
4-CHLOROANILINE	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	35 U [MDL=35]	37 U [MDL=37]	50 U [MDL=50]	40 U [MDL=40]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	27 U [MDL=27]	28 U [MDL=28]	38 U [MDL=38]	31 U [MDL=31]
4-METHYLPHENOL	98 U [MDL=98]	91 U [MDL=91]	96 U [MDL=96]	--	--	--	--
4-NITROANILINE	32 U [MDL=32]	30 U [MDL=30]	31 U [MDL=31]	54 U [MDL=54]	57 U [MDL=57]	76 U [MDL=76]	61 U [MDL=61]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-796 D-SB-796-13 9/10/2010	SB-796 D-SB-796-15 9/10/2010	SB-796 D-SB-796-SS 9/10/2010	SB-872 D-SB-872-0-1 4/24/2012	SB-872 D-SB-872-1-2 4/24/2012	SB-872 D-SB-872-2-4 4/24/2012	SB-872 D-SB-872-4-6 4/24/2012
4-NITROPHENOL	98 U [MDL=98]	91 U [MDL=91]	96 U [MDL=96]	170 U [MDL=170]	180 U [MDL=180]	230 U [MDL=230]	190 U [MDL=190]
ACENAPHTHENE	--	--	--	52 [MDL=6.8]	160 [MDL=7.2]	160 [MDL=9.6]	480 [MDL=7.8]
ACENAPHTHYLENE	--	--	--	6.8 U [MDL=6.8]	27 [MDL=7.2]	9.6 U [MDL=9.6]	7.8 U [MDL=7.8]
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	19 U [MDL=19]	20 U [MDL=20]	27 U [MDL=27]	22 U [MDL=22]
ANTHRACENE	--	--	--	87 [MDL=6.8]	200 [MDL=7.2]	38 [MDL=9.6]	110 [MDL=7.8]
ATRAZINE	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	19 U [MDL=19]	20 U [MDL=20]	27 U [MDL=27]	21 U [MDL=21]
BAP EQUIVALENT-HALFND	--	--	--	133.84 [MDL=NaN]	1480.2 [MDL=NaN]	279.26 [MDL=NaN]	178.02 [MDL=NaN]
BAP EQUIVALENT-POS	--	--	--	130.44 [MDL=NaN]	1476.6 [MDL=NaN]	274.46 [MDL=NaN]	174.12 [MDL=NaN]
BENZALDEHYDE	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	25 UJ [MDL=25]	26 UJ [MDL=26]	35 U [MDL=35]	28 U [MDL=28]
BENZO(A)ANTHRACENE	--	--	--	140 [MDL=6.8]	1200 [MDL=7.2]	150 [MDL=9.6]	250 [MDL=7.8]
BENZO(A)PYRENE	--	--	--	96 [MDL=6.8]	1100 [MDL=7.2]	210 [MDL=9.6]	120 [MDL=7.8]
BENZO(B)FLUORANTHENE	--	--	--	150 [MDL=6.8]	1900 [MDL=7.2]	350 [MDL=9.6]	220 [MDL=7.8]
BENZO(G,H,I)PERYLENE	--	--	--	57 [MDL=6.8]	700 [MDL=7.2]	170 [MDL=9.6]	69 [MDL=7.8]
BENZO(K)FLUORANTHENE	--	--	--	67 [MDL=6.8]	650 [MDL=7.2]	120 [MDL=9.6]	110 [MDL=7.8]
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	25 U [MDL=25]	26 U [MDL=26]	46 U [MDL=46]	48 U [MDL=48]	64 U [MDL=64]	52 U [MDL=52]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	4.1 U [MDL=4.1]	4.4 U [MDL=4.4]	5.8 U [MDL=5.8]	4.7 U [MDL=4.7]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	22 U [MDL=22]	23 U [MDL=23]	39 U [MDL=39]	42 U [MDL=42]	55 U [MDL=55]	45 U [MDL=45]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	21 U [MDL=21]	22 U [MDL=22]	29 U [MDL=29]	23 U [MDL=23]
CAPROLACTAM	45 U [MDL=45]	42 U [MDL=42]	44 U [MDL=44]	77 U [MDL=77]	81 U [MDL=81]	110 U [MDL=110]	87 U [MDL=87]
CARBAZOLE	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	280 [MDL=79]	350 [MDL=63]
CHRYSENE	--	--	--	170 [MDL=2.3]	1100 [MDL=2.4]	260 [MDL=3.2]	320 [MDL=2.6]
DIBENZO(A,H)ANTHRACENE	--	--	--	6.8 U [MDL=6.8]	7.2 U [MDL=7.2]	9.6 U [MDL=9.6]	7.8 U [MDL=7.8]
DIBENZOFURAN	4 U [MDL=4]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	30 J [MDL=6.8]	78 J [MDL=7.2]	55 J [MDL=9.6]	210 [MDL=7.8]
DIETHYL PHTHALATE	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	33 U [MDL=33]	35 U [MDL=35]	47 U [MDL=47]	38 U [MDL=38]
DIMETHYL PHTHALATE	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	35 U [MDL=35]	37 U [MDL=37]	50 U [MDL=50]	40 U [MDL=40]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	31 U [MDL=31]	33 U [MDL=33]	44 U [MDL=44]	35 U [MDL=35]
DI-N-OCTYL PHTHALATE	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	63 U [MDL=63]
FLUORANTHENE	--	--	--	360 [MDL=6.8]	2100 [MDL=7.2]	340 [MDL=9.6]	1100 [MDL=7.8]
FLUORENE	--	--	--	33 [MDL=6.8]	91 [MDL=7.2]	70 [MDL=9.6]	160 [MDL=7.8]
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	4.4 U [MDL=4.4]	4.6 U [MDL=4.6]	6.1 U [MDL=6.1]	4.9 U [MDL=4.9]
HEXACHLOROBUTADIENE	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	63 U [MDL=63]
HEXACHLOROCYCLOPENTADIENE	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	63 U [MDL=63]
HEXACHLOROETHANE	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	19 U [MDL=19]	20 U [MDL=20]	26 U [MDL=26]	21 U [MDL=21]
INDENO(1,2,3-CD)PYRENE	--	--	--	46 [MDL=6.8]	590 [MDL=7.2]	130 [MDL=9.6]	57 [MDL=7.8]
ISOPHORONE	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	27 U [MDL=27]	28 U [MDL=28]	38 U [MDL=38]	31 U [MDL=31]
NAPHTHALENE	--	--	--	22 [MDL=6.8]	98 [MDL=7.2]	3200 [MDL=9.6]	5500 [MDL=16]
NITROBENZENE	2.7 U [MDL=2.7]	2.5 U [MDL=2.5]	2.6 U [MDL=2.6]	4.6 U [MDL=4.6]	4.8 U [MDL=4.8]	6.4 U [MDL=6.4]	5.2 U [MDL=5.2]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	33 U [MDL=33]	35 U [MDL=35]	47 U [MDL=47]	38 U [MDL=38]
N-NITROSO-DI-N-PROPYLAMINE	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	63 U [MDL=63]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	24 U [MDL=24]	25 U [MDL=25]	44 U [MDL=44]	46 U [MDL=46]	61 U [MDL=61]	49 U [MDL=49]
PENTACHLOROPHENOL	98 U [MDL=98]	91 U [MDL=91]	96 U [MDL=96]	170 U [MDL=170]	180 U [MDL=180]	230 U [MDL=230]	190 U [MDL=190]
PHENANTHRENE	--	--	--	180 [MDL=6.8]	120 [MDL=7.2]	120 [MDL=9.6]	580 [MDL=7.8]
PHENOL	33 U [MDL=33]	31 U [MDL=31]	32 U [MDL=32]	56 U [MDL=56]	59 U [MDL=59]	79 U [MDL=79]	63 U [MDL=63]
PYRENE	--	--	--	270 [MDL=6.8]	2200 [MDL=7.2]	310 [MDL=9.6]	790 [MDL=7.8]
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.54 U [MDL=0.54]	0.52 U [MDL=0.52]	0.46 U [MDL=0.46]	0.68 U [MDL=0.68]	0.54 U [MDL=0.54]	8.9 U [MDL=8.9]	17 U [MDL=17]
1,1,1-TRICHLOROETHANE	0.49 U [MDL=0.49]	0.47 U [MDL=0.47]	0.42 U [MDL=0.42]	0.61 U [MDL=0.61]	0.49 U [MDL=0.49]	20 U [MDL=20]	40 U [MDL=40]
1,1,2,2-TETRACHLOROETHANE	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	8.7 U [MDL=8.7]	17 U [MDL=17]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.96 U [MDL=0.96]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	38 U [MDL=38]	74 U [MDL=74]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-796 D-SB-796-13 9/10/2010	SB-796 D-SB-796-15 9/10/2010	SB-796 D-SB-796-SS 9/10/2010	SB-872 D-SB-872-0-1 4/24/2012	SB-872 D-SB-872-1-2 4/24/2012	SB-872 D-SB-872-2-4 4/24/2012	SB-872 D-SB-872-4-6 4/24/2012
1,1-DICHLOROETHANE	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]	17 U [MDL=17]	32 U [MDL=32]
1,1-DICHLOROETHENE	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.39 U [MDL=0.39]	0.57 U [MDL=0.57]	0.45 U [MDL=0.45]	18 U [MDL=18]	34 U [MDL=34]
1,1-DICHLOROPROPENE	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.22 U [MDL=0.22]	0.33 U [MDL=0.33]	0.26 U [MDL=0.26]	9.8 U [MDL=9.8]	19 U [MDL=19]
1,2,3-TRICHLOROBENZENE	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.28 U [MDL=0.28]	0.42 U [MDL=0.42]	0.33 U [MDL=0.33]	9.8 U [MDL=9.8]	19 U [MDL=19]
1,2,3-TRICHLOROPROPANE	0.79 U [MDL=0.79]	0.75 U [MDL=0.75]	0.67 U [MDL=0.67]	0.99 U [MDL=0.99]	0.78 U [MDL=0.78]	20 U [MDL=20]	40 U [MDL=40]
1,2,3-TRIMETHYLBENZENE	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.19 U [MDL=0.19]	0.15 U [MDL=0.15]	0.17 U [MDL=0.17]	26 J [MDL=0.32]
1,2,4-TRICHLOROBENZENE	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.2 U [MDL=0.2]	0.30 U [MDL=0.3]	0.23 U [MDL=0.23]	7.1 U [MDL=7.1]	14 U [MDL=14]
1,2,4-TRIMETHYLBENZENE	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.48 U [MDL=0.48]	0.71 U [MDL=0.71]	0.56 U [MDL=0.56]	5.6 J [MDL=4.9]	43 J [MDL=9.5]
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	0.96 U [MDL=0.96]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	49 U [MDL=49]	95 U [MDL=95]
1,2-DIBROMOETHANE	0.44 U [MDL=0.44]	0.42 U [MDL=0.42]	0.37 U [MDL=0.37]	0.55 U [MDL=0.55]	0.43 U [MDL=0.43]	9.8 U [MDL=9.8]	19 U [MDL=19]
1,2-DICHLOROBENZENE	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]	8.4 U [MDL=8.4]	16 U [MDL=16]
1,2-DICHLOROETHANE	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	9.8 U [MDL=9.8]	19 U [MDL=19]
1,2-DICHLOROPROPANE	0.61 U [MDL=0.61]	0.58 U [MDL=0.58]	0.51 U [MDL=0.51]	0.76 U [MDL=0.76]	0.60 U [MDL=0.6]	8 U [MDL=8]	16 U [MDL=16]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	19 NJ [MDL=11]
1,3-DICHLOROBENZENE	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.38 U [MDL=0.38]	0.30 U [MDL=0.3]	4.7 U [MDL=4.7]	9.1 U [MDL=9.1]
1,3-DICHLOROPROPANE	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	21 U [MDL=21]	42 U [MDL=42]
1,4-DICHLOROBENZENE	0.58 U [MDL=0.58]	0.55 U [MDL=0.55]	0.49 U [MDL=0.49]	0.72 U [MDL=0.72]	0.57 U [MDL=0.57]	7.8 U [MDL=7.8]	15 U [MDL=15]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	270 NJ [MDL=6.1]	370 NJ [MDL=12]
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.83 U [MDL=0.83]	0.78 U [MDL=0.78]	0.7 U [MDL=0.7]	1 U [MDL=1]	0.82 U [MDL=0.82]	22 U [MDL=22]	44 U [MDL=44]
2-BUTANONE	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	2.2 J [MDL=1]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	42 U [MDL=42]	82 U [MDL=82]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1 U [MDL=1]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	42 U [MDL=42]	82 U [MDL=82]
2-CHLOROTOLUENE	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]	8.8 U [MDL=8.8]	17 U [MDL=17]
2-HEXANONE	0.55 U [MDL=0.55]	0.53 U [MDL=0.53]	0.47 U [MDL=0.47]	0.69 U [MDL=0.69]	0.55 U [MDL=0.55]	20 U [MDL=20]	38 U [MDL=38]
2-METHYLNAPHTHALENE	--	--	--	--	--	62 NJ [MDL=17]	550 NJ [MDL=32]
4-CHLOROTOLUENE	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.3 U [MDL=0.3]	0.45 U [MDL=0.45]	0.36 U [MDL=0.36]	9.7 U [MDL=9.7]	19 U [MDL=19]
4-ISOPROPYLTOLUENE	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.16 U [MDL=0.16]	0.23 U [MDL=0.23]	0.18 U [MDL=0.18]	4.7 U [MDL=4.7]	10 J [MDL=9.1]
4-METHYL-2-PENTANONE	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.4 U [MDL=0.4]	0.59 U [MDL=0.59]	0.47 U [MDL=0.47]	47 U [MDL=47]	91 U [MDL=91]
ACETONE	5.5 U [MDL=5.5]	5.3 U [MDL=5.3]	17 B [MDL=4.7]	12 B [MDL=6.9]	16 B [MDL=5.5]	170 U [MDL=170]	320 U [MDL=320]
BENZENE	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]	0.25 U [MDL=0.25]	0.20 U [MDL=0.2]	18 J [MDL=12]	26 J [MDL=23]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.29 U [MDL=0.29]	0.28 U [MDL=0.28]	0.24 U [MDL=0.24]	0.36 U [MDL=0.36]	0.29 U [MDL=0.29]	13 U [MDL=13]	25 U [MDL=25]
BROMOCHLOROMETHANE	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.53 U [MDL=0.53]	0.78 U [MDL=0.78]	0.62 U [MDL=0.62]	13 U [MDL=13]	25 U [MDL=25]
BROMODICHLOROMETHANE	0.25 U [MDL=0.25]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.31 U [MDL=0.31]	0.24 U [MDL=0.24]	9.7 U [MDL=9.7]	19 U [MDL=19]
BROMOFORM	0.29 U [MDL=0.29]	0.28 U [MDL=0.28]	0.24 U [MDL=0.24]	0.36 U [MDL=0.36]	0.29 U [MDL=0.29]	19 U [MDL=19]	36 U [MDL=36]
BROMOMETHANE	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.4 U [MDL=0.4]	0.59 U [MDL=0.59]	0.47 U [MDL=0.47]	28 U [MDL=28]	55 U [MDL=55]
CARBON DISULFIDE	0.79 B [MDL=0.39]	0.84 B [MDL=0.37]	0.73 B [MDL=0.33]	3.9 J [MDL=0.48]	1.7 J [MDL=0.38]	12 U [MDL=12]	160 J [MDL=23]
CARBON TETRACHLORIDE	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]	6.2 U [MDL=6.2]	12 U [MDL=12]
CHLOROBENZENE	0.29 U [MDL=0.29]	0.28 U [MDL=0.28]	0.24 U [MDL=0.24]	0.36 U [MDL=0.36]	0.29 U [MDL=0.29]	6.2 U [MDL=6.2]	12 U [MDL=12]
CHLORODIBROMOMETHANE	0.48 U [MDL=0.48]	0.46 U [MDL=0.46]	0.41 U [MDL=0.41]	0.60 U [MDL=0.6]	0.48 U [MDL=0.48]	12 U [MDL=12]	23 U [MDL=23]
CHLOROETHANE	0.76 U [MDL=0.76]	0.72 U [MDL=0.72]	0.64 U [MDL=0.64]	0.94 U [MDL=0.94]	0.75 U [MDL=0.75]	60 U [MDL=60]	120 U [MDL=120]
CHLOROFORM	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.21 U [MDL=0.21]	0.32 U [MDL=0.32]	0.25 U [MDL=0.25]	8.6 U [MDL=8.6]	17 U [MDL=17]
CHLOROMETHANE	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.3 U [MDL=0.3]	0.45 U [MDL=0.45]	0.36 U [MDL=0.36]	14 U [MDL=14]	27 U [MDL=27]
CIS-1,2-DICHLOROETHENE	0.32 U [MDL=0.32]	0.3 U [MDL=0.3]	0.27 U [MDL=0.27]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]	6.7 U [MDL=6.7]	13 U [MDL=13]
CIS-1,3-DICHLOROPROPENE	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	7.7 U [MDL=7.7]	15 U [MDL=15]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	6.4 NJ [MDL=1.1]	--	--	--
DIBROMOMETHANE	0.55 U [MDL=0.55]	0.53 U [MDL=0.53]	0.47 U [MDL=0.47]	0.69 U [MDL=0.69]	0.55 U [MDL=0.55]	14 U [MDL=14]	27 U [MDL=27]
DICHLORODIFLUOROMETHANE	0.44 U [MDL=0.44]	0.42 U [MDL=0.42]	0.37 U [MDL=0.37]	0.55 U [MDL=0.55]	0.43 U [MDL=0.43]	16 U [MDL=16]	30 U [MDL=30]
DIISOPROPYL ETHER	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.6 U [MDL=1.6]	1.3 U [MDL=1.3]	49 U [MDL=49]	95 U [MDL=95]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-796 D-SB-796-13 9/10/2010	SB-796 D-SB-796-15 9/10/2010	SB-796 D-SB-796-SS 9/10/2010	SB-872 D-SB-872-0-1 4/24/2012	SB-872 D-SB-872-1-2 4/24/2012	SB-872 D-SB-872-2-4 4/24/2012	SB-872 D-SB-872-4-6 4/24/2012
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.16 U [MDL=0.16]	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.42 U [MDL=0.42]
ETHYLBENZENE	0.23 U [MDL=0.23]	0.22 U [MDL=0.22]	0.19 U [MDL=0.19]	0.29 J [MDL=0.29]	0.23 U [MDL=0.23]	12 B [MDL=5.3]	62 B [MDL=10]
HEXACHLOROBUTADIENE	1.1 U [MDL=1.1]	1 U [MDL=1]	0.89 U [MDL=0.89]	1.3 U [MDL=1.3]	1 U [MDL=1]	14 U [MDL=14]	27 U [MDL=27]
INDANE	--	--	--	--	--	--	700 NJ [NA=NaN]
ISOPROPYLBENZENE	0.14 U [MDL=0.14]	0.13 U [MDL=0.13]	0.12 U [MDL=0.12]	0.18 U [MDL=0.18]	0.14 U [MDL=0.14]	6.3 U [MDL=6.3]	12 U [MDL=12]
M+P-XYLENES	1.1 U [MDL=1.1]	1 U [MDL=1]	0.89 U [MDL=0.89]	1.3 U [MDL=1.3]	1 U [MDL=1]	13 B [MDL=6.1]	69 B [MDL=12]
METHYL ACETATE	--	--	--	--	--	26 NJ [MDL=24]	62 NJ [MDL=47]
METHYL CYCLOHEXANE	--	--	--	--	0.31 NJ [MDL=0.27]	--	--
METHYL TERT-BUTYL ETHER	0.38 UJ [MDL=0.38]	0.36 UJ [MDL=0.36]	0.32 UJ [MDL=0.32]	0.47 U [MDL=0.47]	0.37 U [MDL=0.37]	6.9 U [MDL=6.9]	13 U [MDL=13]
METHYLENE CHLORIDE	0.86 B [MDL=0.59]	0.96 B [MDL=0.56]	0.82 B [MDL=0.5]	0.74 U [MDL=0.74]	1.4 J [MDL=0.58]	75 U [MDL=75]	150 U [MDL=150]
NAPHTHALENE	0.74 B [MDL=0.17]	0.7 B [MDL=0.16]	0.71 B [MDL=0.14]	9.8 [MDL=0.21]	2.5 J [MDL=0.16]	920 [MDL=6.5]	9500 [MDL=13]
N-BUTYLBENZENE	0.2 U [MDL=0.2]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]	0.25 U [MDL=0.25]	0.20 U [MDL=0.2]	7.8 U [MDL=7.8]	15 U [MDL=15]
N-PROPYLBENZENE	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.3 U [MDL=0.3]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]	14 U [MDL=14]	27 U [MDL=27]
O-XYLENE	0.31 U [MDL=0.31]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.38 U [MDL=0.38]	0.30 U [MDL=0.3]	8.3 U [MDL=8.3]	21 B [MDL=16]
SEC-BUTYLBENZENE	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.13 U [MDL=0.13]	0.20 U [MDL=0.2]	0.16 U [MDL=0.16]	4.6 U [MDL=4.6]	8.9 U [MDL=8.9]
STYRENE	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.11 U [MDL=0.11]	0.16 U [MDL=0.16]	0.13 U [MDL=0.13]	5.5 U [MDL=5.5]	11 U [MDL=11]
TERT-AMYL METHYL ETHER	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]	0.36 U [MDL=0.36]	0.70 U [MDL=0.7]
TERT-BUTYLBENZENE	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.21 U [MDL=0.21]	0.32 U [MDL=0.32]	0.25 U [MDL=0.25]	6.3 U [MDL=6.3]	12 U [MDL=12]
TERTIARY-BUTYL ALCOHOL	6.7 UR [MDL=6.7]	6.3 UR [MDL=6.3]	5.6 UR [MDL=5.6]	8.3 UR [MDL=8.3]	6.6 UR [MDL=6.6]	230 UR [MDL=230]	460 UR [MDL=460]
TETRACHLOROETHENE	0.46 U [MDL=0.46]	0.43 U [MDL=0.43]	0.39 U [MDL=0.39]	0.57 U [MDL=0.57]	0.45 U [MDL=0.45]	12 U [MDL=12]	23 U [MDL=23]
TOLUENE	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.2 U [MDL=0.2]	0.30 U [MDL=0.3]	0.23 U [MDL=0.23]	17 U [MDL=17]	32 U [MDL=32]
TOTAL XYLENES	0.59 U [MDL=0.59]	0.56 U [MDL=0.56]	0.5 U [MDL=0.5]	0.74 U [MDL=0.74]	0.58 U [MDL=0.58]	13 B [MDL=7.9]	90 B [MDL=15]
TRANS-1,2-DICHLOROETHENE	0.36 U [MDL=0.36]	0.34 U [MDL=0.34]	0.3 U [MDL=0.3]	0.45 U [MDL=0.45]	0.36 U [MDL=0.36]	9 U [MDL=9]	17 U [MDL=17]
TRANS-1,3-DICHLOROPROPENE	0.47 U [MDL=0.47]	0.45 U [MDL=0.45]	0.4 U [MDL=0.4]	0.59 U [MDL=0.59]	0.47 U [MDL=0.47]	20 U [MDL=20]	38 U [MDL=38]
TRICHLOROETHENE	0.37 U [MDL=0.37]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.46 U [MDL=0.46]	0.36 U [MDL=0.36]	9.5 U [MDL=9.5]	18 U [MDL=18]
TRICHLOROFLUOROMETHANE	0.3 U [MDL=0.3]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	16 U [MDL=16]	30 U [MDL=30]
VINYL ACETATE	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.27 UR [MDL=0.27]	0.22 UR [MDL=0.22]	22 UR [MDL=22]	44 UR [MDL=44]
VINYL CHLORIDE	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.29 U [MDL=0.29]	0.43 U [MDL=0.43]	0.34 U [MDL=0.34]	18 U [MDL=18]	34 U [MDL=34]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	10 [MDL=3.9]	--	--	--	--
ACENAPHTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	13 [MDL=3.9]	--	--	--	--
ACENAPHTHYLENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	--	--	--	--
ANTHRACENE	4 U [MDL=4]	3.8 U [MDL=3.8]	15 [MDL=3.9]	--	--	--	--
BAP EQUIVALENT-HALFND	4 U [MDL=NaN]	3.8 U [MDL=NaN]	79.219 [MDL=NaN]	--	--	--	--
BAP EQUIVALENT-POS	4 U [MDL=NaN]	3.8 U [MDL=NaN]	77.269 [MDL=NaN]	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	4 U [MDL=4]	3.8 U [MDL=3.8]	49 [MDL=3.9]	--	--	--	--
BENZO(A)PYRENE	4 U [MDL=4]	3.8 U [MDL=3.8]	60 [MDL=3.9]	--	--	--	--
BENZO(B)FLUORANTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	74 [MDL=3.9]	--	--	--	--
BENZO(G,H,I)PERYLENE	4 U [MDL=4]	3.8 U [MDL=3.8]	40 [MDL=3.9]	--	--	--	--
BENZO(K)FLUORANTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	31 [MDL=3.9]	--	--	--	--
CHRYSENE	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	59 [MDL=1.3]	--	--	--	--
DIBENZO(A,H)ANTHRACENE	4 U [MDL=4]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	--	--	--	--
FLUORANTHENE	4 U [MDL=4]	3.8 U [MDL=3.8]	96 [MDL=3.9]	--	--	--	--
FLUORENE	4 U [MDL=4]	3.8 U [MDL=3.8]	12 [MDL=3.9]	--	--	--	--
INDENO(1,2,3-CD)PYRENE	4 U [MDL=4]	3.8 U [MDL=3.8]	46 [MDL=3.9]	--	--	--	--
NAPHTHALENE	4 U [MDL=4]	3.8 U [MDL=3.8]	18 [MDL=3.9]	--	--	--	--
PHENANTHRENE	4 U [MDL=4]	3.8 U [MDL=3.8]	60 [MDL=3.9]	--	--	--	--
PYRENE	4 U [MDL=4]	3.8 U [MDL=3.8]	81 [MDL=3.9]	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-796 D-SB-796-13 9/10/2010	SB-796 D-SB-796-15 9/10/2010	SB-796 D-SB-796-SS 9/10/2010	SB-872 D-SB-872-0-1 4/24/2012	SB-872 D-SB-872-1-2 4/24/2012	SB-872 D-SB-872-2-4 4/24/2012	SB-872 D-SB-872-4-6 4/24/2012
TOTAL PAHS	0 U [MDL=NaN]	0 U [MDL=NaN]	664 [MDL=NaN]	--	--	--	--
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	24 U [MDL=24]	25 U [MDL=25]	22 U [MDL=22]	23 U [MDL=23]	25 U [MDL=25]	25 U [MDL=25]
AROCLOR-1221	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	17 U [MDL=17]	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]	13 U [MDL=13]	14 U [MDL=14]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1254	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1260	21 U [MDL=21]	19 U [MDL=19]	20 U [MDL=20]	18 U [MDL=18]	44 [MDL=19]	20 U [MDL=20]	40 [MDL=20]
TOTAL AROCLOR	0 U [MDL=NaN]	0 U [MDL=NaN]	0 U [MDL=NaN]	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	--	--	--	64 U [MDL=64]	69 UJ [MDL=69]	14 UJ [MDL=14]	36 UJ [MDL=36]
4,4'-DDE	--	--	--	40 U [MDL=40]	43 U [MDL=43]	9.1 U [MDL=9.1]	23 U [MDL=23]
4,4'-DDT	--	--	--	65 U [MDL=65]	70 U [MDL=70]	15 U [MDL=15]	37 U [MDL=37]
ALDRIN	--	--	--	120 U [MDL=120]	130 U [MDL=130]	28 U [MDL=28]	70 U [MDL=70]
ALPHA-BHC	--	--	--	76 U [MDL=76]	81 U [MDL=81]	17 U [MDL=17]	43 U [MDL=43]
ALPHA-CHLORDANE	--	--	--	97 U [MDL=97]	100 U [MDL=100]	22 U [MDL=22]	55 U [MDL=55]
BETA-BHC	--	--	--	110 U [MDL=110]	120 U [MDL=120]	26 U [MDL=26]	64 U [MDL=64]
DELTA-BHC	--	--	--	120 U [MDL=120]	130 U [MDL=130]	28 U [MDL=28]	70 U [MDL=70]
DIELDRIN	--	--	--	49 U [MDL=49]	52 U [MDL=52]	11 U [MDL=11]	28 U [MDL=28]
ENDOSULFAN I	--	--	--	54 U [MDL=54]	57 UJ [MDL=57]	12 UJ [MDL=12]	30 UJ [MDL=30]
ENDOSULFAN II	--	--	--	85 U [MDL=85]	91 U [MDL=91]	19 U [MDL=19]	48 U [MDL=48]
ENDOSULFAN SULFATE	--	--	--	90 U [MDL=90]	96 U [MDL=96]	20 U [MDL=20]	51 U [MDL=51]
ENDRIN	--	--	--	52 U [MDL=52]	55 U [MDL=55]	12 U [MDL=12]	29 U [MDL=29]
ENDRIN ALDEHYDE	--	--	--	100 U [MDL=100]	110 U [MDL=110]	23 U [MDL=23]	59 U [MDL=59]
ENDRIN KETONE	--	--	--	65 U [MDL=65]	70 U [MDL=70]	15 U [MDL=15]	37 U [MDL=37]
GAMMA-BHC (LINDANE)	--	--	--	77 U [MDL=77]	82 UJ [MDL=82]	17 UJ [MDL=17]	43 UJ [MDL=43]
GAMMA-CHLORDANE	--	--	--	44 U [MDL=44]	46 U [MDL=46]	9.8 U [MDL=9.8]	25 U [MDL=25]
HEPTACHLOR	--	--	--	110 UJ [MDL=110]	120 UJ [MDL=120]	26 UJ [MDL=26]	64 UJ [MDL=64]
HEPTACHLOR EPOXIDE	--	--	--	83 U [MDL=83]	88 U [MDL=88]	19 U [MDL=19]	47 U [MDL=47]
METHOXYCHLOR	--	--	--	160 U [MDL=160]	170 U [MDL=170]	35 U [MDL=35]	88 U [MDL=88]
TOXAPHENE	--	--	--	2000 U [MDL=2000]	2100 U [MDL=2100]	440 U [MDL=440]	1100 U [MDL=1100]
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	0.76 U [MDL=0.76]	0.71 U [MDL=0.71]	0.74 U [MDL=0.74]	--	--	--	--
4,4'-DDE	0.48 U [MDL=0.48]	0.45 U [MDL=0.45]	0.47 U [MDL=0.47]	--	--	--	--
4,4'-DDT	0.77 U [MDL=0.77]	0.72 U [MDL=0.72]	0.75 U [MDL=0.75]	--	--	--	--
ALDRIN	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	--	--	--	--
ALPHA-BHC	0.89 U [MDL=0.89]	0.83 U [MDL=0.83]	0.87 U [MDL=0.87]	--	--	--	--
ALPHA-CHLORDANE	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	1.1 U [MDL=1.1]	--	--	--	--
BETA-BHC	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	--	--	--	--
DELTA-BHC	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.4 U [MDL=1.4]	--	--	--	--
DIELDRIN	0.57 U [MDL=0.57]	0.54 U [MDL=0.54]	0.56 U [MDL=0.56]	--	--	--	--
ENDOSULFAN I	0.63 U [MDL=0.63]	0.59 U [MDL=0.59]	0.62 U [MDL=0.62]	--	--	--	--
ENDOSULFAN II	1 U [MDL=1]	0.94 U [MDL=0.94]	0.98 U [MDL=0.98]	--	--	--	--
ENDOSULFAN SULFATE	1.1 U [MDL=1.1]	0.99 U [MDL=0.99]	1 U [MDL=1]	--	--	--	--
ENDRIN	0.61 U [MDL=0.61]	0.57 U [MDL=0.57]	0.6 U [MDL=0.6]	--	--	--	--
ENDRIN ALDEHYDE	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	--	--	--	--
ENDRIN KETONE	0.77 U [MDL=0.77]	0.72 U [MDL=0.72]	0.75 U [MDL=0.75]	--	--	--	--
GAMMA-BHC (LINDANE)	0.9 U [MDL=0.9]	0.85 U [MDL=0.85]	0.88 U [MDL=0.88]	--	--	--	--
GAMMA-CHLORDANE	0.51 U [MDL=0.51]	0.48 U [MDL=0.48]	0.5 U [MDL=0.5]	--	--	--	--
HEPTACHLOR	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-796	SB-796	SB-796	SB-872	SB-872	SB-872	SB-872
SAMPLE ID	D-SB-796-13	D-SB-796-15	D-SB-796-SS	D-SB-872-0-1	D-SB-872-1-2	D-SB-872-2-4	D-SB-872-4-6
SAMPLE DATE	9/10/2010	9/10/2010	9/10/2010	4/24/2012	4/24/2012	4/24/2012	4/24/2012
HEPTACHLOR EPOXIDE	0.98 U [MDL=0.98]	0.91 U [MDL=0.91]	0.96 U [MDL=0.96]	--	--	--	--
METHOXYCHLOR	1.8 U [MDL=1.8]	1.7 U [MDL=1.7]	1.8 U [MDL=1.8]	--	--	--	--
TOXAPHENE	23 U [MDL=23]	22 U [MDL=22]	23 U [MDL=23]	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	--	--	--	1100 [MDL=48]	270 [MDL=10]	260 [MDL=11]	110 [MDL=11]
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	3400 J [MDL=3.4]	3200 U [MDL=3.2]	64000 [MDL=3.3]	--	--	--	--
GASOLINE RANGE ORGANICS	56 U [MDL=56]	53 U [MDL=53]	55 U [MDL=55]	--	--	--	--
TPH (C06-C10)	--	--	--	48 U [MDL=48]	51 U [MDL=51]	94 J [MDL=54]	280 [MDL=110]

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-872	SB-873	SB-873	SB-873	SB-873	SB-873	SB-874
SAMPLE ID	D-SB-872-6-8	D-SB-873-0-1	D-SB-873-1-2	D-SB-873-2-4	D-SB-873-4-6	D-SB-873-6-8	D-SB-874-0-1
SAMPLE DATE	4/24/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/24/2012
METALS (MG/KG)							
ANTIMONY	1.6 UL [MDL=1.6]	0.43 UJ [MDL=0.43]	2 UJ [MDL=2]	0.40 UJ [MDL=0.4]	0.42 UJ [MDL=0.42]	2.1 J [MDL=2]	0.45 B [MDL=0.44]
ARSENIC	5.1 J [MDL=1.2]	3.5 [MDL=0.33]	6.7 J [MDL=1.6]	6.3 [MDL=0.31]	4.9 [MDL=0.32]	3.2 J [MDL=1.5]	1.9 [MDL=0.34]
BARIUM	18 J [MDL=0.29]	22 J [MDL=0.078]	28 J [MDL=0.37]	17 J [MDL=0.072]	6.7 J [MDL=0.076]	5.3 J [MDL=0.072]	15 J [MDL=0.08]
BERYLLIUM	3.8 [MDL=0.18]	1.1 [MDL=0.047]	1.5 J [MDL=0.22]	1.3 [MDL=0.044]	1.1 [MDL=0.046]	0.61 [MDL=0.044]	0.048 U [MDL=0.048]
CADMIUM	0.38 J [MDL=0.15]	0.29 J [MDL=0.04]	0.19 U [MDL=0.19]	0.067 J [MDL=0.037]	0.069 J [MDL=0.039]	0.18 U [MDL=0.18]	0.21 J [MDL=0.04]
CHROMIUM	24 [MDL=0.82]	18 J [MDL=0.22]	21 J [MDL=1]	24 J [MDL=0.2]	22 J [MDL=0.22]	16 J [MDL=0.2]	13 [MDL=0.22]
COBALT	12 [MDL=0.66]	9.1 [MDL=0.18]	8.8 [MDL=0.84]	6.6 [MDL=0.16]	4 [MDL=0.17]	1.9 [MDL=0.16]	1.7 L [MDL=0.18]
COPPER	29 [MDL=3]	11 [MDL=0.82]	20 [MDL=3.9]	16 [MDL=0.76]	11 [MDL=0.8]	9.3 [MDL=0.75]	4.3 [MDL=0.83]
IRON	--	--	--	--	--	--	--
LEAD	15 [MDL=0.78]	8.7 [MDL=0.21]	17 [MDL=0.99]	8.4 [MDL=0.19]	4.8 [MDL=0.2]	7.5 [MDL=0.96]	4 [MDL=0.21]
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.34 [MDL=0.02]	0.19 [MDL=0.017]	0.27 [MDL=0.019]	0.024 J [MDL=0.015]	0.019 U [MDL=0.019]	0.018 U [MDL=0.018]	0.023 B [MDL=0.017]
MOLYBDENUM	1.1 U [MDL=1.1]	0.65 J [MDL=0.3]	1.4 U [MDL=1.4]	0.36 J [MDL=0.28]	0.67 B [MDL=0.29]	1.4 U [MDL=1.4]	1.2 B [MDL=0.3]
NICKEL	29 [MDL=1.1]	30 [MDL=0.3]	20 J [MDL=1.4]	22 [MDL=0.28]	13 [MDL=0.29]	6 [MDL=0.27]	4 J [MDL=0.3]
SELENIUM	1.9 U [MDL=1.9]	0.50 U [MDL=0.5]	2.4 U [MDL=2.4]	0.46 U [MDL=0.46]	0.48 U [MDL=0.48]	2.3 U [MDL=2.3]	0.50 U [MDL=0.5]
SILVER	0.41 U [MDL=0.41]	0.11 U [MDL=0.11]	0.52 UL [MDL=0.52]	0.10 U [MDL=0.1]	0.11 U [MDL=0.11]	0.10 UL [MDL=0.1]	0.11 UL [MDL=0.11]
THALLIUM	2.3 U [MDL=2.3]	0.61 U [MDL=0.61]	2.9 U [MDL=2.9]	0.56 U [MDL=0.56]	0.59 U [MDL=0.59]	0.56 U [MDL=0.56]	0.62 U [MDL=0.62]
VANADIUM	41 [MDL=0.49]	24 J [MDL=0.13]	33 J [MDL=0.63]	32 J [MDL=0.12]	47 J [MDL=0.13]	33 J [MDL=0.12]	16 [MDL=0.13]
ZINC	76 [MDL=4.1]	85 L [MDL=1.1]	51 L [MDL=5.2]	33 L [MDL=1]	18 L [MDL=1.1]	9.8 L [MDL=1]	32 [MDL=1.1]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
1,4-DIOXANE	54 U [MDL=54]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	27 U [MDL=27]	25 U [MDL=25]	170 U [MDL=170]
2,2'-OXYBIS(1-CHLOROPROPANE)	23 U [MDL=23]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	73 U [MDL=73]
2,4,5-TRICHLOROPHENOL	61 U [MDL=61]	29 U [MDL=29]	30 U [MDL=30]	28 U [MDL=28]	31 U [MDL=31]	29 U [MDL=29]	190 U [MDL=190]
2,4,6-TRICHLOROPHENOL	200 U [MDL=200]	93 U [MDL=93]	95 U [MDL=95]	90 U [MDL=90]	98 U [MDL=98]	92 U [MDL=92]	620 UR [MDL=620]
2,4-DICHLOROPHENOL	49 U [MDL=49]	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	150 U [MDL=150]
2,4-DIMETHYLPHENOL	49 U [MDL=49]	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	150 U [MDL=150]
2,4-DINITROPHENOL	200 U [MDL=200]	93 U [MDL=93]	95 U [MDL=95]	90 U [MDL=90]	98 U [MDL=98]	92 U [MDL=92]	620 UR [MDL=620]
2,4-DINITROTOLUENE	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
2,6-DINITROTOLUENE	51 U [MDL=51]	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	24 U [MDL=24]	160 U [MDL=160]
2-CHLORONAPHTHALENE	8.1 U [MDL=8.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	25 U [MDL=25]
2-CHLOROPHENOL	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
2-METHYLNAPHTHALENE	45 [MDL=8.1]	11 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	50 J [MDL=25]
2-METHYLPHENOL	200 U [MDL=200]	93 U [MDL=93]	95 U [MDL=95]	90 U [MDL=90]	98 U [MDL=98]	92 U [MDL=92]	620 UR [MDL=620]
2-NITROANILINE	22 U [MDL=22]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	10 U [MDL=10]	70 U [MDL=70]
2-NITROPHENOL	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
3&4-METHYLPHENOL	49 U [MDL=49]	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	23 U [MDL=23]	150 U [MDL=150]
3,3'-DICHLOROBENZIDINE	44 U [MDL=44]	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	22 U [MDL=22]	21 U [MDL=21]	140 U [MDL=140]
3-NITROANILINE	39 U [MDL=39]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	20 U [MDL=20]	18 U [MDL=18]	120 U [MDL=120]
4,6-DINITRO-2-METHYLPHENOL	200 U [MDL=200]	93 U [MDL=93]	95 U [MDL=95]	90 U [MDL=90]	98 U [MDL=98]	92 U [MDL=92]	620 UR [MDL=620]
4-BROMOPHENYL PHENYL ETHER	32 U [MDL=32]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	100 U [MDL=100]
4-CHLORO-3-METHYLPHENOL	51 U [MDL=51]	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	24 U [MDL=24]	160 U [MDL=160]
4-CHLOROANILINE	41 U [MDL=41]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	130 U [MDL=130]
4-CHLOROPHENYL PHENYL ETHER	32 U [MDL=32]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	100 U [MDL=100]
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	63 U [MDL=63]	30 U [MDL=30]	31 U [MDL=31]	29 U [MDL=29]	32 U [MDL=32]	30 U [MDL=30]	200 U [MDL=200]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-872 D-SB-872-6-8 4/24/2012	SB-873 D-SB-873-0-1 4/23/2012	SB-873 D-SB-873-1-2 4/23/2012	SB-873 D-SB-873-2-4 4/23/2012	SB-873 D-SB-873-4-6 4/23/2012	SB-873 D-SB-873-6-8 4/23/2012	SB-874 D-SB-874-0-1 4/24/2012
4-NITROPHENOL	200 U [MDL=200]	93 U [MDL=93]	95 U [MDL=95]	90 U [MDL=90]	98 U [MDL=98]	92 U [MDL=92]	620 UR [MDL=620]
ACENAPHTHENE	57 [MDL=8.1]	13 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	49 J [MDL=25]
ACENAPHTHYLENE	8.1 U [MDL=8.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	25 U [MDL=25]
ACETOPHENONE	22 U [MDL=22]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	71 U [MDL=71]
ANTHRACENE	94 [MDL=8.1]	38 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	88 [MDL=25]
ATRAZINE	22 U [MDL=22]	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	10 U [MDL=10]	70 U [MDL=70]
BAP EQUIVALENT-HALFND	124.08 [MDL=NaN]	61.162 [MDL=NaN]	5.5205 [MDL=NaN]	4.9185 [MDL=NaN]	4 U [MDL=NaN]	3.8 U [MDL=NaN]	132.87 [MDL=NaN]
BAP EQUIVALENT-POS	120.03 [MDL=NaN]	59.072 [MDL=NaN]	1.211 [MDL=NaN]	0.83 [MDL=NaN]	4 U [MDL=NaN]	3.8 U [MDL=NaN]	120.37 [MDL=NaN]
BENZALDEHYDE	29 UJ [MDL=29]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	27 J [MDL=15]	14 U [MDL=14]	93 UJ [MDL=93]
BENZO(A)ANTHRACENE	140 [MDL=8.1]	82 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	92 [MDL=25]
BENZO(A)PYRENE	87 [MDL=8.1]	45 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	86 [MDL=25]
BENZO(B)FLUORANTHENE	140 [MDL=8.1]	51 [MDL=3.8]	12 [MDL=3.9]	8.2 [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	180 [MDL=25]
BENZO(G,H,I)PERYLENE	36 [MDL=8.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	93 [MDL=25]
BENZO(K)FLUORANTHENE	80 [MDL=8.1]	69 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	79 [MDL=25]
BIS(2-CHLOROETHOXY)METHANE	54 U [MDL=54]	26 U [MDL=26]	26 U [MDL=26]	25 U [MDL=25]	27 U [MDL=27]	25 U [MDL=25]	170 U [MDL=170]
BIS(2-CHLOROETHYL)ETHER	4.9 U [MDL=4.9]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	15 U [MDL=15]
BIS(2-ETHYLHEXYL)PHTHALATE	46 U [MDL=46]	27 B [MDL=22]	22 U [MDL=22]	21 U [MDL=21]	27 B [MDL=23]	22 U [MDL=22]	150 U [MDL=150]
BUTYL BENZYL PHTHALATE	24 U [MDL=24]	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	77 U [MDL=77]
CAPROLACTAM	90 U [MDL=90]	43 U [MDL=43]	44 U [MDL=44]	42 U [MDL=42]	45 U [MDL=45]	43 U [MDL=43]	290 U [MDL=290]
CARBAZOLE	96 J [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
CHRYSENE	230 [MDL=2.7]	82 [MDL=1.3]	11 [MDL=1.3]	10 [MDL=1.2]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	180 [MDL=8.5]
DIBENZO(A,H)ANTHRACENE	8.1 U [MDL=8.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	25 U [MDL=25]
DIBENZOFURAN	47 J [MDL=8.1]	10 J [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	25 U [MDL=25]
DIETHYL PHTHALATE	39 U [MDL=39]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	20 U [MDL=20]	18 U [MDL=18]	120 U [MDL=120]
DIMETHYL PHTHALATE	41 U [MDL=41]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	130 U [MDL=130]
DI-N-BUTYL PHTHALATE	37 U [MDL=37]	17 U [MDL=17]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	17 U [MDL=17]	120 U [MDL=120]
DI-N-OCTYL PHTHALATE	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
FLUORANTHENE	650 [MDL=8.1]	160 [MDL=3.8]	11 [MDL=3.9]	10 [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	230 [MDL=25]
FLUORENE	72 [MDL=8.1]	14 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	25 U [MDL=25]
HEXACHLOROBENZENE	5.1 U [MDL=5.1]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	16 U [MDL=16]
HEXACHLOROBUTADIENE	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
HEXACHLOROCYCLOPENTADIENE	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 UR [MDL=210]
HEXACHLOROETHANE	22 U [MDL=22]	10 U [MDL=10]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	10 U [MDL=10]	69 U [MDL=69]
INDENO(1,2,3-CD)PYRENE	40 [MDL=8.1]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	62 [MDL=25]
ISOPHORONE	32 U [MDL=32]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	100 U [MDL=100]
NAPHTHALENE	1200 [MDL=8.1]	9 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	1000 [MDL=25]
NITROBENZENE	5.4 U [MDL=5.4]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.5 U [MDL=2.5]	2.7 U [MDL=2.7]	2.5 U [MDL=2.5]	17 U [MDL=17]
N-NITROSODIMETHYLAMINE	39 U [MDL=39]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	20 U [MDL=20]	18 U [MDL=18]	120 U [MDL=120]
N-NITROSO-DI-N-PROPYLAMINE	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
N-NITROSODIPHENYLAMINE	51 U [MDL=51]	24 U [MDL=24]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	24 U [MDL=24]	160 U [MDL=160]
PENTACHLOROPHENOL	200 U [MDL=200]	93 U [MDL=93]	95 U [MDL=95]	90 U [MDL=90]	98 U [MDL=98]	92 U [MDL=92]	620 UR [MDL=620]
PHENANTHRENE	410 [MDL=8.1]	130 [MDL=3.8]	3.9 U [MDL=3.9]	3.7 U [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	100 [MDL=25]
PHENOL	66 U [MDL=66]	31 U [MDL=31]	32 U [MDL=32]	30 U [MDL=30]	33 U [MDL=33]	31 U [MDL=31]	210 U [MDL=210]
PYRENE	430 [MDL=8.1]	120 [MDL=3.8]	10 [MDL=3.9]	9.9 [MDL=3.7]	4 U [MDL=4]	3.8 U [MDL=3.8]	200 [MDL=25]
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	9.6 U [MDL=9.6]	0.64 U [MDL=0.64]	0.50 U [MDL=0.5]	0.51 U [MDL=0.51]	0.62 U [MDL=0.62]	0.54 U [MDL=0.54]	0.92 U [MDL=0.92]
1,1,1-TRICHLOROETHANE	22 U [MDL=22]	0.58 U [MDL=0.58]	0.45 U [MDL=0.45]	0.47 U [MDL=0.47]	0.56 U [MDL=0.56]	0.49 U [MDL=0.49]	0.83 U [MDL=0.83]
1,1,2,2-TETRACHLOROETHANE	9.4 U [MDL=9.4]	0.35 U [MDL=0.35]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.30 U [MDL=0.3]	0.51 U [MDL=0.51]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	41 U [MDL=41]	1.3 U [MDL=1.3]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.9 U [MDL=1.9]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-872 D-SB-872-6-8 4/24/2012	SB-873 D-SB-873-0-1 4/23/2012	SB-873 D-SB-873-1-2 4/23/2012	SB-873 D-SB-873-2-4 4/23/2012	SB-873 D-SB-873-4-6 4/23/2012	SB-873 D-SB-873-6-8 4/23/2012	SB-874 D-SB-874-0-1 4/24/2012
1,1-DICHLOROETHANE	18 U [MDL=18]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	0.30 U [MDL=0.3]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]	0.54 U [MDL=0.54]
1,1-DICHLOROETHENE	19 U [MDL=19]	0.54 U [MDL=0.54]	0.42 U [MDL=0.42]	0.43 U [MDL=0.43]	0.52 U [MDL=0.52]	0.46 U [MDL=0.46]	0.77 U [MDL=0.77]
1,1-DICHLOROPROPENE	11 U [MDL=11]	0.31 U [MDL=0.31]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]	0.30 U [MDL=0.3]	0.26 U [MDL=0.26]	0.45 U [MDL=0.45]
1,2,3-TRICHLOROBENZENE	11 U [MDL=11]	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.56 U [MDL=0.56]
1,2,3-TRICHLOROPROPANE	22 U [MDL=22]	0.93 U [MDL=0.93]	0.72 U [MDL=0.72]	0.75 U [MDL=0.75]	0.90 U [MDL=0.9]	0.79 U [MDL=0.79]	1.3 U [MDL=1.3]
1,2,3-TRIMETHYLBENZENE	10 J [MDL=0.18]	0.18 U [MDL=0.18]	0.14 U [MDL=0.14]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.25 U [MDL=0.25]
1,2,4-TRICHLOROBENZENE	7.7 U [MDL=7.7]	0.28 U [MDL=0.28]	0.22 U [MDL=0.22]	0.22 U [MDL=0.22]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]	0.40 U [MDL=0.4]
1,2,4-TRIMETHYLBENZENE	11 J [MDL=5.3]	0.67 U [MDL=0.67]	0.52 U [MDL=0.52]	0.54 U [MDL=0.54]	0.65 U [MDL=0.65]	0.57 U [MDL=0.57]	0.97 U [MDL=0.97]
1,2-DIBROMO-3-CHLOROPROPANE	53 U [MDL=53]	1.3 U [MDL=1.3]	1 U [MDL=1]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.9 U [MDL=1.9]
1,2-DIBROMOETHANE	11 U [MDL=11]	0.52 U [MDL=0.52]	0.40 U [MDL=0.4]	0.42 U [MDL=0.42]	0.50 U [MDL=0.5]	0.44 U [MDL=0.44]	0.74 U [MDL=0.74]
1,2-DICHLOROBENZENE	9.1 U [MDL=9.1]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	0.30 U [MDL=0.3]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]	0.54 U [MDL=0.54]
1,2-DICHLOROETHANE	11 U [MDL=11]	0.35 U [MDL=0.35]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.30 U [MDL=0.3]	0.51 U [MDL=0.51]
1,2-DICHLOROPROPANE	8.6 U [MDL=8.6]	0.71 U [MDL=0.71]	0.55 U [MDL=0.55]	0.57 U [MDL=0.57]	0.69 U [MDL=0.69]	0.61 U [MDL=0.61]	1 U [MDL=1]
1,3,5-TRIMETHYLBENZENE	6.7 NJ [MDL=6.1]	--	--	--	--	--	--
1,3-DICHLOROBENZENE	5.1 U [MDL=5.1]	0.36 U [MDL=0.36]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.52 U [MDL=0.52]
1,3-DICHLOROPROPANE	23 U [MDL=23]	0.35 U [MDL=0.35]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.30 U [MDL=0.3]	0.51 U [MDL=0.51]
1,4-DICHLOROBENZENE	8.4 U [MDL=8.4]	0.68 U [MDL=0.68]	0.53 U [MDL=0.53]	0.55 U [MDL=0.55]	0.66 U [MDL=0.66]	0.58 U [MDL=0.58]	0.98 U [MDL=0.98]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	24 U [MDL=24]	0.97 U [MDL=0.97]	0.75 U [MDL=0.75]	0.78 U [MDL=0.78]	0.94 U [MDL=0.94]	0.82 U [MDL=0.82]	1.4 U [MDL=1.4]
2-BUTANONE	45 U [MDL=45]	1.4 U [MDL=1.4]	2.5 J [MDL=1.1]	2.8 J [MDL=1.2]	3.7 J [MDL=1.4]	1.5 J [MDL=1.2]	2.1 U [MDL=2.1]
2-CHLOROETHYL VINYL ETHER	45 U [MDL=45]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	2.1 U [MDL=2.1]
2-CHLOROTOLUENE	9.5 U [MDL=9.5]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.40 U [MDL=0.4]	0.35 U [MDL=0.35]	0.59 U [MDL=0.59]
2-HEXANONE	22 J [MDL=21]	0.65 U [MDL=0.65]	0.50 U [MDL=0.5]	0.52 U [MDL=0.52]	0.63 U [MDL=0.63]	0.55 U [MDL=0.55]	0.94 U [MDL=0.94]
2-METHYLNAPHTHALENE	59 NJ [MDL=18]	--	--	--	--	--	--
4-CHLOROTOLUENE	10 U [MDL=10]	0.42 U [MDL=0.42]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.41 U [MDL=0.41]	0.36 U [MDL=0.36]	0.61 U [MDL=0.61]
4-ISOPROPYLTOLUENE	5.1 U [MDL=5.1]	0.22 U [MDL=0.22]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.18 U [MDL=0.18]	0.31 U [MDL=0.31]
4-METHYL-2-PENTANONE	51 U [MDL=51]	0.56 U [MDL=0.56]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.54 U [MDL=0.54]	0.47 U [MDL=0.47]	0.80 U [MDL=0.8]
ACETONE	180 U [MDL=180]	11 B [MDL=6.5]	32 B [MDL=5]	43 B [MDL=5.2]	52 B [MDL=6.3]	23 B [MDL=5.5]	19 J [MDL=9.4]
BENZENE	13 U [MDL=13]	0.24 U [MDL=0.24]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.20 U [MDL=0.2]	0.34 U [MDL=0.34]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	14 U [MDL=14]	0.34 U [MDL=0.34]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.29 U [MDL=0.29]	0.49 U [MDL=0.49]
BROMOCHLOROMETHANE	14 U [MDL=14]	0.73 U [MDL=0.73]	0.57 U [MDL=0.57]	0.59 U [MDL=0.59]	0.71 U [MDL=0.71]	0.62 U [MDL=0.62]	1.1 U [MDL=1.1]
BROMODICHLOROMETHANE	10 U [MDL=10]	0.29 U [MDL=0.29]	0.22 U [MDL=0.22]	0.23 U [MDL=0.23]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.42 U [MDL=0.42]
BROMOFORM	20 U [MDL=20]	0.34 U [MDL=0.34]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.29 U [MDL=0.29]	0.49 U [MDL=0.49]
BROMOMETHANE	31 U [MDL=31]	0.56 U [MDL=0.56]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.54 U [MDL=0.54]	0.47 U [MDL=0.47]	0.80 U [MDL=0.8]
CARBON DISULFIDE	13 U [MDL=13]	1.9 J [MDL=0.46]	1.4 J [MDL=0.35]	1.4 J [MDL=0.37]	1.9 J [MDL=0.44]	1.5 J [MDL=0.39]	3.7 J [MDL=0.65]
CARBON TETRACHLORIDE	6.7 U [MDL=6.7]	0.38 U [MDL=0.38]	0.30 U [MDL=0.3]	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.55 U [MDL=0.55]
CHLOROBENZENE	6.7 U [MDL=6.7]	0.34 U [MDL=0.34]	0.26 U [MDL=0.26]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.29 U [MDL=0.29]	0.49 U [MDL=0.49]
CHLORODIBROMOMETHANE	13 U [MDL=13]	0.57 U [MDL=0.57]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.55 U [MDL=0.55]	0.48 U [MDL=0.48]	0.82 U [MDL=0.82]
CHLOROETHANE	64 U [MDL=64]	0.89 U [MDL=0.89]	0.69 U [MDL=0.69]	0.71 U [MDL=0.71]	0.86 U [MDL=0.86]	0.75 U [MDL=0.75]	1.3 U [MDL=1.3]
CHLOROFORM	9.3 U [MDL=9.3]	0.30 U [MDL=0.3]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.25 U [MDL=0.25]	0.43 U [MDL=0.43]
CHLOROMETHANE	15 U [MDL=15]	0.42 U [MDL=0.42]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.41 U [MDL=0.41]	0.36 U [MDL=0.36]	0.61 U [MDL=0.61]
CIS-1,2-DICHLOROETHENE	7.3 U [MDL=7.3]	0.37 U [MDL=0.37]	0.29 U [MDL=0.29]	0.30 U [MDL=0.3]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]	0.54 U [MDL=0.54]
CIS-1,3-DICHLOROPROPENE	8.3 U [MDL=8.3]	0.35 U [MDL=0.35]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.30 U [MDL=0.3]	0.51 U [MDL=0.51]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	15 U [MDL=15]	0.65 U [MDL=0.65]	0.50 U [MDL=0.5]	0.52 U [MDL=0.52]	0.63 U [MDL=0.63]	0.55 U [MDL=0.55]	0.94 U [MDL=0.94]
DICHLORODIFLUOROMETHANE	17 U [MDL=17]	0.52 U [MDL=0.52]	0.40 U [MDL=0.4]	0.42 U [MDL=0.42]	0.50 U [MDL=0.5]	0.44 U [MDL=0.44]	0.74 U [MDL=0.74]
DIISOPROPYL ETHER	53 U [MDL=53]	1.6 U [MDL=1.6]	1.2 U [MDL=1.2]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	2.2 U [MDL=2.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-872 D-SB-872-6-8 4/24/2012	SB-873 D-SB-873-0-1 4/23/2012	SB-873 D-SB-873-1-2 4/23/2012	SB-873 D-SB-873-2-4 4/23/2012	SB-873 D-SB-873-4-6 4/23/2012	SB-873 D-SB-873-6-8 4/23/2012	SB-874 D-SB-874-0-1 4/24/2012
DISILOXANE, HEXAMETHYL-	280 R [NA=NaN]	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.23 U [MDL=0.23]	0.23 U [MDL=0.23]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]	0.19 U [MDL=0.19]	0.33 U [MDL=0.33]
ETHYLBENZENE	19 B [MDL=5.7]	0.27 U [MDL=0.27]	0.21 U [MDL=0.21]	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.23 U [MDL=0.23]	0.39 U [MDL=0.39]
HEXACHLOROBUTADIENE	15 U [MDL=15]	1.2 U [MDL=1.2]	0.96 U [MDL=0.96]	1 U [MDL=1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.8 U [MDL=1.8]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	6.8 U [MDL=6.8]	0.17 U [MDL=0.17]	0.13 U [MDL=0.13]	0.13 U [MDL=0.13]	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.24 U [MDL=0.24]
M+P-XYLENES	21 B [MDL=6.5]	1.2 U [MDL=1.2]	0.96 U [MDL=0.96]	1 U [MDL=1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.8 U [MDL=1.8]
METHYL ACETATE	52 NJ [MDL=26]	--	--	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	7.5 U [MDL=7.5]	0.44 U [MDL=0.44]	0.34 U [MDL=0.34]	0.36 U [MDL=0.36]	0.43 U [MDL=0.43]	0.38 U [MDL=0.38]	0.64 U [MDL=0.64]
METHYLENE CHLORIDE	81 U [MDL=81]	0.69 U [MDL=0.69]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]	0.67 U [MDL=0.67]	0.72 J [MDL=0.59]	1.5 J [MDL=1]
NAPHTHALENE	400 [MDL=7.1]	0.31 B [MDL=0.2]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]	29 [MDL=0.28]
N-BUTYLBENZENE	9.2 J [MDL=8.4]	0.24 U [MDL=0.24]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.20 U [MDL=0.2]	0.34 U [MDL=0.34]
N-PROPYLBENZENE	15 U [MDL=15]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.40 U [MDL=0.4]	0.35 U [MDL=0.35]	0.59 U [MDL=0.59]
O-XYLENE	15 B [MDL=8.9]	0.36 U [MDL=0.36]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.52 U [MDL=0.52]
SEC-BUTYLBENZENE	4.9 U [MDL=4.9]	0.19 U [MDL=0.19]	0.14 U [MDL=0.14]	0.15 U [MDL=0.15]	0.18 U [MDL=0.18]	0.16 U [MDL=0.16]	0.27 U [MDL=0.27]
STYRENE	6.7 B [MDL=5.9]	0.16 B [MDL=0.16]	0.12 U [MDL=0.12]	0.12 U [MDL=0.12]	0.15 U [MDL=0.15]	0.13 U [MDL=0.13]	0.22 U [MDL=0.22]
TERT-AMYL METHYL ETHER	0.39 U [MDL=0.39]	0.38 U [MDL=0.38]	0.30 U [MDL=0.3]	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.55 U [MDL=0.55]
TERT-BUTYLBENZENE	6.8 U [MDL=6.8]	0.30 U [MDL=0.3]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.25 U [MDL=0.25]	0.43 U [MDL=0.43]
TERTIARY-BUTYL ALCOHOL	250 UR [MDL=250]	7.9 UR [MDL=7.9]	6.1 UR [MDL=6.1]	6.3 UR [MDL=6.3]	7.6 UR [MDL=7.6]	6.7 UR [MDL=6.7]	11 UR [MDL=11]
TETRACHLOROETHENE	13 U [MDL=13]	1.9 J [MDL=0.54]	0.42 U [MDL=0.42]	0.43 U [MDL=0.43]	0.52 U [MDL=0.52]	0.46 U [MDL=0.46]	0.77 U [MDL=0.77]
TOLUENE	19 J [MDL=18]	0.28 U [MDL=0.28]	0.22 U [MDL=0.22]	0.22 U [MDL=0.22]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]	0.43 J [MDL=0.4]
TOTAL XYLENES	36 B [MDL=8.5]	0.69 U [MDL=0.69]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]	0.67 U [MDL=0.67]	0.59 U [MDL=0.59]	1 U [MDL=1]
TRANS-1,2-DICHLOROETHENE	9.7 U [MDL=9.7]	0.42 U [MDL=0.42]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]	0.41 U [MDL=0.41]	0.36 U [MDL=0.36]	0.61 U [MDL=0.61]
TRANS-1,3-DICHLOROPROPENE	21 U [MDL=21]	0.56 U [MDL=0.56]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.54 U [MDL=0.54]	0.47 U [MDL=0.47]	0.80 U [MDL=0.8]
TRICHLOROETHENE	10 U [MDL=10]	0.43 U [MDL=0.43]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.42 U [MDL=0.42]	0.37 U [MDL=0.37]	0.62 U [MDL=0.62]
TRICHLOROFLUOROMETHANE	17 U [MDL=17]	0.35 U [MDL=0.35]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.30 U [MDL=0.3]	0.51 U [MDL=0.51]
VINYL ACETATE	24 UR [MDL=24]	0.26 UR [MDL=0.26]	0.20 UR [MDL=0.2]	0.21 UR [MDL=0.21]	0.25 UR [MDL=0.25]	0.22 UR [MDL=0.22]	0.37 UR [MDL=0.37]
VINYL CHLORIDE	19 U [MDL=19]	0.40 U [MDL=0.4]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.34 U [MDL=0.34]	0.58 U [MDL=0.58]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-872	SB-873	SB-873	SB-873	SB-873	SB-873	SB-874
SAMPLE ID	D-SB-872-6-8	D-SB-873-0-1	D-SB-873-1-2	D-SB-873-2-4	D-SB-873-4-6	D-SB-873-6-8	D-SB-874-0-1
SAMPLE DATE	4/24/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/24/2012
TOTAL PAHS	--	--	--	--	--	--	--
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	26 U [MDL=26]	24 U [MDL=24]	24 U [MDL=24]
AROCLOR-1221	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	20 U [MDL=20]	18 U [MDL=18]	19 U [MDL=19]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	16 U [MDL=16]	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1254	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1260	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	21 U [MDL=21]	20 U [MDL=20]	20 U [MDL=20]
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	7.6 UJ [MDL=7.6]	72 U [MDL=72]	7.3 U [MDL=7.3]	14 U [MDL=14]	15 U [MDL=15]	0.71 U [MDL=0.71]	36 U [MDL=36]
4,4'-DDE	4.8 U [MDL=4.8]	46 U [MDL=46]	4.6 U [MDL=4.6]	8.8 U [MDL=8.8]	9.5 U [MDL=9.5]	0.45 U [MDL=0.45]	23 U [MDL=23]
4,4'-DDT	7.7 U [MDL=7.7]	74 U [MDL=74]	7.4 U [MDL=7.4]	14 U [MDL=14]	15 U [MDL=15]	0.73 U [MDL=0.73]	37 U [MDL=37]
ALDRIN	15 U [MDL=15]	140 U [MDL=140]	14 U [MDL=14]	27 U [MDL=27]	29 U [MDL=29]	1.4 U [MDL=1.4]	70 U [MDL=70]
ALPHA-BHC	8.9 U [MDL=8.9]	85 U [MDL=85]	8.6 U [MDL=8.6]	16 U [MDL=16]	18 U [MDL=18]	0.84 U [MDL=0.84]	43 U [MDL=43]
ALPHA-CHLORDANE	11 U [MDL=11]	110 U [MDL=110]	11 U [MDL=11]	21 U [MDL=21]	23 U [MDL=23]	1.1 U [MDL=1.1]	55 U [MDL=55]
BETA-BHC	13 U [MDL=13]	130 U [MDL=130]	13 U [MDL=13]	25 U [MDL=25]	27 U [MDL=27]	1.3 U [MDL=1.3]	64 U [MDL=64]
DELTA-BHC	15 U [MDL=15]	140 U [MDL=140]	14 U [MDL=14]	27 U [MDL=27]	29 U [MDL=29]	1.4 U [MDL=1.4]	70 U [MDL=70]
DIELDRIN	5.7 U [MDL=5.7]	55 U [MDL=55]	5.6 U [MDL=5.6]	11 U [MDL=11]	11 U [MDL=11]	0.54 U [MDL=0.54]	27 U [MDL=27]
ENDOSULFAN I	6.4 UJ [MDL=6.4]	61 U [MDL=61]	6.1 U [MDL=6.1]	12 U [MDL=12]	13 U [MDL=13]	0.60 U [MDL=0.6]	30 U [MDL=30]
ENDOSULFAN II	10 U [MDL=10]	96 U [MDL=96]	9.7 U [MDL=9.7]	19 U [MDL=19]	20 U [MDL=20]	0.94 U [MDL=0.94]	48 U [MDL=48]
ENDOSULFAN SULFATE	11 U [MDL=11]	100 U [MDL=100]	10 U [MDL=10]	20 U [MDL=20]	21 U [MDL=21]	1 U [MDL=1]	51 U [MDL=51]
ENDRIN	6.1 U [MDL=6.1]	58 U [MDL=58]	5.9 U [MDL=5.9]	11 U [MDL=11]	12 U [MDL=12]	0.58 U [MDL=0.58]	29 U [MDL=29]
ENDRIN ALDEHYDE	12 U [MDL=12]	120 U [MDL=120]	12 U [MDL=12]	23 U [MDL=23]	24 U [MDL=24]	1.2 U [MDL=1.2]	58 U [MDL=58]
ENDRIN KETONE	7.7 U [MDL=7.7]	74 U [MDL=74]	7.4 U [MDL=7.4]	14 U [MDL=14]	15 U [MDL=15]	0.73 U [MDL=0.73]	37 U [MDL=37]
GAMMA-BHC (LINDANE)	9 UJ [MDL=9]	86 U [MDL=86]	8.7 U [MDL=8.7]	17 U [MDL=17]	18 U [MDL=18]	0.85 U [MDL=0.85]	43 U [MDL=43]
GAMMA-CHLORDANE	5.1 U [MDL=5.1]	49 U [MDL=49]	5 U [MDL=5]	9.5 U [MDL=9.5]	10 U [MDL=10]	0.48 U [MDL=0.48]	24 U [MDL=24]
HEPTACHLOR	13 UJ [MDL=13]	130 U [MDL=130]	13 U [MDL=13]	25 UJ [MDL=25]	27 UJ [MDL=27]	1.3 U [MDL=1.3]	64 UJ [MDL=64]
HEPTACHLOR EPOXIDE	9.8 U [MDL=9.8]	93 U [MDL=93]	9.5 U [MDL=9.5]	18 U [MDL=18]	20 U [MDL=20]	0.92 U [MDL=0.92]	47 U [MDL=47]
METHOXYCHLOR	18 U [MDL=18]	180 U [MDL=180]	18 U [MDL=18]	34 U [MDL=34]	37 U [MDL=37]	1.7 U [MDL=1.7]	87 U [MDL=87]
TOXAPHENE	230 U [MDL=230]	2200 U [MDL=2200]	220 U [MDL=220]	430 U [MDL=430]	460 U [MDL=460]	22 U [MDL=22]	1100 U [MDL=1100]
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-872	SB-873	SB-873	SB-873	SB-873	SB-873	SB-874
SAMPLE ID	D-SB-872-6-8	D-SB-873-0-1	D-SB-873-1-2	D-SB-873-2-4	D-SB-873-4-6	D-SB-873-6-8	D-SB-874-0-1
SAMPLE DATE	4/24/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/24/2012
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	52 [MDL=11]	330 [MDL=54]	100 [MDL=11]	63 [MDL=10]	86 [MDL=11]	14 J [MDL=11]	780 [MDL=54]
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	56 U [MDL=56]	130 [MDL=54]	54 U [MDL=54]	52 U [MDL=52]	56 U [MDL=56]	53 U [MDL=53]	78 J [MDL=54]

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-874	SB-874	SB-874	SB-874	SB-875	SB-875	SB-875
SAMPLE ID	D-SB-874-1-2	D-SB-874-2-4	D-SB-874-4-6	D-SB-874-6-8	D-SB-875-0-1	D-SB-875-1-2	D-SB-875-2-4
SAMPLE DATE	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/23/2012	4/23/2012	4/23/2012
METALS (MG/KG)							
ANTIMONY	0.49 B [MDL=0.41]	0.75 B [MDL=0.41]	0.53 B [MDL=0.47]	0.44 UL [MDL=0.44]	1.3 J [MDL=0.38]	2 UJ [MDL=2]	1.7 J [MDL=0.38]
ARSENIC	4.2 [MDL=0.32]	3 [MDL=0.31]	4.4 [MDL=0.36]	3.6 [MDL=0.34]	1.8 [MDL=0.29]	24 [MDL=0.31]	7.7 [MDL=0.29]
BARIUM	12 J [MDL=0.075]	17 J [MDL=0.074]	25 [MDL=0.086]	15 J [MDL=0.08]	15 J [MDL=0.07]	17 J [MDL=0.073]	77 J [MDL=0.07]
BERYLLIUM	1.1 [MDL=0.046]	1.7 [MDL=0.045]	1.5 [MDL=0.052]	1.2 [MDL=0.049]	0.042 U [MDL=0.042]	0.65 [MDL=0.044]	1.3 [MDL=0.042]
CADMIUM	0.26 J [MDL=0.038]	0.38 J [MDL=0.037]	0.24 J [MDL=0.043]	0.21 J [MDL=0.041]	0.1 J [MDL=0.035]	0.18 U [MDL=0.18]	0.22 J [MDL=0.035]
CHROMIUM	21 [MDL=0.21]	24 [MDL=0.21]	21 [MDL=0.24]	16 [MDL=0.23]	12 J [MDL=0.2]	26 J [MDL=0.2]	53 J [MDL=0.2]
COBALT	5.9 [MDL=0.17]	8.2 [MDL=0.17]	7.8 [MDL=0.19]	10 [MDL=0.18]	1.9 L [MDL=0.16]	2.7 [MDL=0.16]	44 [MDL=0.16]
COPPER	18 [MDL=0.78]	16 [MDL=0.77]	16 [MDL=0.89]	15 [MDL=0.84]	3.9 L [MDL=0.73]	13 [MDL=0.76]	38 [MDL=0.73]
IRON	--	--	--	--	--	--	--
LEAD	5.4 [MDL=0.2]	9.4 [MDL=0.2]	7.9 [MDL=0.23]	8.9 [MDL=0.21]	6.1 [MDL=0.19]	8.7 [MDL=0.97]	39 [MDL=0.19]
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.024 B [MDL=0.017]	0.032 B [MDL=0.019]	0.05 B [MDL=0.016]	0.036 B [MDL=0.019]	0.019 J [MDL=0.015]	0.077 J [MDL=0.016]	0.15 [MDL=0.019]
MOLYBDENUM	0.32 B [MDL=0.29]	0.88 B [MDL=0.28]	0.55 B [MDL=0.33]	0.6 B [MDL=0.31]	0.29 B [MDL=0.27]	0.28 U [MDL=0.28]	0.39 B [MDL=0.26]
NICKEL	14 [MDL=0.29]	16 [MDL=0.28]	17 [MDL=0.33]	15 [MDL=0.31]	10 [MDL=0.27]	8.6 [MDL=0.28]	64 [MDL=0.26]
SELENIUM	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]	0.54 U [MDL=0.54]	0.51 U [MDL=0.51]	0.44 U [MDL=0.44]	2.3 U [MDL=2.3]	0.44 U [MDL=0.44]
SILVER	0.14 J [MDL=0.11]	0.54 J [MDL=0.1]	0.12 UL [MDL=0.12]	0.11 UL [MDL=0.11]	0.098 UL [MDL=0.098]	0.10 UL [MDL=0.1]	0.098 UL [MDL=0.098]
THALLIUM	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]	0.66 U [MDL=0.66]	0.62 U [MDL=0.62]	0.54 U [MDL=0.54]	2.8 U [MDL=2.8]	1.2 J [MDL=0.54]
VANADIUM	36 [MDL=0.13]	30 [MDL=0.12]	33 [MDL=0.14]	30 [MDL=0.14]	16 J [MDL=0.12]	57 J [MDL=0.61]	360 J [MDL=0.12]
ZINC	18 [MDL=1.1]	40 [MDL=1]	33 [MDL=1.2]	30 [MDL=1.1]	11 L [MDL=0.98]	23 J [MDL=5.1]	130 L [MDL=0.98]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.28 U [MDL=0.28]	0.28 U [MDL=0.28]	0.33 U [MDL=0.33]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	1600 U [MDL=1600]	630 U [MDL=630]	1100 J [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
1,4-DIOXANE	1300 U [MDL=1300]	520 U [MDL=520]	670 U [MDL=670]	26 U [MDL=26]	230 U [MDL=230]	23 U [MDL=23]	27 U [MDL=27]
2,2'-OXYBIS(1-CHLOROPROPANE)	550 U [MDL=550]	220 U [MDL=220]	290 U [MDL=290]	11 U [MDL=11]	99 U [MDL=99]	10 U [MDL=10]	12 U [MDL=12]
2,4,5-TRICHLOROPHENOL	1500 UR [MDL=1500]	590 U [MDL=590]	760 U [MDL=760]	29 U [MDL=29]	260 U [MDL=260]	26 U [MDL=26]	30 U [MDL=30]
2,4,6-TRICHLOROPHENOL	4600 UR [MDL=4600]	1900 U [MDL=1900]	2400 U [MDL=2400]	94 U [MDL=94]	830 U [MDL=830]	84 U [MDL=84]	98 U [MDL=98]
2,4-DICHLOROPHENOL	1200 UR [MDL=1200]	470 U [MDL=470]	610 U [MDL=610]	23 U [MDL=23]	210 U [MDL=210]	21 U [MDL=21]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	1200 UR [MDL=1200]	470 U [MDL=470]	610 U [MDL=610]	23 U [MDL=23]	210 U [MDL=210]	21 U [MDL=21]	24 U [MDL=24]
2,4-DINITROPHENOL	4600 UR [MDL=4600]	1900 U [MDL=1900]	2400 U [MDL=2400]	94 U [MDL=94]	830 U [MDL=830]	84 U [MDL=84]	98 U [MDL=98]
2,4-DINITROTOLUENE	1600 U [MDL=1600]	630 U [MDL=630]	820 U [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
2,6-DINITROTOLUENE	1200 U [MDL=1200]	490 U [MDL=490]	640 U [MDL=640]	25 U [MDL=25]	220 U [MDL=220]	22 U [MDL=22]	26 U [MDL=26]
2-CHLORONAPHTHALENE	190 U [MDL=190]	78 U [MDL=78]	100 U [MDL=100]	3.9 U [MDL=3.9]	34 U [MDL=34]	3.5 U [MDL=3.5]	4 U [MDL=4]
2-CHLOROPHENOL	1600 UR [MDL=1600]	630 U [MDL=630]	820 U [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
2-METHYLNAPHTHALENE	6400 [MDL=190]	2600 [MDL=78]	6200 [MDL=100]	36 [MDL=3.9]	34 U [MDL=34]	69 [MDL=3.5]	32 [MDL=4]
2-METHYLPHENOL	4600 UR [MDL=4600]	1900 U [MDL=1900]	2400 U [MDL=2400]	94 U [MDL=94]	830 U [MDL=830]	84 U [MDL=84]	98 U [MDL=98]
2-NITROANILINE	530 U [MDL=530]	210 U [MDL=210]	280 U [MDL=280]	11 U [MDL=11]	95 U [MDL=95]	9.5 U [MDL=9.5]	11 U [MDL=11]
2-NITROPHENOL	1600 UR [MDL=1600]	630 U [MDL=630]	820 U [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
3&4-METHYLPHENOL	1200 UR [MDL=1200]	470 U [MDL=470]	610 U [MDL=610]	23 U [MDL=23]	210 U [MDL=210]	21 U [MDL=21]	24 U [MDL=24]
3,3'-DICHLOROBENZIDINE	1000 U [MDL=1000]	420 U [MDL=420]	540 U [MDL=540]	21 U [MDL=21]	190 U [MDL=190]	19 U [MDL=19]	22 U [MDL=22]
3-NITROANILINE	930 U [MDL=930]	380 U [MDL=380]	480 U [MDL=480]	19 U [MDL=19]	170 U [MDL=170]	17 U [MDL=17]	20 U [MDL=20]
4,6-DINITRO-2-METHYLPHENOL	4600 UR [MDL=4600]	1900 U [MDL=1900]	2400 U [MDL=2400]	94 U [MDL=94]	830 U [MDL=830]	84 U [MDL=84]	98 U [MDL=98]
4-BROMOPHENYL PHENYL ETHER	750 U [MDL=750]	310 U [MDL=310]	390 U [MDL=390]	15 U [MDL=15]	140 U [MDL=140]	14 U [MDL=14]	16 U [MDL=16]
4-CHLORO-3-METHYLPHENOL	1200 UR [MDL=1200]	490 U [MDL=490]	640 U [MDL=640]	25 U [MDL=25]	220 U [MDL=220]	22 U [MDL=22]	26 U [MDL=26]
4-CHLOROANILINE	990 U [MDL=990]	400 U [MDL=400]	510 U [MDL=510]	20 U [MDL=20]	180 U [MDL=180]	18 U [MDL=18]	21 U [MDL=21]
4-CHLOROPHENYL PHENYL ETHER	750 U [MDL=750]	310 U [MDL=310]	390 U [MDL=390]	15 U [MDL=15]	140 U [MDL=140]	14 U [MDL=14]	16 U [MDL=16]
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	1500 U [MDL=1500]	610 U [MDL=610]	790 U [MDL=790]	31 U [MDL=31]	270 U [MDL=270]	27 U [MDL=27]	32 U [MDL=32]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-874 D-SB-874-1-2 4/24/2012	SB-874 D-SB-874-2-4 4/24/2012	SB-874 D-SB-874-4-6 4/24/2012	SB-874 D-SB-874-6-8 4/24/2012	SB-875 D-SB-875-0-1 4/23/2012	SB-875 D-SB-875-1-2 4/23/2012	SB-875 D-SB-875-2-4 4/23/2012
4-NITROPHENOL	4600 UR [MDL=4600]	1900 U [MDL=1900]	2400 U [MDL=2400]	94 U [MDL=94]	830 U [MDL=830]	84 U [MDL=84]	98 U [MDL=98]
ACENAPHTHENE	9700 [MDL=190]	4200 [MDL=78]	6200 [MDL=100]	38 [MDL=3.9]	34 U [MDL=34]	18 [MDL=3.5]	15 [MDL=4]
ACENAPHTHYLENE	190 U [MDL=190]	78 U [MDL=78]	100 U [MDL=100]	3.9 U [MDL=3.9]	34 U [MDL=34]	3.5 U [MDL=3.5]	4 U [MDL=4]
ACETOPHENONE	530 U [MDL=530]	220 U [MDL=220]	280 U [MDL=280]	11 U [MDL=11]	96 U [MDL=96]	9.6 U [MDL=9.6]	11 U [MDL=11]
ANTHRACENE	4600 [MDL=190]	2600 [MDL=78]	2000 [MDL=100]	16 [MDL=3.9]	34 U [MDL=34]	42 [MDL=3.5]	54 [MDL=4]
ATRAZINE	530 U [MDL=530]	210 U [MDL=210]	280 U [MDL=280]	11 U [MDL=11]	95 U [MDL=95]	9.5 U [MDL=9.5]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	6008 [MDL=NaN]	1672.7 [MDL=NaN]	965.1 [MDL=NaN]	21.881 [MDL=NaN]	34 U [MDL=NaN]	67.23 [MDL=NaN]	36.257 [MDL=NaN]
BAP EQUIVALENT-POS	5913 [MDL=NaN]	1633.7 [MDL=NaN]	915.1 [MDL=NaN]	19.931 [MDL=NaN]	34 U [MDL=NaN]	65.48 [MDL=NaN]	34.057 [MDL=NaN]
BENZALDEHYDE	700 UJ [MDL=700]	280 UJ [MDL=280]	360 UJ [MDL=360]	14 UJ [MDL=14]	130 U [MDL=130]	13 U [MDL=13]	15 U [MDL=15]
BENZO(A)ANTHRACENE	6900 [MDL=190]	1800 [MDL=78]	980 [MDL=100]	16 [MDL=3.9]	34 U [MDL=34]	85 [MDL=3.5]	43 [MDL=4]
BENZO(A)PYRENE	4300 [MDL=190]	1200 [MDL=78]	670 [MDL=100]	15 [MDL=3.9]	34 U [MDL=34]	42 [MDL=3.5]	25 [MDL=4]
BENZO(B)FLUORANTHENE	7200 [MDL=190]	1900 [MDL=78]	1100 [MDL=100]	25 [MDL=3.9]	34 U [MDL=34]	110 [MDL=3.5]	45 [MDL=4]
BENZO(G,H,I)PERYLENE	1900 [MDL=190]	600 [MDL=78]	320 [MDL=100]	8.3 [MDL=3.9]	34 U [MDL=34]	41 [MDL=3.5]	4 U [MDL=4]
BENZO(K)FLUORANTHENE	2900 [MDL=190]	860 [MDL=78]	570 [MDL=100]	12 [MDL=3.9]	34 U [MDL=34]	45 [MDL=3.5]	20 [MDL=4]
BIS(2-CHLOROETHOXY)METHANE	1300 U [MDL=1300]	520 U [MDL=520]	670 U [MDL=670]	26 U [MDL=26]	230 U [MDL=230]	23 U [MDL=23]	27 U [MDL=27]
BIS(2-CHLOROETHYL)ETHER	120 U [MDL=120]	47 U [MDL=47]	61 U [MDL=61]	2.3 U [MDL=2.3]	21 U [MDL=21]	2.1 U [MDL=2.1]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	1100 U [MDL=1100]	450 U [MDL=450]	580 U [MDL=580]	22 U [MDL=22]	200 U [MDL=200]	34 B [MDL=20]	40 B [MDL=23]
BUTYL BENZYL PHTHALATE	580 U [MDL=580]	240 U [MDL=240]	300 U [MDL=300]	12 U [MDL=12]	100 U [MDL=100]	10 U [MDL=10]	12 U [MDL=12]
CAPROLACTAM	2100 U [MDL=2100]	870 U [MDL=870]	1100 U [MDL=1100]	43 U [MDL=43]	390 U [MDL=390]	39 U [MDL=39]	45 U [MDL=45]
CARBAZOLE	2500 J [MDL=1600]	2700 [MDL=630]	11000 [MDL=820]	49 J [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
CHRYSENE	4000 [MDL=64]	2100 [MDL=26]	1400 [MDL=33]	31 [MDL=1.3]	11 U [MDL=11]	130 [MDL=1.2]	57 [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	190 U [MDL=190]	78 U [MDL=78]	100 U [MDL=100]	3.9 U [MDL=3.9]	34 U [MDL=34]	3.5 U [MDL=3.5]	4 U [MDL=4]
DIBENZOFURAN	6800 [MDL=190]	2600 [MDL=78]	4300 [MDL=100]	26 J [MDL=3.9]	34 U [MDL=34]	44 J [MDL=3.5]	23 J [MDL=4]
DIETHYL PHTHALATE	930 U [MDL=930]	380 U [MDL=380]	480 U [MDL=480]	19 U [MDL=19]	170 U [MDL=170]	17 U [MDL=17]	20 U [MDL=20]
DIMETHYL PHTHALATE	990 U [MDL=990]	400 U [MDL=400]	510 U [MDL=510]	20 U [MDL=20]	180 U [MDL=180]	18 U [MDL=18]	21 U [MDL=21]
DI-N-BUTYL PHTHALATE	870 U [MDL=870]	350 U [MDL=350]	450 U [MDL=450]	18 U [MDL=18]	160 U [MDL=160]	16 U [MDL=16]	18 U [MDL=18]
DI-N-OCTYL PHTHALATE	1600 U [MDL=1600]	630 U [MDL=630]	820 U [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
FLUORANTHENE	27000 [MDL=190]	10000 [MDL=78]	3900 [MDL=100]	77 [MDL=3.9]	34 U [MDL=34]	130 [MDL=3.5]	120 [MDL=4]
FLUORENE	9600 [MDL=190]	4000 [MDL=78]	4900 [MDL=100]	31 [MDL=3.9]	34 U [MDL=34]	25 [MDL=3.5]	44 [MDL=4]
HEXACHLOROBENZENE	120 U [MDL=120]	49 U [MDL=49]	64 U [MDL=64]	2.5 U [MDL=2.5]	22 U [MDL=22]	2.2 U [MDL=2.2]	2.6 U [MDL=2.6]
HEXACHLOROBUTADIENE	1600 U [MDL=1600]	630 U [MDL=630]	820 U [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
HEXACHLOROCYCLOPENTADIENE	1600 U [MDL=1600]	630 U [MDL=630]	820 U [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
HEXACHLOROETHANE	520 U [MDL=520]	210 U [MDL=210]	270 U [MDL=270]	11 U [MDL=11]	94 U [MDL=94]	9.4 U [MDL=9.4]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	1700 [MDL=190]	530 [MDL=78]	300 [MDL=100]	6.8 J [MDL=3.9]	34 U [MDL=34]	34 [MDL=3.5]	4 U [MDL=4]
ISOPHORONE	750 U [MDL=750]	310 U [MDL=310]	390 U [MDL=390]	15 U [MDL=15]	140 U [MDL=140]	14 U [MDL=14]	16 U [MDL=16]
NAPHTHALENE	21000 [MDL=190]	27000 [MDL=78]	34000 [MDL=100]	270 [MDL=3.9]	34 U [MDL=34]	58 [MDL=3.5]	34 [MDL=4]
NITROBENZENE	130 U [MDL=130]	52 U [MDL=52]	67 U [MDL=67]	2.6 U [MDL=2.6]	23 U [MDL=23]	2.3 U [MDL=2.3]	2.7 U [MDL=2.7]
N-NITROSODIMETHYLAMINE	930 U [MDL=930]	380 U [MDL=380]	480 U [MDL=480]	19 U [MDL=19]	170 U [MDL=170]	17 U [MDL=17]	20 U [MDL=20]
N-NITROSO-DI-N-PROPYLAMINE	1600 U [MDL=1600]	630 U [MDL=630]	820 U [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
N-NITROSODIPHENYLAMINE	1200 U [MDL=1200]	490 U [MDL=490]	640 U [MDL=640]	25 U [MDL=25]	220 U [MDL=220]	22 U [MDL=22]	26 U [MDL=26]
PENTACHLOROPHENOL	4600 UR [MDL=4600]	1900 U [MDL=1900]	2400 U [MDL=2400]	94 U [MDL=94]	830 U [MDL=830]	84 U [MDL=84]	98 U [MDL=98]
PHENANTHRENE	37000 [MDL=190]	15000 [MDL=78]	11000 [MDL=100]	140 [MDL=3.9]	34 U [MDL=34]	160 [MDL=3.5]	210 [MDL=4]
PHENOL	1600 UR [MDL=1600]	630 U [MDL=630]	820 U [MDL=820]	32 U [MDL=32]	280 U [MDL=280]	28 U [MDL=28]	33 U [MDL=33]
PYRENE	18000 [MDL=190]	7300 [MDL=78]	2800 [MDL=100]	53 [MDL=3.9]	34 U [MDL=34]	120 [MDL=3.5]	110 [MDL=4]
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	100 U [MDL=100]	43 U [MDL=43]	170 U [MDL=170]	8.9 U [MDL=8.9]	0.79 U [MDL=0.79]	0.48 U [MDL=0.48]	0.66 U [MDL=0.66]
1,1,1-TRICHLOROETHANE	240 U [MDL=240]	99 U [MDL=99]	380 U [MDL=380]	20 U [MDL=20]	0.71 U [MDL=0.71]	0.43 U [MDL=0.43]	0.59 U [MDL=0.59]
1,1,2,2-TETRACHLOROETHANE	100 U [MDL=100]	42 U [MDL=42]	160 U [MDL=160]	8.7 U [MDL=8.7]	0.43 U [MDL=0.43]	0.26 U [MDL=0.26]	0.36 U [MDL=0.36]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	440 U [MDL=440]	180 U [MDL=180]	710 U [MDL=710]	38 U [MDL=38]	1.7 U [MDL=1.7]	1 U [MDL=1]	1.4 U [MDL=1.4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-874 D-SB-874-1-2 4/24/2012	SB-874 D-SB-874-2-4 4/24/2012	SB-874 D-SB-874-4-6 4/24/2012	SB-874 D-SB-874-6-8 4/24/2012	SB-875 D-SB-875-0-1 4/23/2012	SB-875 D-SB-875-1-2 4/23/2012	SB-875 D-SB-875-2-4 4/23/2012
1,1-DICHLOROETHANE	190 U [MDL=190]	80 U [MDL=80]	310 U [MDL=310]	17 U [MDL=17]	0.46 U [MDL=0.46]	0.28 U [MDL=0.28]	0.38 U [MDL=0.38]
1,1-DICHLOROETHENE	200 U [MDL=200]	85 U [MDL=85]	330 U [MDL=330]	18 U [MDL=18]	0.66 U [MDL=0.66]	0.40 U [MDL=0.4]	0.55 U [MDL=0.55]
1,1-DICHLOROPROPENE	110 U [MDL=110]	47 U [MDL=47]	180 U [MDL=180]	9.7 U [MDL=9.7]	0.38 U [MDL=0.38]	0.23 U [MDL=0.23]	0.32 U [MDL=0.32]
1,2,3-TRICHLOROBENZENE	110 U [MDL=110]	47 U [MDL=47]	180 U [MDL=180]	9.7 U [MDL=9.7]	0.48 U [MDL=0.48]	0.29 U [MDL=0.29]	0.40 U [MDL=0.4]
1,2,3-TRICHLOROPROPANE	240 U [MDL=240]	99 U [MDL=99]	380 U [MDL=380]	20 U [MDL=20]	1.1 U [MDL=1.1]	0.69 U [MDL=0.69]	0.95 U [MDL=0.95]
1,2,3-TRIMETHYLBENZENE	170 J [MDL=1.9]	39 J [MDL=0.8]	320 J [MDL=3.1]	16 J [MDL=0.17]	0.22 U [MDL=0.22]	0.13 U [MDL=0.13]	0.18 U [MDL=0.18]
1,2,4-TRICHLOROBENZENE	83 U [MDL=83]	35 U [MDL=35]	130 U [MDL=130]	7.1 U [MDL=7.1]	0.34 U [MDL=0.34]	0.21 U [MDL=0.21]	0.29 U [MDL=0.29]
1,2,4-TRIMETHYLBENZENE	110 J [MDL=57]	62 J [MDL=24]	480 J [MDL=92]	29 J [MDL=4.9]	0.83 U [MDL=0.83]	0.50 U [MDL=0.5]	0.69 U [MDL=0.69]
1,2-DIBROMO-3-CHLOROPROPANE	570 U [MDL=570]	240 U [MDL=240]	920 U [MDL=920]	49 U [MDL=49]	1.7 U [MDL=1.7]	1 U [MDL=1]	1.4 U [MDL=1.4]
1,2-DIBROMOETHANE	110 U [MDL=110]	47 U [MDL=47]	180 U [MDL=180]	9.7 U [MDL=9.7]	0.64 U [MDL=0.64]	0.39 U [MDL=0.39]	0.53 U [MDL=0.53]
1,2-DICHLOROBENZENE	98 U [MDL=98]	41 U [MDL=41]	160 U [MDL=160]	8.4 U [MDL=8.4]	0.46 U [MDL=0.46]	0.28 U [MDL=0.28]	0.38 U [MDL=0.38]
1,2-DICHLOROETHANE	110 U [MDL=110]	47 U [MDL=47]	180 U [MDL=180]	9.7 U [MDL=9.7]	0.43 U [MDL=0.43]	0.26 U [MDL=0.26]	0.36 U [MDL=0.36]
1,2-DICHLOROPROPANE	93 U [MDL=93]	39 U [MDL=39]	150 U [MDL=150]	8 U [MDL=8]	0.88 U [MDL=0.88]	0.53 U [MDL=0.53]	0.73 U [MDL=0.73]
1,3,5-TRIMETHYLBENZENE	--	27 NJ [MDL=27]	200 NJ [MDL=110]	10 NJ [MDL=5.6]	--	--	--
1,3-DICHLOROBENZENE	55 U [MDL=55]	23 U [MDL=23]	88 U [MDL=88]	5 B [MDL=4.7]	0.45 U [MDL=0.45]	0.27 U [MDL=0.27]	0.37 U [MDL=0.37]
1,3-DICHLOROPROPANE	250 U [MDL=250]	100 U [MDL=100]	400 U [MDL=400]	21 U [MDL=21]	0.43 U [MDL=0.43]	0.26 U [MDL=0.26]	0.36 U [MDL=0.36]
1,4-DICHLOROBENZENE	91 U [MDL=91]	38 U [MDL=38]	150 U [MDL=150]	7.8 U [MDL=7.8]	0.84 U [MDL=0.84]	0.51 U [MDL=0.51]	0.70 U [MDL=0.7]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	9200 NJ [NA=NaN]	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	1300 NJ [NA=NaN]	--	--	--	--	--
2,2-DICHLOROPROPANE	260 U [MDL=260]	110 U [MDL=110]	420 U [MDL=420]	22 U [MDL=22]	1.2 U [MDL=1.2]	0.73 U [MDL=0.73]	1 U [MDL=1]
2-BUTANONE	490 U [MDL=490]	200 U [MDL=200]	790 U [MDL=790]	42 U [MDL=42]	1.8 U [MDL=1.8]	1.1 U [MDL=1.1]	1.5 U [MDL=1.5]
2-CHLOROETHYL VINYL ETHER	490 U [MDL=490]	200 U [MDL=200]	790 U [MDL=790]	42 U [MDL=42]	1.8 U [MDL=1.8]	1.1 U [MDL=1.1]	1.5 U [MDL=1.5]
2-CHLOROTOLUENE	100 U [MDL=100]	43 U [MDL=43]	160 U [MDL=160]	8.8 U [MDL=8.8]	0.51 U [MDL=0.51]	0.31 U [MDL=0.31]	0.42 U [MDL=0.42]
2-HEXANONE	230 U [MDL=230]	95 U [MDL=95]	370 U [MDL=370]	19 U [MDL=19]	0.80 U [MDL=0.8]	0.49 U [MDL=0.49]	0.67 U [MDL=0.67]
2-METHYLNAPHTHALENE	7800 NJ [MDL=190]	2600 NJ [MDL=80]	22000 NJ [MDL=310]	560 NJ [MDL=17]	--	--	--
4-CHLOROTOLUENE	110 U [MDL=110]	47 U [MDL=47]	180 U [MDL=180]	9.6 U [MDL=9.6]	0.52 U [MDL=0.52]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]
4-ISOPROPYLTOLUENE	55 U [MDL=55]	23 U [MDL=23]	88 U [MDL=88]	4.7 U [MDL=4.7]	0.27 U [MDL=0.27]	0.16 U [MDL=0.16]	0.22 U [MDL=0.22]
4-METHYL-2-PENTANONE	550 U [MDL=550]	230 U [MDL=230]	880 U [MDL=880]	47 U [MDL=47]	0.69 U [MDL=0.69]	0.42 U [MDL=0.42]	0.57 U [MDL=0.57]
ACETONE	1900 U [MDL=1900]	810 J [MDL=800]	3100 U [MDL=3100]	170 U [MDL=170]	11 B [MDL=8]	10 B [MDL=4.9]	23 B [MDL=6.7]
BENZENE	140 U [MDL=140]	57 U [MDL=57]	220 U [MDL=220]	17 J [MDL=12]	0.29 U [MDL=0.29]	0.18 U [MDL=0.18]	0.24 U [MDL=0.24]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	3500 NJ [NA=NaN]	--	--	--	--	--	--
BROMOBENZENE	150 U [MDL=150]	61 U [MDL=61]	240 U [MDL=240]	13 U [MDL=13]	0.42 U [MDL=0.42]	0.25 U [MDL=0.25]	0.35 U [MDL=0.35]
BROMOCHLOROMETHANE	150 U [MDL=150]	61 U [MDL=61]	240 U [MDL=240]	13 U [MDL=13]	0.90 U [MDL=0.9]	0.55 U [MDL=0.55]	0.75 U [MDL=0.75]
BROMODICHLOROMETHANE	110 U [MDL=110]	47 U [MDL=47]	180 U [MDL=180]	9.6 U [MDL=9.6]	0.36 U [MDL=0.36]	0.22 U [MDL=0.22]	0.30 U [MDL=0.3]
BROMOFORM	220 U [MDL=220]	90 U [MDL=90]	350 U [MDL=350]	18 U [MDL=18]	0.42 U [MDL=0.42]	0.25 U [MDL=0.25]	0.35 U [MDL=0.35]
BROMOMETHANE	330 U [MDL=330]	140 U [MDL=140]	530 U [MDL=530]	28 U [MDL=28]	0.69 U [MDL=0.69]	0.42 U [MDL=0.42]	0.57 U [MDL=0.57]
CARBON DISULFIDE	140 U [MDL=140]	57 U [MDL=57]	220 U [MDL=220]	12 U [MDL=12]	2.7 J [MDL=0.56]	1.4 J [MDL=0.34]	1.9 J [MDL=0.47]
CARBON TETRACHLORIDE	73 U [MDL=73]	30 U [MDL=30]	120 U [MDL=120]	6.2 U [MDL=6.2]	0.47 U [MDL=0.47]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]
CHLOROBENZENE	73 U [MDL=73]	30 U [MDL=30]	120 U [MDL=120]	6.2 U [MDL=6.2]	0.42 U [MDL=0.42]	0.25 U [MDL=0.25]	0.35 U [MDL=0.35]
CHLORODIBROMOMETHANE	140 U [MDL=140]	57 U [MDL=57]	220 U [MDL=220]	12 U [MDL=12]	0.70 U [MDL=0.7]	0.42 U [MDL=0.42]	0.58 U [MDL=0.58]
CHLOROETHANE	690 U [MDL=690]	290 U [MDL=290]	1100 U [MDL=1100]	59 U [MDL=59]	1.1 U [MDL=1.1]	0.66 U [MDL=0.66]	0.91 U [MDL=0.91]
CHLOROFORM	100 U [MDL=100]	42 U [MDL=42]	160 U [MDL=160]	8.6 U [MDL=8.6]	0.37 U [MDL=0.37]	0.22 U [MDL=0.22]	0.31 U [MDL=0.31]
CHLOROMETHANE	160 U [MDL=160]	66 U [MDL=66]	260 U [MDL=260]	14 U [MDL=14]	0.52 U [MDL=0.52]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]
CIS-1,2-DICHLOROETHENE	78 U [MDL=78]	33 U [MDL=33]	130 U [MDL=130]	6.7 U [MDL=6.7]	0.46 U [MDL=0.46]	0.28 U [MDL=0.28]	0.38 U [MDL=0.38]
CIS-1,3-DICHLOROPROPENE	90 U [MDL=90]	37 U [MDL=37]	140 U [MDL=140]	7.7 U [MDL=7.7]	0.43 U [MDL=0.43]	0.26 U [MDL=0.26]	0.36 U [MDL=0.36]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	160 U [MDL=160]	66 U [MDL=66]	260 U [MDL=260]	14 U [MDL=14]	0.80 U [MDL=0.8]	0.49 U [MDL=0.49]	0.67 U [MDL=0.67]
DICHLORODIFLUOROMETHANE	180 U [MDL=180]	76 U [MDL=76]	290 U [MDL=290]	16 U [MDL=16]	0.64 U [MDL=0.64]	0.39 U [MDL=0.39]	0.53 U [MDL=0.53]
DIISOPROPYL ETHER	570 U [MDL=570]	240 U [MDL=240]	920 U [MDL=920]	49 U [MDL=49]	1.9 U [MDL=1.9]	1.2 U [MDL=1.2]	1.6 U [MDL=1.6]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-874 D-SB-874-1-2 4/24/2012	SB-874 D-SB-874-2-4 4/24/2012	SB-874 D-SB-874-4-6 4/24/2012	SB-874 D-SB-874-6-8 4/24/2012	SB-875 D-SB-875-0-1 4/23/2012	SB-875 D-SB-875-1-2 4/23/2012	SB-875 D-SB-875-2-4 4/23/2012
DISILOXANE, HEXAMETHYL-	--	1600 R [NA=NaN]	--	320 R [NA=NaN]	--	--	--
ETHYL TERT-BUTYL ETHER	2.5 U [MDL=2.5]	1 U [MDL=1]	4 U [MDL=4]	0.21 U [MDL=0.21]	0.28 U [MDL=0.28]	0.17 U [MDL=0.17]	0.23 U [MDL=0.23]
ETHYLBENZENE	200 B [MDL=61]	46 B [MDL=26]	260 B [MDL=99]	21 B [MDL=5.3]	0.33 U [MDL=0.33]	0.20 U [MDL=0.2]	0.28 U [MDL=0.28]
HEXACHLOROBUTADIENE	160 U [MDL=160]	66 U [MDL=66]	260 U [MDL=260]	14 U [MDL=14]	1.5 U [MDL=1.5]	0.93 U [MDL=0.93]	1.3 U [MDL=1.3]
INDANE	4600 NJ [NA=NaN]	--	6200 NJ [NA=NaN]	440 NJ [NA=NaN]	--	--	--
ISOPROPYLBENZENE	74 U [MDL=74]	31 U [MDL=31]	120 U [MDL=120]	6.3 U [MDL=6.3]	0.20 U [MDL=0.2]	0.12 U [MDL=0.12]	0.17 U [MDL=0.17]
M+P-XYLENES	110 B [MDL=70]	54 B [MDL=29]	380 B [MDL=110]	28 B [MDL=6]	1.5 U [MDL=1.5]	0.93 U [MDL=0.93]	1.3 U [MDL=1.3]
METHYL ACETATE	--	120 NJ [MDL=120]	--	43 NJ [MDL=24]	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	81 U [MDL=81]	34 U [MDL=34]	130 U [MDL=130]	6.9 U [MDL=6.9]	0.55 U [MDL=0.55]	0.33 U [MDL=0.33]	0.46 U [MDL=0.46]
METHYLENE CHLORIDE	880 U [MDL=880]	360 U [MDL=360]	1400 U [MDL=1400]	75 U [MDL=75]	2 J [MDL=0.85]	0.52 U [MDL=0.52]	0.71 U [MDL=0.71]
NAPHTHALENE	70000 [MDL=76]	20000 [MDL=32]	130000 [MDL=120]	5300 [MDL=6.5]	0.24 U [MDL=0.24]	0.15 U [MDL=0.15]	0.20 U [MDL=0.2]
N-BUTYLBENZENE	91 U [MDL=91]	38 U [MDL=38]	150 U [MDL=150]	7.8 U [MDL=7.8]	0.29 U [MDL=0.29]	0.18 U [MDL=0.18]	0.24 U [MDL=0.24]
N-PROPYLBENZENE	160 U [MDL=160]	66 U [MDL=66]	260 U [MDL=260]	14 U [MDL=14]	0.51 U [MDL=0.51]	0.31 U [MDL=0.31]	0.42 U [MDL=0.42]
O-XYLENE	120 B [MDL=97]	40 U [MDL=40]	240 B [MDL=160]	26 B [MDL=8.3]	0.45 U [MDL=0.45]	0.27 U [MDL=0.27]	0.37 U [MDL=0.37]
SEC-BUTYLBENZENE	53 U [MDL=53]	22 U [MDL=22]	86 U [MDL=86]	4.6 U [MDL=4.6]	0.23 U [MDL=0.23]	0.14 U [MDL=0.14]	0.19 U [MDL=0.19]
STYRENE	64 U [MDL=64]	26 U [MDL=26]	100 U [MDL=100]	5.5 U [MDL=5.5]	0.19 U [MDL=0.19]	0.12 U [MDL=0.12]	0.16 U [MDL=0.16]
TERT-AMYL METHYL ETHER	4.2 U [MDL=4.2]	1.8 U [MDL=1.8]	6.8 U [MDL=6.8]	0.36 U [MDL=0.36]	0.47 U [MDL=0.47]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]
TERT-BUTYLBENZENE	74 U [MDL=74]	31 U [MDL=31]	120 U [MDL=120]	6.3 U [MDL=6.3]	0.37 U [MDL=0.37]	0.22 U [MDL=0.22]	0.31 U [MDL=0.31]
TERTIARY-BUTYL ALCOHOL	2700 UR [MDL=2700]	1100 UR [MDL=1100]	4400 UR [MDL=4400]	230 UR [MDL=230]	9.7 UR [MDL=9.7]	5.9 UR [MDL=5.9]	8 UR [MDL=8]
TETRACHLOROETHENE	140 U [MDL=140]	57 U [MDL=57]	220 U [MDL=220]	12 U [MDL=12]	0.66 U [MDL=0.66]	0.40 U [MDL=0.4]	0.55 U [MDL=0.55]
TOLUENE	190 U [MDL=190]	95 J [MDL=80]	310 U [MDL=310]	19 J [MDL=17]	0.34 U [MDL=0.34]	0.21 U [MDL=0.21]	0.29 U [MDL=0.29]
TOTAL XYLENES	230 B [MDL=92]	54 B [MDL=38]	620 B [MDL=150]	54 B [MDL=7.9]	0.85 U [MDL=0.85]	0.52 U [MDL=0.52]	0.71 U [MDL=0.71]
TRANS-1,2-DICHLOROETHENE	100 U [MDL=100]	44 U [MDL=44]	170 U [MDL=170]	9 U [MDL=9]	0.52 U [MDL=0.52]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]
TRANS-1,3-DICHLOROPROPENE	230 U [MDL=230]	95 U [MDL=95]	370 U [MDL=370]	19 U [MDL=19]	0.69 U [MDL=0.69]	0.42 U [MDL=0.42]	0.57 U [MDL=0.57]
TRICHLOROETHENE	110 U [MDL=110]	46 U [MDL=46]	180 U [MDL=180]	9.4 U [MDL=9.4]	0.53 U [MDL=0.53]	0.32 U [MDL=0.32]	0.44 U [MDL=0.44]
TRICHLOROFLUOROMETHANE	180 U [MDL=180]	76 U [MDL=76]	290 U [MDL=290]	16 U [MDL=16]	0.43 U [MDL=0.43]	0.26 U [MDL=0.26]	0.36 U [MDL=0.36]
VINYL ACETATE	260 UR [MDL=260]	110 UR [MDL=110]	420 UR [MDL=420]	22 UR [MDL=22]	0.32 UR [MDL=0.32]	0.19 UR [MDL=0.19]	0.26 UR [MDL=0.26]
VINYL CHLORIDE	200 U [MDL=200]	85 U [MDL=85]	330 U [MDL=330]	18 U [MDL=18]	0.50 U [MDL=0.5]	0.30 U [MDL=0.3]	0.41 U [MDL=0.41]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-874 D-SB-874-1-2 4/24/2012	SB-874 D-SB-874-2-4 4/24/2012	SB-874 D-SB-874-4-6 4/24/2012	SB-874 D-SB-874-6-8 4/24/2012	SB-875 D-SB-875-0-1 4/23/2012	SB-875 D-SB-875-1-2 4/23/2012	SB-875 D-SB-875-2-4 4/23/2012
TOTAL PAHS	--	--	--	--	--	--	--
PCBS (UG/KG)							
AROCLOR-1016	25 U [MDL=25]	25 U [MDL=25]	26 U [MDL=26]	25 U [MDL=25]	22 U [MDL=22]	22 U [MDL=22]	26 U [MDL=26]
AROCLOR-1221	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	17 U [MDL=17]	20 U [MDL=20]
AROCLOR-1232	16 U [MDL=16]	16 U [MDL=16]	17 U [MDL=17]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	17 U [MDL=17]
AROCLOR-1242	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	13 U [MDL=13]	14 U [MDL=14]	16 U [MDL=16]
AROCLOR-1248	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	18 U [MDL=18]	21 U [MDL=21]
AROCLOR-1254	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	18 U [MDL=18]	21 U [MDL=21]
AROCLOR-1260	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	20 U [MDL=20]	18 U [MDL=18]	18 U [MDL=18]	21 U [MDL=21]
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	72 U [MDL=72]	36 U [MDL=36]	38 U [MDL=38]	15 U [MDL=15]	64 U [MDL=64]	33 U [MDL=33]	38 U [MDL=38]
4,4'-DDE	46 U [MDL=46]	23 U [MDL=23]	24 U [MDL=24]	9.2 U [MDL=9.2]	40 U [MDL=40]	21 U [MDL=21]	24 UR [MDL=24]
4,4'-DDT	74 U [MDL=74]	37 U [MDL=37]	38 U [MDL=38]	15 U [MDL=15]	65 U [MDL=65]	33 U [MDL=33]	38 UR [MDL=38]
ALDRIN	140 U [MDL=140]	70 U [MDL=70]	73 U [MDL=73]	28 U [MDL=28]	120 U [MDL=120]	63 U [MDL=63]	73 U [MDL=73]
ALPHA-BHC	85 U [MDL=85]	43 U [MDL=43]	44 U [MDL=44]	17 U [MDL=17]	76 U [MDL=76]	38 U [MDL=38]	45 U [MDL=45]
ALPHA-CHLORDANE	110 U [MDL=110]	55 U [MDL=55]	57 U [MDL=57]	22 U [MDL=22]	98 U [MDL=98]	50 U [MDL=50]	57 U [MDL=57]
BETA-BHC	130 U [MDL=130]	64 U [MDL=64]	67 U [MDL=67]	26 U [MDL=26]	110 U [MDL=110]	58 U [MDL=58]	67 U [MDL=67]
DELTA-BHC	140 U [MDL=140]	70 U [MDL=70]	73 U [MDL=73]	28 U [MDL=28]	120 U [MDL=120]	63 U [MDL=63]	73 U [MDL=73]
DIELDRIN	55 U [MDL=55]	28 U [MDL=28]	29 U [MDL=29]	11 U [MDL=11]	49 U [MDL=49]	25 U [MDL=25]	29 UR [MDL=29]
ENDOSULFAN I	61 U [MDL=61]	30 U [MDL=30]	32 U [MDL=32]	12 U [MDL=12]	54 U [MDL=54]	27 U [MDL=27]	32 UR [MDL=32]
ENDOSULFAN II	96 U [MDL=96]	48 U [MDL=48]	50 U [MDL=50]	19 U [MDL=19]	85 U [MDL=85]	43 U [MDL=43]	50 U [MDL=50]
ENDOSULFAN SULFATE	100 U [MDL=100]	98 J [MDL=51]	53 U [MDL=53]	20 U [MDL=20]	90 U [MDL=90]	46 U [MDL=46]	53 U [MDL=53]
ENDRIN	58 U [MDL=58]	29 U [MDL=29]	30 U [MDL=30]	12 U [MDL=12]	52 U [MDL=52]	26 U [MDL=26]	31 UR [MDL=31]
ENDRIN ALDEHYDE	120 U [MDL=120]	59 U [MDL=59]	61 U [MDL=61]	23 U [MDL=23]	100 U [MDL=100]	53 U [MDL=53]	61 U [MDL=61]
ENDRIN KETONE	74 U [MDL=74]	37 U [MDL=37]	38 U [MDL=38]	15 U [MDL=15]	65 U [MDL=65]	33 U [MDL=33]	38 UR [MDL=38]
GAMMA-BHC (LINDANE)	86 U [MDL=86]	43 U [MDL=43]	45 U [MDL=45]	17 U [MDL=17]	77 U [MDL=77]	39 U [MDL=39]	45 U [MDL=45]
GAMMA-CHLORDANE	49 U [MDL=49]	25 U [MDL=25]	26 U [MDL=26]	9.9 U [MDL=9.9]	44 U [MDL=44]	22 U [MDL=22]	26 U [MDL=26]
HEPTACHLOR	130 UJ [MDL=130]	64 UJ [MDL=64]	67 UJ [MDL=67]	26 UJ [MDL=26]	110 UJ [MDL=110]	58 UJ [MDL=58]	67 UJ [MDL=67]
HEPTACHLOR EPOXIDE	93 U [MDL=93]	47 U [MDL=47]	49 U [MDL=49]	19 U [MDL=19]	83 U [MDL=83]	42 U [MDL=42]	49 U [MDL=49]
METHOXYCHLOR	180 U [MDL=180]	88 U [MDL=88]	91 U [MDL=91]	35 U [MDL=35]	160 U [MDL=160]	79 U [MDL=79]	92 U [MDL=92]
TOXAPHENE	2200 U [MDL=2200]	1100 U [MDL=1100]	1200 U [MDL=1200]	450 U [MDL=450]	2000 U [MDL=2000]	1000 U [MDL=1000]	1200 U [MDL=1200]
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-874	SB-874	SB-874	SB-874	SB-875	SB-875	SB-875
SAMPLE ID	D-SB-874-1-2	D-SB-874-2-4	D-SB-874-4-6	D-SB-874-6-8	D-SB-875-0-1	D-SB-875-1-2	D-SB-875-2-4
SAMPLE DATE	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/23/2012	4/23/2012	4/23/2012
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	810 [MDL=54]	2300 [MDL=110]	190 [MDL=11]	12 J [MDL=11]	430 [MDL=48]	78 [MDL=9.7]	130 [MDL=11]
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	300 [MDL=110]	7600 [MDL=540]	1800 [MDL=280]	95 J [MDL=54]	94 J [MDL=48]	49 U [MDL=49]	56 U [MDL=56]

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-875	SB-875	SB-876	SB-876
SAMPLE ID	D-SB-875-4-6	D-SB-875-6-8	D-SB-876-0-1	D-SB-876-1-2
SAMPLE DATE	4/23/2012	4/23/2012	4/23/2012	4/23/2012
METALS (MG/KG)				
ANTIMONY	0.57 J [MDL=0.39]	1.1 J [MDL=0.39]	0.41 UJ [MDL=0.41]	0.41 UJ [MDL=0.41]
ARSENIC	4.3 [MDL=0.3]	4.6 [MDL=0.3]	3 [MDL=0.32]	3.7 [MDL=0.32]
BARIUM	7.2 J [MDL=0.072]	5.2 J [MDL=0.071]	30 J [MDL=0.075]	12 J [MDL=0.37]
BERYLLIUM	1.3 [MDL=0.043]	1.1 [MDL=0.043]	0.31 B [MDL=0.045]	0.93 J [MDL=0.23]
CADMIUM	0.46 J [MDL=0.036]	0.6 [MDL=0.036]	0.21 J [MDL=0.038]	0.12 J [MDL=0.038]
CHROMIUM	25 J [MDL=0.2]	30 J [MDL=0.2]	18 J [MDL=0.21]	26 J [MDL=0.21]
COBALT	3.5 [MDL=0.16]	5.4 [MDL=0.16]	6.2 [MDL=0.17]	4.4 [MDL=0.17]
COPPER	21 [MDL=0.75]	9.9 [MDL=0.74]	6.4 [MDL=0.78]	11 [MDL=0.78]
IRON	--	--	--	--
LEAD	5.5 [MDL=0.19]	8.1 [MDL=0.19]	8.7 [MDL=0.2]	11 [MDL=0.2]
MANGANESE	--	--	--	--
MERCURY	0.03 J [MDL=0.019]	0.017 U [MDL=0.017]	0.078 J [MDL=0.015]	0.16 [MDL=0.017]
MOLYBDENUM	0.73 B [MDL=0.27]	0.51 B [MDL=0.27]	0.75 J [MDL=0.29]	0.49 J [MDL=0.28]
NICKEL	13 [MDL=0.27]	21 [MDL=0.27]	39 [MDL=0.29]	11 [MDL=0.28]
SELENIUM	0.45 U [MDL=0.45]	0.45 U [MDL=0.45]	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]
SILVER	0.10 UL [MDL=0.1]	0.10 UL [MDL=0.1]	0.11 U [MDL=0.11]	0.11 U [MDL=0.11]
THALLIUM	0.55 U [MDL=0.55]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.58 U [MDL=0.58]
VANADIUM	58 J [MDL=0.12]	74 J [MDL=0.12]	23 J [MDL=0.13]	71 J [MDL=0.63]
ZINC	13 L [MDL=1]	17 L [MDL=1]	44 L [MDL=1.1]	31 L [MDL=1.1]
MISCELLANEOUS PARAMETERS				
PERCENT SOLIDS (%)	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.33 U [MDL=0.33]	0.32 U [MDL=0.32]	0.30 U [MDL=0.3]	0.30 U [MDL=0.3]
MERCURY (METHYL) (UG/KG)	--	--	--	--
SEMIVOLATILES (UG/KG)				
1,1-BIPHENYL	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
1,4-DIOXANE	27 U [MDL=27]	26 U [MDL=26]	120 U [MDL=120]	25 U [MDL=25]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	11 U [MDL=11]	53 U [MDL=53]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	30 U [MDL=30]	29 U [MDL=29]	140 U [MDL=140]	28 U [MDL=28]
2,4,6-TRICHLOROPHENOL	97 U [MDL=97]	93 U [MDL=93]	450 U [MDL=450]	90 U [MDL=90]
2,4-DICHLOROPHENOL	24 U [MDL=24]	23 U [MDL=23]	110 U [MDL=110]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	23 U [MDL=23]	110 U [MDL=110]	23 U [MDL=23]
2,4-DINITROPHENOL	97 U [MDL=97]	93 U [MDL=93]	450 U [MDL=450]	90 U [MDL=90]
2,4-DINITROTOLUENE	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
2,6-DINITROTOLUENE	25 U [MDL=25]	25 U [MDL=25]	120 U [MDL=120]	24 U [MDL=24]
2-CHLORONAPHTHALENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	3.7 U [MDL=3.7]
2-CHLOROPHENOL	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
2-METHYLNAPHTHALENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	11 [MDL=3.7]
2-METHYLPHENOL	97 U [MDL=97]	93 U [MDL=93]	450 U [MDL=450]	90 U [MDL=90]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	51 U [MDL=51]	10 U [MDL=10]
2-NITROPHENOL	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
3&4-METHYLPHENOL	24 U [MDL=24]	23 U [MDL=23]	110 U [MDL=110]	23 U [MDL=23]
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	21 U [MDL=21]	100 U [MDL=100]	20 U [MDL=20]
3-NITROANILINE	19 U [MDL=19]	19 U [MDL=19]	89 U [MDL=89]	18 U [MDL=18]
4,6-DINITRO-2-METHYLPHENOL	97 U [MDL=97]	93 U [MDL=93]	450 U [MDL=450]	90 U [MDL=90]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	73 U [MDL=73]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	25 U [MDL=25]	25 U [MDL=25]	120 U [MDL=120]	24 U [MDL=24]
4-CHLOROANILINE	21 U [MDL=21]	20 U [MDL=20]	95 U [MDL=95]	19 U [MDL=19]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	15 U [MDL=15]	73 U [MDL=73]	15 U [MDL=15]
4-METHYLPHENOL	--	--	--	--
4-NITROANILINE	31 U [MDL=31]	30 U [MDL=30]	150 U [MDL=150]	29 U [MDL=29]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-875 D-SB-875-4-6 4/23/2012	SB-875 D-SB-875-6-8 4/23/2012	SB-876 D-SB-876-0-1 4/23/2012	SB-876 D-SB-876-1-2 4/23/2012
4-NITROPHENOL	97 U [MDL=97]	93 U [MDL=93]	450 U [MDL=450]	90 U [MDL=90]
ACENAPHTHENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	27 [MDL=3.7]
ACENAPHTHYLENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	3.7 U [MDL=3.7]
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	51 U [MDL=51]	10 U [MDL=10]
ANTHRACENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	60 [MDL=3.7]
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	51 U [MDL=51]	10 U [MDL=10]
BAP EQUIVALENT-HALFND	4 U [MDL=NaN]	3.9 U [MDL=NaN]	18 U [MDL=NaN]	130.86 [MDL=NaN]
BAP EQUIVALENT-POS	4 U [MDL=NaN]	3.9 U [MDL=NaN]	18 U [MDL=NaN]	129.01 [MDL=NaN]
BENZALDEHYDE	14 U [MDL=14]	14 U [MDL=14]	67 U [MDL=67]	14 U [MDL=14]
BENZO(A)ANTHRACENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	110 [MDL=3.7]
BENZO(A)PYRENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	100 [MDL=3.7]
BENZO(B)FLUORANTHENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	120 [MDL=3.7]
BENZO(G,H,I)PERYLENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	63 [MDL=3.7]
BENZO(K)FLUORANTHENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	60 [MDL=3.7]
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	26 U [MDL=26]	120 U [MDL=120]	25 U [MDL=25]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	11 U [MDL=11]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	36 B [MDL=23]	22 U [MDL=22]	110 U [MDL=110]	21 B [MDL=21]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	12 U [MDL=12]	56 U [MDL=56]	11 U [MDL=11]
CAPROLACTAM	45 U [MDL=45]	43 U [MDL=43]	210 U [MDL=210]	42 U [MDL=42]
CARBAZOLE	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
CHRYSENE	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	6.1 U [MDL=6.1]	110 [MDL=1.2]
DIBENZO(A,H)ANTHRACENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	3.7 U [MDL=3.7]
DIBENZOFURAN	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	18 J [MDL=3.7]
DIETHYL PHTHALATE	19 U [MDL=19]	19 U [MDL=19]	89 U [MDL=89]	18 U [MDL=18]
DIMETHYL PHTHALATE	21 U [MDL=21]	20 U [MDL=20]	95 U [MDL=95]	19 U [MDL=19]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	18 U [MDL=18]	84 U [MDL=84]	17 U [MDL=17]
DI-N-OCTYL PHTHALATE	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
FLUORANTHENE	4 U [MDL=4]	3.9 U [MDL=3.9]	45 [MDL=18]	210 [MDL=3.7]
FLUORENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	33 [MDL=3.7]
HEXACHLOROBENZENE	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	12 U [MDL=12]	2.4 U [MDL=2.4]
HEXACHLOROBUTADIENE	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
HEXACHLOROCYCLOPENTADIENE	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
HEXACHLOROETHANE	11 U [MDL=11]	11 U [MDL=11]	50 U [MDL=50]	10 U [MDL=10]
INDENO(1,2,3-CD)PYRENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	53 [MDL=3.7]
ISOPHORONE	16 U [MDL=16]	15 U [MDL=15]	73 U [MDL=73]	15 U [MDL=15]
NAPHTHALENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	15 [MDL=3.7]
NITROBENZENE	2.7 U [MDL=2.7]	2.6 U [MDL=2.6]	12 U [MDL=12]	2.5 U [MDL=2.5]
N-NITROSODIMETHYLAMINE	19 U [MDL=19]	19 U [MDL=19]	89 U [MDL=89]	18 U [MDL=18]
N-NITROSO-DI-N-PROPYLAMINE	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
N-NITROSODIPHENYLAMINE	25 U [MDL=25]	25 U [MDL=25]	120 U [MDL=120]	24 U [MDL=24]
PENTACHLOROPHENOL	97 U [MDL=97]	93 U [MDL=93]	450 U [MDL=450]	90 U [MDL=90]
PHENANTHRENE	4 U [MDL=4]	3.9 U [MDL=3.9]	18 U [MDL=18]	210 [MDL=3.7]
PHENOL	33 U [MDL=33]	32 U [MDL=32]	150 U [MDL=150]	30 U [MDL=30]
PYRENE	4 U [MDL=4]	3.9 U [MDL=3.9]	49 [MDL=18]	180 [MDL=3.7]
VOLATILES (UG/KG)				
.BETA.-SESQUIPHELLANDRENE	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.58 U [MDL=0.58]	0.69 U [MDL=0.69]	0.68 U [MDL=0.68]	0.70 U [MDL=0.7]
1,1,1-TRICHLOROETHANE	0.53 U [MDL=0.53]	0.63 U [MDL=0.63]	0.62 U [MDL=0.62]	0.63 U [MDL=0.63]
1,1,2,2-TETRACHLOROETHANE	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]
1,1,2-TRICHLOROETHANE	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-875 D-SB-875-4-6 4/23/2012	SB-875 D-SB-875-6-8 4/23/2012	SB-876 D-SB-876-0-1 4/23/2012	SB-876 D-SB-876-1-2 4/23/2012
1,1-DICHLOROETHANE	0.34 U [MDL=0.34]	0.40 U [MDL=0.4]	0.40 U [MDL=0.4]	0.41 U [MDL=0.41]
1,1-DICHLOROETHENE	0.49 U [MDL=0.49]	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]	0.59 U [MDL=0.59]
1,1-DICHLOROPROPENE	0.28 U [MDL=0.28]	0.34 U [MDL=0.34]	0.33 U [MDL=0.33]	0.34 U [MDL=0.34]
1,2,3-TRICHLOROBENZENE	0.36 U [MDL=0.36]	0.43 U [MDL=0.43]	0.42 U [MDL=0.42]	0.43 U [MDL=0.43]
1,2,3-TRICHLOROPROPANE	0.85 U [MDL=0.85]	1 U [MDL=1]	0.99 U [MDL=0.99]	1 U [MDL=1]
1,2,3-TRIMETHYLBENZENE	0.16 U [MDL=0.16]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]	0.19 U [MDL=0.19]
1,2,4-TRICHLOROBENZENE	0.25 U [MDL=0.25]	0.30 U [MDL=0.3]	0.30 U [MDL=0.3]	0.30 U [MDL=0.3]
1,2,4-TRIMETHYLBENZENE	0.61 U [MDL=0.61]	0.73 U [MDL=0.73]	0.72 U [MDL=0.72]	0.73 U [MDL=0.73]
1,2-DIBROMO-3-CHLOROPROPANE	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]
1,2-DIBROMOETHANE	0.47 U [MDL=0.47]	0.56 U [MDL=0.56]	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]
1,2-DICHLOROBENZENE	0.34 U [MDL=0.34]	0.40 U [MDL=0.4]	0.40 U [MDL=0.4]	0.41 U [MDL=0.41]
1,2-DICHLOROETHANE	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]
1,2-DICHLOROPROPANE	0.65 U [MDL=0.65]	0.77 U [MDL=0.77]	0.76 U [MDL=0.76]	0.78 U [MDL=0.78]
1,3,5-TRIMETHYLBENZENE	--	--	--	--
1,3-DICHLOROBENZENE	0.33 U [MDL=0.33]	0.39 U [MDL=0.39]	0.39 U [MDL=0.39]	0.39 U [MDL=0.39]
1,3-DICHLOROPROPANE	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]
1,4-DICHLOROBENZENE	0.62 U [MDL=0.62]	0.74 U [MDL=0.74]	0.73 U [MDL=0.73]	0.74 U [MDL=0.74]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--
1-BUTANOL	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--
2,2-DICHLOROPROPANE	0.88 U [MDL=0.88]	1.1 U [MDL=1.1]	1 U [MDL=1]	1.1 U [MDL=1.1]
2-BUTANONE	1.3 U [MDL=1.3]	2.9 J [MDL=1.6]	1.5 U [MDL=1.5]	3.5 J [MDL=1.6]
2-CHLOROETHYL VINYL ETHER	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	1.5 U [MDL=1.5]	1.6 U [MDL=1.6]
2-CHLOROTOLUENE	0.38 U [MDL=0.38]	0.45 U [MDL=0.45]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]
2-HEXANONE	0.59 U [MDL=0.59]	0.71 U [MDL=0.71]	0.69 U [MDL=0.69]	0.71 U [MDL=0.71]
2-METHYLNAPHTHALENE	--	--	--	--
4-CHLOROTOLUENE	0.39 U [MDL=0.39]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]
4-ISOPROPYLTOLUENE	0.20 U [MDL=0.2]	0.24 U [MDL=0.24]	0.23 U [MDL=0.23]	0.24 U [MDL=0.24]
4-METHYL-2-PENTANONE	0.51 U [MDL=0.51]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]
ACETONE	23 B [MDL=5.9]	25 B [MDL=7.1]	24 B [MDL=6.9]	37 B [MDL=7.1]
BENZENE	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--
BROMOBENZENE	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]
BROMOCHLOROMETHANE	0.67 U [MDL=0.67]	0.80 U [MDL=0.8]	0.78 U [MDL=0.78]	0.80 U [MDL=0.8]
BROMODICHLOROMETHANE	0.26 U [MDL=0.26]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]
BROMOFORM	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]
BROMOMETHANE	0.51 U [MDL=0.51]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]
CARBON DISULFIDE	0.41 U [MDL=0.41]	1.9 J [MDL=0.49]	2.1 J [MDL=0.48]	2.2 J [MDL=0.5]
CARBON TETRACHLORIDE	0.35 U [MDL=0.35]	0.41 U [MDL=0.41]	0.41 U [MDL=0.41]	0.42 U [MDL=0.42]
CHLOROBENZENE	0.31 U [MDL=0.31]	0.37 U [MDL=0.37]	0.36 U [MDL=0.36]	0.37 U [MDL=0.37]
CHLORODIBROMOMETHANE	0.52 U [MDL=0.52]	0.62 U [MDL=0.62]	0.61 U [MDL=0.61]	0.62 U [MDL=0.62]
CHLOROETHANE	0.81 U [MDL=0.81]	0.96 U [MDL=0.96]	0.95 U [MDL=0.95]	0.97 U [MDL=0.97]
CHLOROFORM	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]
CHLOROMETHANE	0.39 U [MDL=0.39]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]
CIS-1,2-DICHLOROETHENE	0.34 U [MDL=0.34]	0.40 U [MDL=0.4]	0.40 U [MDL=0.4]	0.41 U [MDL=0.41]
CIS-1,3-DICHLOROPROPENE	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--
DIBROMOMETHANE	0.59 U [MDL=0.59]	0.71 U [MDL=0.71]	0.69 U [MDL=0.69]	0.71 U [MDL=0.71]
DICHLORODIFLUOROMETHANE	0.47 U [MDL=0.47]	0.56 U [MDL=0.56]	0.55 U [MDL=0.55]	0.56 U [MDL=0.56]
DIISOPROPYL ETHER	1.4 U [MDL=1.4]	1.7 U [MDL=1.7]	1.7 U [MDL=1.7]	1.7 U [MDL=1.7]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-875 D-SB-875-4-6 4/23/2012	SB-875 D-SB-875-6-8 4/23/2012	SB-876 D-SB-876-0-1 4/23/2012	SB-876 D-SB-876-1-2 4/23/2012
DISILOXANE, HEXAMETHYL-	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.21 U [MDL=0.21]	0.25 U [MDL=0.25]	0.24 U [MDL=0.24]	0.25 U [MDL=0.25]
ETHYLBENZENE	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]	0.29 U [MDL=0.29]
HEXACHLOROBUTADIENE	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]
INDANE	--	--	--	--
ISOPROPYLBENZENE	0.15 U [MDL=0.15]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]	0.18 U [MDL=0.18]
M+P-XYLENES	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]
METHYL ACETATE	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--
METHYL TERT-BUTYL ETHER	0.40 U [MDL=0.4]	0.48 U [MDL=0.48]	0.47 U [MDL=0.47]	0.49 U [MDL=0.49]
METHYLENE CHLORIDE	0.63 U [MDL=0.63]	0.75 U [MDL=0.75]	1.4 J [MDL=0.74]	1.4 J [MDL=0.76]
NAPHTHALENE	0.18 U [MDL=0.18]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]	0.21 U [MDL=0.21]
N-BUTYLBENZENE	0.22 U [MDL=0.22]	0.26 U [MDL=0.26]	0.25 U [MDL=0.25]	0.26 U [MDL=0.26]
N-PROPYLBENZENE	0.38 U [MDL=0.38]	0.45 U [MDL=0.45]	0.44 U [MDL=0.44]	0.45 U [MDL=0.45]
O-XYLENE	0.33 U [MDL=0.33]	0.39 U [MDL=0.39]	0.39 U [MDL=0.39]	0.39 U [MDL=0.39]
SEC-BUTYLBENZENE	0.17 U [MDL=0.17]	0.20 U [MDL=0.2]	0.20 U [MDL=0.2]	0.20 U [MDL=0.2]
STYRENE	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]	0.17 U [MDL=0.17]
TERT-AMYL METHYL ETHER	0.35 U [MDL=0.35]	0.41 U [MDL=0.41]	0.41 U [MDL=0.41]	0.42 U [MDL=0.42]
TERT-BUTYLBENZENE	0.27 U [MDL=0.27]	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.33 U [MDL=0.33]
TERTIARY-BUTYL ALCOHOL	7.1 UR [MDL=7.1]	8.5 UR [MDL=8.5]	8.4 UR [MDL=8.4]	8.6 UR [MDL=8.6]
TETRACHLOROETHENE	0.49 U [MDL=0.49]	0.58 U [MDL=0.58]	0.57 U [MDL=0.57]	0.59 U [MDL=0.59]
TOLUENE	0.25 U [MDL=0.25]	0.30 U [MDL=0.3]	0.30 U [MDL=0.3]	0.30 U [MDL=0.3]
TOTAL XYLENES	0.63 U [MDL=0.63]	0.75 U [MDL=0.75]	0.74 U [MDL=0.74]	0.76 U [MDL=0.76]
TRANS-1,2-DICHLOROETHENE	0.39 U [MDL=0.39]	0.46 U [MDL=0.46]	0.45 U [MDL=0.45]	0.46 U [MDL=0.46]
TRANS-1,3-DICHLOROPROPENE	0.51 U [MDL=0.51]	0.61 U [MDL=0.61]	0.59 U [MDL=0.59]	0.61 U [MDL=0.61]
TRICHLOROETHENE	0.39 U [MDL=0.39]	0.47 U [MDL=0.47]	0.46 U [MDL=0.46]	0.47 U [MDL=0.47]
TRICHLOROFLUOROMETHANE	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]	0.37 U [MDL=0.37]	0.38 U [MDL=0.38]
VINYL ACETATE	0.24 UR [MDL=0.24]	0.28 UR [MDL=0.28]	0.28 UR [MDL=0.28]	0.28 UR [MDL=0.28]
VINYL CHLORIDE	0.37 U [MDL=0.37]	0.44 U [MDL=0.44]	0.43 U [MDL=0.43]	0.44 U [MDL=0.44]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)				
2-METHYLNAPHTHALENE	--	--	--	--
ACENAPHTHENE	--	--	--	--
ACENAPHTHYLENE	--	--	--	--
ANTHRACENE	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--
BENZO(A)PYRENE	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--
CHRYSENE	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--
FLUORANTHENE	--	--	--	--
FLUORENE	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--
NAPHTHALENE	--	--	--	--
PHENANTHRENE	--	--	--	--
PYRENE	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-875 D-SB-875-4-6 4/23/2012	SB-875 D-SB-875-6-8 4/23/2012	SB-876 D-SB-876-0-1 4/23/2012	SB-876 D-SB-876-1-2 4/23/2012
TOTAL PAHS	--	--	--	--
PCBS (UG/KG)				
AROCLOR-1016	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	24 U [MDL=24]
AROCLOR-1221	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	18 U [MDL=18]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1254	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
AROCLOR-1260	21 U [MDL=21]	20 U [MDL=20]	19 U [MDL=19]	19 U [MDL=19]
TOTAL AROCLOR	--	--	--	--
PESTICIDES (UG/KG)				
4,4'-DDD	37 U [MDL=37]	0.72 U [MDL=0.72]	70 U [MDL=70]	35 U [MDL=35]
4,4'-DDE	24 U [MDL=24]	0.46 U [MDL=0.46]	44 U [MDL=44]	22 U [MDL=22]
4,4'-DDT	38 U [MDL=38]	0.74 U [MDL=0.74]	71 U [MDL=71]	35 U [MDL=35]
ALDRIN	72 U [MDL=72]	1.4 U [MDL=1.4]	130 U [MDL=130]	67 U [MDL=67]
ALPHA-BHC	44 U [MDL=44]	0.85 U [MDL=0.85]	82 U [MDL=82]	41 U [MDL=41]
ALPHA-CHLORDANE	57 U [MDL=57]	1.1 U [MDL=1.1]	110 U [MDL=110]	53 U [MDL=53]
BETA-BHC	66 U [MDL=66]	1.3 U [MDL=1.3]	120 U [MDL=120]	62 U [MDL=62]
DELTA-BHC	72 U [MDL=72]	1.4 U [MDL=1.4]	130 U [MDL=130]	67 U [MDL=67]
DIELDRIN	28 U [MDL=28]	0.55 U [MDL=0.55]	53 U [MDL=53]	26 U [MDL=26]
ENDOSULFAN I	31 U [MDL=31]	0.61 U [MDL=0.61]	58 U [MDL=58]	29 U [MDL=29]
ENDOSULFAN II	49 U [MDL=49]	0.96 U [MDL=0.96]	92 U [MDL=92]	46 U [MDL=46]
ENDOSULFAN SULFATE	53 U [MDL=53]	1 U [MDL=1]	98 U [MDL=98]	49 U [MDL=49]
ENDRIN	30 U [MDL=30]	0.58 U [MDL=0.58]	56 U [MDL=56]	28 U [MDL=28]
ENDRIN ALDEHYDE	60 U [MDL=60]	1.2 U [MDL=1.2]	110 U [MDL=110]	56 U [MDL=56]
ENDRIN KETONE	38 U [MDL=38]	0.74 U [MDL=0.74]	71 U [MDL=71]	35 U [MDL=35]
GAMMA-BHC (LINDANE)	45 U [MDL=45]	0.86 U [MDL=0.86]	83 U [MDL=83]	41 U [MDL=41]
GAMMA-CHLORDANE	25 U [MDL=25]	0.49 U [MDL=0.49]	47 U [MDL=47]	24 U [MDL=24]
HEPTACHLOR	66 UJ [MDL=66]	1.3 UJ [MDL=1.3]	120 U [MDL=120]	62 UJ [MDL=62]
HEPTACHLOR EPOXIDE	48 U [MDL=48]	0.93 U [MDL=0.93]	90 U [MDL=90]	45 U [MDL=45]
METHOXYCHLOR	91 U [MDL=91]	1.8 U [MDL=1.8]	170 U [MDL=170]	84 U [MDL=84]
TOXAPHENE	1100 U [MDL=1100]	22 U [MDL=22]	2100 U [MDL=2100]	1100 U [MDL=1100]
PESTICIDES/PCBS (UG/KG)				
4,4'-DDD	--	--	--	--
4,4'-DDE	--	--	--	--
4,4'-DDT	--	--	--	--
ALDRIN	--	--	--	--
ALPHA-BHC	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--
BETA-BHC	--	--	--	--
DELTA-BHC	--	--	--	--
DIELDRIN	--	--	--	--
ENDOSULFAN I	--	--	--	--
ENDOSULFAN II	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--
ENDRIN	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--
ENDRIN KETONE	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--
HEPTACHLOR	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-875	SB-875	SB-876	SB-876
SAMPLE ID	D-SB-875-4-6	D-SB-875-6-8	D-SB-876-0-1	D-SB-876-1-2
SAMPLE DATE	4/23/2012	4/23/2012	4/23/2012	4/23/2012
HEPTACHLOR EPOXIDE	--	--	--	--
METHOXYCHLOR	--	--	--	--
TOXAPHENE	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)				
TPH (C10-C32)	11 U [MDL=11]	11 U [MDL=11]	730 [MDL=52]	51 [MDL=10]
PETROLEUM HYDROCARBONS (UG/KG)				
DIESEL RANGE ORGANICS	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--
TPH (C06-C10)	56 U [MDL=56]	54 U [MDL=54]	52 U [MDL=52]	52 U [MDL=52]

SOIL Footnotes:

-- = The chemical was not analyzed or no value was available.

Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

> = The chemical was detected.

J = The chemical was detected but the concentration reported is an

U = The chemical was not detected.

< = The chemical was not detected.

R = The chemical was rejected.

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-876	SB-876	SB-876	SB-877	SB-877	SB-877	SB-877
SAMPLE ID	D-SB-876-2-4	D-SB-876-4-6	D-SB-876-6-8	D-SB-877-0-1	D-SB-877-1-2	D-SB-877-2-4	D-SB-877-4-6
SAMPLE DATE	4/23/2012	4/23/2012	4/23/2012	4/25/2012	4/25/2012	4/25/2012	4/25/2012
METALS (MG/KG)							
ANTIMONY	2.5 J [MDL=2.4]	0.82 J [MDL=0.39]	0.59 J [MDL=0.35]	0.42 UL [MDL=0.42]	0.42 UL [MDL=0.42]	0.36 UL [MDL=0.36]	0.42 UL [MDL=0.42]
ARSENIC	9 J [MDL=1.8]	4.5 [MDL=0.3]	2.1 [MDL=0.27]	3.9 [MDL=0.33]	4.2 [MDL=0.32]	4.2 [MDL=0.28]	4.3 [MDL=0.32]
BARIUM	29 J [MDL=0.43]	26 J [MDL=0.072]	6.6 J [MDL=0.064]	20 J [MDL=0.077]	31 J [MDL=0.076]	27 J [MDL=0.066]	6.6 J [MDL=0.077]
BERYLLIUM	1.6 J [MDL=0.26]	1.4 [MDL=0.043]	1.1 [MDL=0.038]	1.3 [MDL=0.047]	0.86 [MDL=0.046]	1.4 [MDL=0.04]	1.2 [MDL=0.046]
CADMIUM	0.22 U [MDL=0.22]	0.036 U [MDL=0.036]	0.032 U [MDL=0.032]	0.054 J [MDL=0.039]	0.21 J [MDL=0.038]	0.2 J [MDL=0.034]	0.08 J [MDL=0.039]
CHROMIUM	27 J [MDL=1.2]	23 J [MDL=0.2]	18 J [MDL=0.18]	19 J [MDL=0.22]	19 J [MDL=0.21]	18 J [MDL=0.19]	29 J [MDL=0.22]
COBALT	8.3 [MDL=0.97]	6.1 [MDL=0.16]	3.5 [MDL=0.14]	7.1 [MDL=0.17]	15 [MDL=0.17]	18 [MDL=0.15]	10 [MDL=0.17]
COPPER	21 [MDL=4.5]	27 [MDL=0.75]	20 [MDL=0.66]	13 [MDL=0.8]	10 [MDL=0.79]	26 [MDL=0.69]	24 [MDL=0.8]
IRON	--	--	--	--	--	--	--
LEAD	13 [MDL=1.1]	7.7 [MDL=0.19]	3.5 [MDL=0.17]	6.5 J [MDL=0.21]	78 J [MDL=0.2]	16 J [MDL=0.18]	6.4 J [MDL=0.21]
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.46 [MDL=0.019]	0.053 J [MDL=0.019]	0.018 U [MDL=0.018]	0.021 J [MDL=0.017]	0.23 [MDL=0.015]	0.11 [MDL=0.016]	0.02 J [MDL=0.019]
MOLYBDENUM	1.6 U [MDL=1.6]	0.34 B [MDL=0.27]	0.31 J [MDL=0.24]	0.33 J [MDL=0.29]	0.36 J [MDL=0.29]	0.37 J [MDL=0.25]	0.29 U [MDL=0.29]
NICKEL	33 [MDL=1.6]	13 [MDL=0.27]	13 [MDL=0.24]	15 [MDL=0.29]	15 [MDL=0.29]	28 [MDL=0.25]	28 [MDL=0.29]
SELENIUM	2.7 U [MDL=2.7]	0.45 U [MDL=0.45]	0.40 U [MDL=0.4]	0.49 U [MDL=0.49]	0.48 U [MDL=0.48]	0.42 U [MDL=0.42]	0.49 U [MDL=0.49]
SILVER	0.60 UL [MDL=0.6]	0.10 UL [MDL=0.1]	0.09 UL [MDL=0.09]	0.11 UL [MDL=0.11]	0.11 UL [MDL=0.11]	0.093 UL [MDL=0.093]	0.11 UL [MDL=0.11]
THALLIUM	3.3 U [MDL=3.3]	0.55 U [MDL=0.55]	0.49 U [MDL=0.49]	0.60 U [MDL=0.6]	0.59 U [MDL=0.59]	0.51 U [MDL=0.51]	0.59 U [MDL=0.59]
VANADIUM	36 J [MDL=0.72]	43 J [MDL=0.12]	38 J [MDL=0.11]	30 J [MDL=0.13]	30 J [MDL=0.13]	32 J [MDL=0.11]	43 J [MDL=0.13]
ZINC	34 L [MDL=6]	35 L [MDL=1]	9.5 L [MDL=0.9]	34 [MDL=1.1]	41 [MDL=1.1]	49 [MDL=0.93]	25 [MDL=1.1]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.33 U [MDL=0.33]	0.38 U [MDL=0.38]	0.31 U [MDL=0.31]	0.31 J [MDL=0.3]	0.31 U [MDL=0.31]	0.31 U [MDL=0.31]	0.33 U [MDL=0.33]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
1,4-DIOXANE	27 U [MDL=27]	30 U [MDL=30]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	27 U [MDL=27]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	13 U [MDL=13]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	31 U [MDL=31]	35 U [MDL=35]	29 U [MDL=29]	28 U [MDL=28]	29 U [MDL=29]	29 U [MDL=29]	30 U [MDL=30]
2,4,6-TRICHLOROPHENOL	98 U [MDL=98]	110 U [MDL=110]	92 U [MDL=92]	89 U [MDL=89]	93 U [MDL=93]	92 U [MDL=92]	97 U [MDL=97]
2,4-DICHLOROPHENOL	24 U [MDL=24]	28 U [MDL=28]	23 U [MDL=23]	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	24 U [MDL=24]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	28 U [MDL=28]	23 U [MDL=23]	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	24 U [MDL=24]
2,4-DINITROPHENOL	98 U [MDL=98]	110 U [MDL=110]	92 U [MDL=92]	89 U [MDL=89]	93 U [MDL=93]	92 U [MDL=92]	97 U [MDL=97]
2,4-DINITROTOLUENE	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
2,6-DINITROTOLUENE	26 U [MDL=26]	29 U [MDL=29]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]
2-CHLORONAPHTHALENE	4 U [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
2-CHLOROPHENOL	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
2-METHYLNAPHTHALENE	11 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
2-METHYLPHENOL	98 U [MDL=98]	110 U [MDL=110]	92 U [MDL=92]	89 U [MDL=89]	93 U [MDL=93]	92 U [MDL=92]	97 U [MDL=97]
2-NITROANILINE	11 U [MDL=11]	13 U [MDL=13]	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]
2-NITROPHENOL	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
3&4-METHYLPHENOL	24 U [MDL=24]	28 U [MDL=28]	23 U [MDL=23]	22 U [MDL=22]	23 U [MDL=23]	23 U [MDL=23]	24 U [MDL=24]
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	25 U [MDL=25]	21 U [MDL=21]	20 U [MDL=20]	21 U [MDL=21]	21 U [MDL=21]	22 U [MDL=22]
3-NITROANILINE	20 U [MDL=20]	22 U [MDL=22]	18 U [MDL=18]	18 U [MDL=18]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
4,6-DINITRO-2-METHYLPHENOL	98 U [MDL=98]	110 U [MDL=110]	92 U [MDL=92]	89 U [MDL=89]	93 U [MDL=93]	92 U [MDL=92]	97 U [MDL=97]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	18 U [MDL=18]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	29 U [MDL=29]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]
4-CHLOROANILINE	21 U [MDL=21]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	18 U [MDL=18]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	32 U [MDL=32]	36 U [MDL=36]	30 U [MDL=30]	29 U [MDL=29]	30 U [MDL=30]	30 U [MDL=30]	31 U [MDL=31]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-876	SB-876	SB-876	SB-877	SB-877	SB-877	SB-877
SAMPLE ID	D-SB-876-2-4	D-SB-876-4-6	D-SB-876-6-8	D-SB-877-0-1	D-SB-877-1-2	D-SB-877-2-4	D-SB-877-4-6
SAMPLE DATE	4/23/2012	4/23/2012	4/23/2012	4/25/2012	4/25/2012	4/25/2012	4/25/2012
4-NITROPHENOL	98 U [MDL=98]	110 U [MDL=110]	92 U [MDL=92]	89 U [MDL=89]	93 U [MDL=93]	92 U [MDL=92]	97 U [MDL=97]
ACENAPHTHENE	4 U [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
ACENAPHTHYLENE	4 U [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
ACETOPHENONE	11 U [MDL=11]	13 U [MDL=13]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
ANTHRACENE	11 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	11 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
ATRAZINE	11 U [MDL=11]	13 U [MDL=13]	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]
BAP EQUIVALENT-HALFND	66.893 [MDL=NaN]	4.6 U [MDL=NaN]	3.8 U [MDL=NaN]	17.391 [MDL=NaN]	67.188 [MDL=NaN]	3.8 U [MDL=NaN]	4 U [MDL=NaN]
BAP EQUIVALENT-POS	64.893 [MDL=NaN]	4.6 U [MDL=NaN]	3.8 U [MDL=NaN]	15.541 [MDL=NaN]	65.288 [MDL=NaN]	3.8 U [MDL=NaN]	4 U [MDL=NaN]
BENZALDEHYDE	15 U [MDL=15]	17 U [MDL=17]	14 U [MDL=14]	13 U [MDL=13]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]
BENZO(A)ANTHRACENE	45 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	9 [MDL=3.7]	46 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
BENZO(A)PYRENE	49 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	12 [MDL=3.7]	51 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
BENZO(B)FLUORANTHENE	75 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	17 [MDL=3.7]	62 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
BENZO(G,H,I)PERYLENE	48 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	11 [MDL=3.7]	38 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
BENZO(K)FLUORANTHENE	33 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	6.8 J [MDL=3.7]	33 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	30 U [MDL=30]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	25 U [MDL=25]	27 U [MDL=27]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.8 U [MDL=2.8]	2.3 U [MDL=2.3]	2.2 U [MDL=2.2]	2.3 U [MDL=2.3]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	26 U [MDL=26]	88 B [MDL=22]	79 B [MDL=21]	41 B [MDL=22]	57 B [MDL=22]	42 B [MDL=23]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	14 U [MDL=14]	12 U [MDL=12]	11 U [MDL=11]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]
CAPROLACTAM	45 U [MDL=45]	51 U [MDL=51]	43 U [MDL=43]	41 U [MDL=41]	43 U [MDL=43]	43 U [MDL=43]	45 U [MDL=45]
CARBAZOLE	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
CHRYSENE	63 [MDL=1.3]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	13 [MDL=1.2]	58 [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]
DIBENZO(A,H)ANTHRACENE	4 U [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
DIBENZOFURAN	4 U [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
DIETHYL PHTHALATE	20 U [MDL=20]	22 U [MDL=22]	18 U [MDL=18]	18 U [MDL=18]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
DIMETHYL PHTHALATE	21 U [MDL=21]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	21 U [MDL=21]	17 U [MDL=17]	17 U [MDL=17]	17 U [MDL=17]	22 J [MDL=17]	21 J [MDL=18]
DI-N-OCTYL PHTHALATE	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
FLUORANTHENE	66 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	17 [MDL=3.7]	89 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
FLUORENE	8.2 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.9 U [MDL=2.9]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]
HEXACHLOROBUTADIENE	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
HEXACHLOROCYCLOPENTADIENE	33 U [MDL=33]	37 UL [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
HEXACHLOROETHANE	11 U [MDL=11]	12 U [MDL=12]	10 U [MDL=10]	10 U [MDL=10]	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]
INDENO(1,2,3-CD)PYRENE	35 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	8.6 [MDL=3.7]	31 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
ISOPHORONE	16 U [MDL=16]	18 U [MDL=18]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]
NAPHTHALENE	15 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	3.7 U [MDL=3.7]	3.8 U [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
NITROBENZENE	2.7 U [MDL=2.7]	3 U [MDL=3]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.7 U [MDL=2.7]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	22 U [MDL=22]	18 U [MDL=18]	18 U [MDL=18]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
N-NITROSO-DI-N-PROPYLAMINE	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	31 U [MDL=31]	33 U [MDL=33]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	29 U [MDL=29]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]
PENTACHLOROPHENOL	98 U [MDL=98]	110 U [MDL=110]	92 U [MDL=92]	89 U [MDL=89]	93 U [MDL=93]	92 U [MDL=92]	97 U [MDL=97]
PHENANTHRENE	42 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	7.8 [MDL=3.7]	42 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
PHENOL	33 U [MDL=33]	37 U [MDL=37]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	42 J [MDL=31]	33 U [MDL=33]
PYRENE	56 [MDL=4]	4.6 U [MDL=4.6]	3.8 U [MDL=3.8]	17 [MDL=3.7]	86 [MDL=3.8]	3.8 U [MDL=3.8]	4 U [MDL=4]
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.51 U [MDL=0.51]	0.77 U [MDL=0.77]	0.56 U [MDL=0.56]	0.74 U [MDL=0.74]	0.55 U [MDL=0.55]	0.74 U [MDL=0.74]	0.58 U [MDL=0.58]
1,1,1-TRICHLOROETHANE	0.46 U [MDL=0.46]	0.70 U [MDL=0.7]	0.51 U [MDL=0.51]	0.67 U [MDL=0.67]	0.50 U [MDL=0.5]	0.67 U [MDL=0.67]	0.52 U [MDL=0.52]
1,1,2,2-TETRACHLOROETHANE	0.28 U [MDL=0.28]	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U [MDL=1.1]	1.6 U [MDL=1.6]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-876 D-SB-876-2-4 4/23/2012	SB-876 D-SB-876-4-6 4/23/2012	SB-876 D-SB-876-6-8 4/23/2012	SB-877 D-SB-877-0-1 4/25/2012	SB-877 D-SB-877-1-2 4/25/2012	SB-877 D-SB-877-2-4 4/25/2012	SB-877 D-SB-877-4-6 4/25/2012
1,1-DICHLOROETHANE	0.30 U [MDL=0.3]	0.45 U [MDL=0.45]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]	0.34 U [MDL=0.34]
1,1-DICHLOROETHENE	0.43 U [MDL=0.43]	0.65 U [MDL=0.65]	0.47 U [MDL=0.47]	0.62 U [MDL=0.62]	0.46 U [MDL=0.46]	0.62 U [MDL=0.62]	0.49 U [MDL=0.49]
1,1-DICHLOROPROPENE	0.25 U [MDL=0.25]	0.37 U [MDL=0.37]	0.27 U [MDL=0.27]	0.36 U [MDL=0.36]	0.27 U [MDL=0.27]	0.36 U [MDL=0.36]	0.28 U [MDL=0.28]
1,2,3-TRICHLOROBENZENE	0.31 U [MDL=0.31]	0.47 U [MDL=0.47]	0.34 U [MDL=0.34]	0.45 U [MDL=0.45]	0.34 U [MDL=0.34]	0.45 U [MDL=0.45]	0.36 U [MDL=0.36]
1,2,3-TRICHLOROPROPANE	0.74 U [MDL=0.74]	1.1 U [MDL=1.1]	0.81 U [MDL=0.81]	1.1 U [MDL=1.1]	0.80 U [MDL=0.8]	1.1 U [MDL=1.1]	0.84 U [MDL=0.84]
1,2,3-TRIMETHYLBENZENE	0.14 U [MDL=0.14]	0.21 U [MDL=0.21]	0.15 U [MDL=0.15]	0.20 U [MDL=0.2]	0.15 U [MDL=0.15]	0.20 U [MDL=0.2]	0.16 U [MDL=0.16]
1,2,4-TRICHLOROBENZENE	0.22 U [MDL=0.22]	0.34 U [MDL=0.34]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.25 U [MDL=0.25]
1,2,4-TRIMETHYLBENZENE	0.54 U [MDL=0.54]	0.81 U [MDL=0.81]	0.59 U [MDL=0.59]	0.77 U [MDL=0.77]	0.58 U [MDL=0.58]	0.77 U [MDL=0.77]	0.61 U [MDL=0.61]
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U [MDL=1.1]	1.6 U [MDL=1.6]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.2 U [MDL=1.2]
1,2-DIBROMOETHANE	0.41 U [MDL=0.41]	0.62 U [MDL=0.62]	0.45 U [MDL=0.45]	0.60 U [MDL=0.6]	0.45 U [MDL=0.45]	0.60 U [MDL=0.6]	0.47 U [MDL=0.47]
1,2-DICHLOROBENZENE	0.30 U [MDL=0.3]	0.45 U [MDL=0.45]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]	0.34 U [MDL=0.34]
1,2-DICHLOROETHANE	0.28 U [MDL=0.28]	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]
1,2-DICHLOROPROPANE	0.57 U [MDL=0.57]	0.86 U [MDL=0.86]	0.62 U [MDL=0.62]	0.82 U [MDL=0.82]	0.61 U [MDL=0.61]	0.82 U [MDL=0.82]	0.65 U [MDL=0.65]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.29 U [MDL=0.29]	0.44 U [MDL=0.44]	0.32 U [MDL=0.32]	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.42 U [MDL=0.42]	0.33 U [MDL=0.33]
1,3-DICHLOROPROPANE	0.28 U [MDL=0.28]	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]
1,4-DICHLOROBENZENE	0.55 U [MDL=0.55]	0.82 U [MDL=0.82]	0.60 U [MDL=0.6]	0.79 U [MDL=0.79]	0.59 U [MDL=0.59]	0.79 U [MDL=0.79]	0.62 U [MDL=0.62]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.78 U [MDL=0.78]	1.2 U [MDL=1.2]	0.85 U [MDL=0.85]	1.1 U [MDL=1.1]	0.84 U [MDL=0.84]	1.1 U [MDL=1.1]	0.88 U [MDL=0.88]
2-BUTANONE	1.2 U [MDL=1.2]	9.8 J [MDL=1.7]	1.3 U [MDL=1.3]	1.7 U [MDL=1.7]	1.2 U [MDL=1.2]	1.7 U [MDL=1.7]	1.3 U [MDL=1.3]
2-CHLOROETHYL VINYL ETHER	1.2 U [MDL=1.2]	1.7 U [MDL=1.7]	1.3 U [MDL=1.3]	1.7 U [MDL=1.7]	1.2 U [MDL=1.2]	1.7 U [MDL=1.7]	1.3 U [MDL=1.3]
2-CHLOROTOLUENE	0.33 U [MDL=0.33]	0.50 U [MDL=0.5]	0.36 U [MDL=0.36]	0.48 U [MDL=0.48]	0.36 U [MDL=0.36]	0.48 U [MDL=0.48]	0.37 U [MDL=0.37]
2-HEXANONE	0.52 U [MDL=0.52]	0.79 U [MDL=0.79]	0.57 U [MDL=0.57]	0.75 U [MDL=0.75]	0.56 U [MDL=0.56]	0.75 U [MDL=0.75]	0.59 U [MDL=0.59]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.34 U [MDL=0.34]	0.51 U [MDL=0.51]	0.37 U [MDL=0.37]	0.49 U [MDL=0.49]	0.37 U [MDL=0.37]	0.49 U [MDL=0.49]	0.38 U [MDL=0.38]
4-ISOPROPYLTOLUENE	0.17 U [MDL=0.17]	0.26 U [MDL=0.26]	0.19 U [MDL=0.19]	0.25 U [MDL=0.25]	0.19 U [MDL=0.19]	0.25 U [MDL=0.25]	0.20 U [MDL=0.2]
4-METHYL-2-PENTANONE	0.45 U [MDL=0.45]	0.67 U [MDL=0.67]	0.49 U [MDL=0.49]	0.64 U [MDL=0.64]	0.48 U [MDL=0.48]	0.64 U [MDL=0.64]	0.51 U [MDL=0.51]
ACETONE	22 B [MDL=5.2]	110 K [MDL=7.9]	35 B [MDL=5.7]	7.5 U [MDL=7.5]	5.6 U [MDL=5.6]	7.5 U [MDL=7.5]	30 B [MDL=5.9]
BENZENE	0.19 U [MDL=0.19]	0.29 U [MDL=0.29]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]	0.20 U [MDL=0.2]	0.27 U [MDL=0.27]	0.22 U [MDL=0.22]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.27 U [MDL=0.27]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.39 U [MDL=0.39]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]
BROMOCHLOROMETHANE	0.59 U [MDL=0.59]	0.89 U [MDL=0.89]	0.64 U [MDL=0.64]	0.85 U [MDL=0.85]	0.63 U [MDL=0.63]	0.85 U [MDL=0.85]	0.66 U [MDL=0.66]
BROMODICHLOROMETHANE	0.23 U [MDL=0.23]	0.35 U [MDL=0.35]	0.25 U [MDL=0.25]	0.33 U [MDL=0.33]	0.25 U [MDL=0.25]	0.33 U [MDL=0.33]	0.26 U [MDL=0.26]
BROMOFORM	0.27 U [MDL=0.27]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.39 U [MDL=0.39]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]
BROMOMETHANE	0.45 U [MDL=0.45]	0.67 U [MDL=0.67]	0.49 U [MDL=0.49]	0.64 U [MDL=0.64]	0.48 U [MDL=0.48]	0.64 U [MDL=0.64]	0.51 U [MDL=0.51]
CARBON DISULFIDE	0.36 U [MDL=0.36]	3 J [MDL=0.55]	0.40 U [MDL=0.4]	0.52 U [MDL=0.52]	0.39 U [MDL=0.39]	0.52 U [MDL=0.52]	1.7 J [MDL=0.41]
CARBON TETRACHLORIDE	0.31 U [MDL=0.31]	0.46 U [MDL=0.46]	0.33 U [MDL=0.33]	0.44 U [MDL=0.44]	0.33 U [MDL=0.33]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]
CHLOROBENZENE	0.27 U [MDL=0.27]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.39 U [MDL=0.39]	0.29 U [MDL=0.29]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]
CHLORODIBROMOMETHANE	0.45 U [MDL=0.45]	0.69 U [MDL=0.69]	0.50 U [MDL=0.5]	0.66 U [MDL=0.66]	0.49 U [MDL=0.49]	0.66 U [MDL=0.66]	0.51 U [MDL=0.51]
CHLOROETHANE	0.71 U [MDL=0.71]	1.1 U [MDL=1.1]	0.78 U [MDL=0.78]	1 U [MDL=1]	0.77 U [MDL=0.77]	1 U [MDL=1]	0.80 U [MDL=0.8]
CHLOROFORM	0.24 U [MDL=0.24]	0.36 U [MDL=0.36]	0.26 U [MDL=0.26]	0.35 U [MDL=0.35]	0.26 U [MDL=0.26]	0.35 U [MDL=0.35]	0.27 U [MDL=0.27]
CHLOROMETHANE	0.34 U [MDL=0.34]	0.51 U [MDL=0.51]	0.37 U [MDL=0.37]	0.49 U [MDL=0.49]	0.37 U [MDL=0.37]	0.49 U [MDL=0.49]	0.38 U [MDL=0.38]
CIS-1,2-DICHLOROETHENE	0.30 U [MDL=0.3]	0.45 U [MDL=0.45]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]	0.32 U [MDL=0.32]	0.43 U [MDL=0.43]	0.34 U [MDL=0.34]
CIS-1,3-DICHLOROPROPENE	0.28 U [MDL=0.28]	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.52 U [MDL=0.52]	0.79 U [MDL=0.79]	0.57 U [MDL=0.57]	0.75 U [MDL=0.75]	0.56 U [MDL=0.56]	0.75 U [MDL=0.75]	0.59 U [MDL=0.59]
DICHLORODIFLUOROMETHANE	0.41 U [MDL=0.41]	0.62 U [MDL=0.62]	0.45 U [MDL=0.45]	0.60 U [MDL=0.6]	0.45 U [MDL=0.45]	0.60 U [MDL=0.6]	0.47 U [MDL=0.47]
DIISOPROPYL ETHER	1.2 U [MDL=1.2]	1.9 U [MDL=1.9]	1.4 U [MDL=1.4]	1.8 U [MDL=1.8]	1.3 U [MDL=1.3]	1.8 U [MDL=1.8]	1.4 U [MDL=1.4]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-876 D-SB-876-2-4 4/23/2012	SB-876 D-SB-876-4-6 4/23/2012	SB-876 D-SB-876-6-8 4/23/2012	SB-877 D-SB-877-0-1 4/25/2012	SB-877 D-SB-877-1-2 4/25/2012	SB-877 D-SB-877-2-4 4/25/2012	SB-877 D-SB-877-4-6 4/25/2012
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.18 U [MDL=0.18]	0.27 U [MDL=0.27]	0.20 U [MDL=0.2]	0.26 U [MDL=0.26]	0.20 U [MDL=0.2]	0.26 U [MDL=0.26]	0.21 U [MDL=0.21]
ETHYLBENZENE	0.21 U [MDL=0.21]	0.32 U [MDL=0.32]	0.23 U [MDL=0.23]	0.31 U [MDL=0.31]	0.23 U [MDL=0.23]	0.31 U [MDL=0.31]	0.24 U [MDL=0.24]
HEXACHLOROBUTADIENE	0.99 U [MDL=0.99]	1.5 U [MDL=1.5]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.13 U [MDL=0.13]	0.20 U [MDL=0.2]	0.14 U [MDL=0.14]	0.19 U [MDL=0.19]	0.14 U [MDL=0.14]	0.19 U [MDL=0.19]	0.15 U [MDL=0.15]
M+P-XYLENES	0.99 U [MDL=0.99]	1.5 U [MDL=1.5]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]
METHYL ACETATE	--	--	--	--	2.2 NJ [MDL=1.2]	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.36 U [MDL=0.36]	0.54 U [MDL=0.54]	0.39 U [MDL=0.39]	0.51 U [MDL=0.51]	0.38 U [MDL=0.38]	0.51 U [MDL=0.51]	0.40 U [MDL=0.4]
METHYLENE CHLORIDE	0.55 U [MDL=0.55]	0.84 U [MDL=0.84]	1.1 J [MDL=0.6]	0.80 U [MDL=0.8]	0.63 B [MDL=0.6]	0.9 B [MDL=0.8]	2.3 B [MDL=0.63]
NAPHTHALENE	0.16 U [MDL=0.16]	0.24 U [MDL=0.24]	0.17 U [MDL=0.17]	0.23 U [MDL=0.23]	0.17 U [MDL=0.17]	0.23 U [MDL=0.23]	0.18 U [MDL=0.18]
N-BUTYLBENZENE	0.19 U [MDL=0.19]	0.29 U [MDL=0.29]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]	0.20 U [MDL=0.2]	0.27 U [MDL=0.27]	0.22 U [MDL=0.22]
N-PROPYLBENZENE	0.33 U [MDL=0.33]	0.50 U [MDL=0.5]	0.36 U [MDL=0.36]	0.48 U [MDL=0.48]	0.36 U [MDL=0.36]	0.48 U [MDL=0.48]	0.37 U [MDL=0.37]
O-XYLENE	0.29 U [MDL=0.29]	0.44 U [MDL=0.44]	0.32 U [MDL=0.32]	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.42 U [MDL=0.42]	0.33 U [MDL=0.33]
SEC-BUTYLBENZENE	0.15 U [MDL=0.15]	0.22 U [MDL=0.22]	0.16 U [MDL=0.16]	0.21 U [MDL=0.21]	0.16 U [MDL=0.16]	0.21 U [MDL=0.21]	0.17 U [MDL=0.17]
STYRENE	0.12 U [MDL=0.12]	0.19 U [MDL=0.19]	0.14 U [MDL=0.14]	0.18 U [MDL=0.18]	0.13 U [MDL=0.13]	0.18 U [MDL=0.18]	0.14 U [MDL=0.14]
TERT-AMYL METHYL ETHER	0.31 U [MDL=0.31]	0.46 U [MDL=0.46]	0.33 U [MDL=0.33]	0.44 U [MDL=0.44]	0.33 U [MDL=0.33]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]
TERT-BUTYLBENZENE	0.24 U [MDL=0.24]	0.36 U [MDL=0.36]	0.26 U [MDL=0.26]	0.35 U [MDL=0.35]	0.26 U [MDL=0.26]	0.35 U [MDL=0.35]	0.27 U [MDL=0.27]
TERTIARY-BUTYL ALCOHOL	6.3 UR [MDL=6.3]	9.5 UR [MDL=9.5]	6.9 UR [MDL=6.9]	9.1 UR [MDL=9.1]	6.8 UR [MDL=6.8]	9.1 UR [MDL=9.1]	7.1 UR [MDL=7.1]
TETRACHLOROETHENE	0.43 U [MDL=0.43]	0.65 U [MDL=0.65]	0.47 U [MDL=0.47]	0.62 U [MDL=0.62]	0.46 U [MDL=0.46]	0.62 U [MDL=0.62]	0.49 U [MDL=0.49]
TOLUENE	0.22 U [MDL=0.22]	0.34 U [MDL=0.34]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.24 U [MDL=0.24]	0.32 U [MDL=0.32]	0.25 U [MDL=0.25]
TOTAL XYLENES	0.55 U [MDL=0.55]	0.84 U [MDL=0.84]	0.60 U [MDL=0.6]	0.80 U [MDL=0.8]	0.60 U [MDL=0.6]	0.80 U [MDL=0.8]	0.63 U [MDL=0.63]
TRANS-1,2-DICHLOROETHENE	0.34 U [MDL=0.34]	0.51 U [MDL=0.51]	0.37 U [MDL=0.37]	0.49 U [MDL=0.49]	0.37 U [MDL=0.37]	0.49 U [MDL=0.49]	0.38 U [MDL=0.38]
TRANS-1,3-DICHLOROPROPENE	0.45 U [MDL=0.45]	0.67 U [MDL=0.67]	0.49 U [MDL=0.49]	0.64 U [MDL=0.64]	0.48 U [MDL=0.48]	0.64 U [MDL=0.64]	0.51 U [MDL=0.51]
TRICHLOROETHENE	0.35 U [MDL=0.35]	0.52 U [MDL=0.52]	0.38 U [MDL=0.38]	0.50 U [MDL=0.5]	0.37 U [MDL=0.37]	0.50 U [MDL=0.5]	0.39 U [MDL=0.39]
TRICHLOROFLUOROMETHANE	0.28 U [MDL=0.28]	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]
VINYL ACETATE	0.21 UR [MDL=0.21]	0.31 UR [MDL=0.31]	0.23 UR [MDL=0.23]	0.30 UR [MDL=0.3]	0.22 UR [MDL=0.22]	0.30 UR [MDL=0.3]	0.23 UR [MDL=0.23]
VINYL CHLORIDE	0.32 U [MDL=0.32]	0.49 U [MDL=0.49]	0.35 U [MDL=0.35]	0.46 U [MDL=0.46]	0.35 U [MDL=0.35]	0.46 U [MDL=0.46]	0.36 U [MDL=0.36]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-876 D-SB-876-2-4 4/23/2012	SB-876 D-SB-876-4-6 4/23/2012	SB-876 D-SB-876-6-8 4/23/2012	SB-877 D-SB-877-0-1 4/25/2012	SB-877 D-SB-877-1-2 4/25/2012	SB-877 D-SB-877-2-4 4/25/2012	SB-877 D-SB-877-4-6 4/25/2012
TOTAL PAHS	--	--	--	--	--	--	--
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	29 U [MDL=29]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	24 U [MDL=24]	25 U [MDL=25]
AROCLOR-1221	19 U [MDL=19]	22 U [MDL=22]	18 U [MDL=18]	18 U [MDL=18]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
AROCLOR-1232	17 U [MDL=17]	19 U [MDL=19]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	16 U [MDL=16]	17 U [MDL=17]
AROCLOR-1242	16 U [MDL=16]	18 U [MDL=18]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]
AROCLOR-1248	21 U [MDL=21]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1254	21 U [MDL=21]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]
AROCLOR-1260	21 U [MDL=21]	24 U [MDL=24]	20 U [MDL=20]	19 U [MDL=19]	50 [MDL=20]	20 U [MDL=20]	20 U [MDL=20]
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	7.5 U [MDL=7.5]	17 U [MDL=17]	0.71 U [MDL=0.71]	14 U [MDL=14]	36 U [MDL=36]	7.1 U [MDL=7.1]	3.7 U [MDL=3.7]
4,4'-DDE	4.7 U [MDL=4.7]	11 U [MDL=11]	0.45 U [MDL=0.45]	8.7 U [MDL=8.7]	66 J [MDL=23]	4.5 U [MDL=4.5]	2.3 U [MDL=2.3]
4,4'-DDT	7.7 U [MDL=7.7]	17 U [MDL=17]	0.73 U [MDL=0.73]	14 U [MDL=14]	37 U [MDL=37]	7.3 U [MDL=7.3]	3.8 U [MDL=3.8]
ALDRIN	15 U [MDL=15]	33 U [MDL=33]	1.4 U [MDL=1.4]	27 U [MDL=27]	70 U [MDL=70]	14 U [MDL=14]	7.2 U [MDL=7.2]
ALPHA-BHC	8.9 U [MDL=8.9]	20 U [MDL=20]	0.84 U [MDL=0.84]	16 U [MDL=16]	42 U [MDL=42]	8.4 U [MDL=8.4]	4.4 U [MDL=4.4]
ALPHA-CHLORDANE	11 U [MDL=11]	26 U [MDL=26]	1.1 U [MDL=1.1]	21 U [MDL=21]	55 U [MDL=55]	11 U [MDL=11]	5.7 U [MDL=5.7]
BETA-BHC	13 U [MDL=13]	31 U [MDL=31]	1.3 U [MDL=1.3]	25 U [MDL=25]	64 U [MDL=64]	13 U [MDL=13]	6.6 U [MDL=6.6]
DELTA-BHC	15 U [MDL=15]	33 U [MDL=33]	1.4 U [MDL=1.4]	27 U [MDL=27]	70 U [MDL=70]	14 U [MDL=14]	7.2 U [MDL=7.2]
DIELDRIN	5.7 U [MDL=5.7]	13 U [MDL=13]	0.54 U [MDL=0.54]	10 U [MDL=10]	27 U [MDL=27]	5.4 U [MDL=5.4]	2.8 U [MDL=2.8]
ENDOSULFAN I	6.3 U [MDL=6.3]	14 U [MDL=14]	0.60 U [MDL=0.6]	12 U [MDL=12]	30 U [MDL=30]	6 U [MDL=6]	3.1 U [MDL=3.1]
ENDOSULFAN II	10 U [MDL=10]	23 U [MDL=23]	0.95 U [MDL=0.95]	18 U [MDL=18]	48 U [MDL=48]	9.4 U [MDL=9.4]	4.9 U [MDL=4.9]
ENDOSULFAN SULFATE	11 U [MDL=11]	24 U [MDL=24]	1 U [MDL=1]	19 U [MDL=19]	51 U [MDL=51]	10 U [MDL=10]	5.2 U [MDL=5.2]
ENDRIN	6.1 U [MDL=6.1]	14 U [MDL=14]	0.58 U [MDL=0.58]	11 U [MDL=11]	29 U [MDL=29]	5.8 U [MDL=5.8]	3 U [MDL=3]
ENDRIN ALDEHYDE	12 U [MDL=12]	28 U [MDL=28]	1.2 U [MDL=1.2]	22 U [MDL=22]	58 U [MDL=58]	12 U [MDL=12]	6 U [MDL=6]
ENDRIN KETONE	7.7 U [MDL=7.7]	17 U [MDL=17]	0.73 U [MDL=0.73]	14 U [MDL=14]	37 U [MDL=37]	7.3 U [MDL=7.3]	3.8 U [MDL=3.8]
GAMMA-BHC (LINDANE)	9 U [MDL=9]	21 U [MDL=21]	0.85 U [MDL=0.85]	17 U [MDL=17]	43 U [MDL=43]	8.5 U [MDL=8.5]	4.5 U [MDL=4.5]
GAMMA-CHLORDANE	5.1 U [MDL=5.1]	12 U [MDL=12]	0.48 U [MDL=0.48]	9.4 U [MDL=9.4]	24 U [MDL=24]	4.8 U [MDL=4.8]	2.5 U [MDL=2.5]
HEPTACHLOR	13 UJ [MDL=13]	31 UJ [MDL=31]	1.3 U [MDL=1.3]	25 U [MDL=25]	64 U [MDL=64]	13 U [MDL=13]	6.6 U [MDL=6.6]
HEPTACHLOR EPOXIDE	9.7 U [MDL=9.7]	22 U [MDL=22]	0.92 U [MDL=0.92]	18 U [MDL=18]	46 U [MDL=46]	9.2 U [MDL=9.2]	4.8 U [MDL=4.8]
METHOXYCHLOR	18 U [MDL=18]	42 U [MDL=42]	1.7 U [MDL=1.7]	34 U [MDL=34]	87 U [MDL=87]	17 U [MDL=17]	9 U [MDL=9]
TOXAPHENE	230 U [MDL=230]	530 U [MDL=530]	22 U [MDL=22]	420 U [MDL=420]	1100 U [MDL=1100]	220 U [MDL=220]	110 U [MDL=110]
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-876	SB-876	SB-876	SB-877	SB-877	SB-877	SB-877
SAMPLE ID	D-SB-876-2-4	D-SB-876-4-6	D-SB-876-6-8	D-SB-877-0-1	D-SB-877-1-2	D-SB-877-2-4	D-SB-877-4-6
SAMPLE DATE	4/23/2012	4/23/2012	4/23/2012	4/25/2012	4/25/2012	4/25/2012	4/25/2012
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	44 [MDL=11]	73 [MDL=13]	11 U [MDL=11]	28 B [MDL=10]	75 B [MDL=11]	11 U [MDL=11]	16 B [MDL=11]
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	56 U [MDL=56]	64 U [MDL=64]	53 U [MDL=53]	51 U [MDL=51]	53 U [MDL=53]	53 U [MDL=53]	56 U [MDL=56]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-877	SB-878	SB-878	SB-878	SB-878	SB-878	SB-879
SAMPLE ID	D-SB-877-6-8	D-SB-878-0-1	D-SB-878-1-2	D-SB-878-2-4	D-SB-878-4-6	D-SB-878-6-8	D-SB-879-0-1
SAMPLE DATE	4/25/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/25/2012
METALS (MG/KG)							
ANTIMONY	2.1 UL [MDL=2.1]	0.44 UL [MDL=0.44]	0.42 UL [MDL=0.42]	0.44 UL [MDL=0.44]	0.34 UL [MDL=0.34]	1.1 UL [MDL=1.1]	0.38 UL [MDL=0.38]
ARSENIC	7.4 J [MDL=1.6]	3.8 [MDL=0.34]	3.3 [MDL=0.32]	3.9 [MDL=0.34]	3 [MDL=0.26]	8.3 [MDL=0.83]	3 [MDL=0.3]
BARIUM	19 J [MDL=0.38]	51 [MDL=0.08]	30 [MDL=0.076]	13 J [MDL=0.08]	21 [MDL=0.062]	34 J [MDL=0.2]	35 J [MDL=0.07]
BERYLLIUM	1.7 J [MDL=0.23]	1.1 [MDL=0.048]	0.98 [MDL=0.046]	2.2 [MDL=0.048]	1.3 [MDL=0.037]	2.3 [MDL=0.12]	0.78 [MDL=0.042]
CADMIUM	0.19 U [MDL=0.19]	0.34 J [MDL=0.041]	0.16 J [MDL=0.039]	0.16 J [MDL=0.04]	0.1 J [MDL=0.031]	0.3 J [MDL=0.099]	0.12 J [MDL=0.035]
CHROMIUM	34 J [MDL=1.1]	16 [MDL=0.23]	15 [MDL=0.22]	25 [MDL=0.22]	20 [MDL=0.17]	30 [MDL=0.55]	13 J [MDL=0.2]
COBALT	12 [MDL=0.86]	8.3 [MDL=0.18]	7.9 [MDL=0.17]	25 [MDL=0.18]	23 [MDL=0.14]	25 [MDL=0.44]	5.4 [MDL=0.16]
COPPER	22 L [MDL=4]	14 [MDL=0.83]	14 [MDL=0.8]	41 [MDL=0.83]	30 [MDL=0.64]	35 [MDL=2]	9.7 [MDL=0.73]
IRON	--	--	--	--	--	--	--
LEAD	18 J [MDL=1]	21 [MDL=0.21]	23 [MDL=0.2]	6.8 [MDL=0.21]	5.1 [MDL=0.17]	37 [MDL=0.52]	18 J [MDL=0.19]
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.13 [MDL=0.018]	0.082 J [MDL=0.023]	0.049 B [MDL=0.016]	0.02 U [MDL=0.02]	0.016 B [MDL=0.016]	0.15 J [MDL=0.042]	0.038 J [MDL=0.017]
MOLYBDENUM	1.5 U [MDL=1.5]	0.43 J [MDL=0.3]	0.4 J [MDL=0.29]	0.3 J [MDL=0.3]	0.31 J [MDL=0.23]	2.5 J [MDL=0.74]	0.38 J [MDL=0.27]
NICKEL	24 [MDL=1.5]	13 [MDL=0.3]	11 [MDL=0.29]	47 [MDL=0.3]	39 [MDL=0.23]	36 [MDL=0.74]	9.6 [MDL=0.27]
SELENIUM	2.4 U [MDL=2.4]	0.51 U [MDL=0.51]	0.5 J [MDL=0.48]	0.51 U [MDL=0.51]	0.39 U [MDL=0.39]	1.3 J [MDL=1.2]	0.44 U [MDL=0.44]
SILVER	0.54 UL [MDL=0.54]	0.11 U [MDL=0.11]	0.11 U [MDL=0.11]	0.11 U [MDL=0.11]	0.087 U [MDL=0.087]	0.28 U [MDL=0.28]	0.098 UL [MDL=0.098]
THALLIUM	3 U [MDL=3]	0.62 U [MDL=0.62]	0.59 U [MDL=0.59]	0.62 U [MDL=0.62]	0.48 U [MDL=0.48]	1.5 U [MDL=1.5]	0.54 U [MDL=0.54]
VANADIUM	38 J [MDL=0.65]	36 [MDL=0.14]	32 [MDL=0.13]	47 [MDL=0.13]	36 [MDL=0.1]	62 [MDL=0.33]	26 J [MDL=0.12]
ZINC	47 [MDL=5.4]	51 [MDL=1.1]	38 [MDL=1.1]	49 [MDL=1.1]	36 [MDL=0.87]	120 [MDL=2.8]	34 [MDL=0.98]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.87 J [MDL=0.33]	0.36 U [MDL=0.36]	0.32 U [MDL=0.32]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	1.2 J [MDL=0.77]	0.30 U [MDL=0.3]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
1,4-DIOXANE	27 U [MDL=27]	29 U [MDL=29]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	160 U [MDL=160]	25 U [MDL=25]
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U [MDL=12]	13 U [MDL=13]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	68 U [MDL=68]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	30 U [MDL=30]	33 U [MDL=33]	30 U [MDL=30]	29 U [MDL=29]	29 U [MDL=29]	180 U [MDL=180]	28 U [MDL=28]
2,4,6-TRICHLOROPHENOL	98 U [MDL=98]	110 U [MDL=110]	95 U [MDL=95]	93 U [MDL=93]	94 U [MDL=94]	570 U [MDL=570]	90 U [MDL=90]
2,4-DICHLOROPHENOL	24 U [MDL=24]	27 U [MDL=27]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	140 U [MDL=140]	22 U [MDL=22]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	27 U [MDL=27]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	140 U [MDL=140]	22 U [MDL=22]
2,4-DINITROPHENOL	98 UR [MDL=98]	110 U [MDL=110]	95 U [MDL=95]	93 U [MDL=93]	94 U [MDL=94]	570 U [MDL=570]	90 U [MDL=90]
2,4-DINITROTOLUENE	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
2,6-DINITROTOLUENE	26 U [MDL=26]	28 U [MDL=28]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	150 U [MDL=150]	24 U [MDL=24]
2-CHLORONAPHTHALENE	4 U [MDL=4]	4.4 U [MDL=4.4]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	3.7 U [MDL=3.7]
2-CHLOROPHENOL	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
2-METHYLNAPHTHALENE	4 U [MDL=4]	7.6 J [MDL=4.4]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	3.7 U [MDL=3.7]
2-METHYLPHENOL	98 U [MDL=98]	110 U [MDL=110]	95 U [MDL=95]	93 U [MDL=93]	94 U [MDL=94]	570 U [MDL=570]	90 U [MDL=90]
2-NITROANILINE	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	65 U [MDL=65]	10 U [MDL=10]
2-NITROPHENOL	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
3&4-METHYLPHENOL	24 U [MDL=24]	27 U [MDL=27]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]	140 U [MDL=140]	22 U [MDL=22]
3,3'-DICHLOROBENZIDINE	22 U [MDL=22]	24 U [MDL=24]	21 U [MDL=21]	21 U [MDL=21]	21 U [MDL=21]	130 U [MDL=130]	20 U [MDL=20]
3-NITROANILINE	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	110 U [MDL=110]	18 U [MDL=18]
4,6-DINITRO-2-METHYLPHENOL	98 U [MDL=98]	110 U [MDL=110]	95 U [MDL=95]	93 U [MDL=93]	94 U [MDL=94]	570 U [MDL=570]	90 U [MDL=90]
4-BROMOPHENYL PHENYL ETHER	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	93 U [MDL=93]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	26 U [MDL=26]	28 U [MDL=28]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	150 U [MDL=150]	24 U [MDL=24]
4-CHLOROANILINE	21 U [MDL=21]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	120 U [MDL=120]	19 U [MDL=19]
4-CHLOROPHENYL PHENYL ETHER	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	93 U [MDL=93]	15 U [MDL=15]
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	32 U [MDL=32]	34 U [MDL=34]	31 U [MDL=31]	30 U [MDL=30]	31 U [MDL=31]	190 U [MDL=190]	29 U [MDL=29]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-877 D-SB-877-6-8 4/25/2012	SB-878 D-SB-878-0-1 4/24/2012	SB-878 D-SB-878-1-2 4/24/2012	SB-878 D-SB-878-2-4 4/24/2012	SB-878 D-SB-878-4-6 4/24/2012	SB-878 D-SB-878-6-8 4/24/2012	SB-879 D-SB-879-0-1 4/25/2012
4-NITROPHENOL	98 U [MDL=98]	110 U [MDL=110]	95 U [MDL=95]	93 U [MDL=93]	94 U [MDL=94]	570 U [MDL=570]	90 U [MDL=90]
ACENAPHTHENE	10 [MDL=4]	4.4 U [MDL=4.4]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	3.7 U [MDL=3.7]
ACENAPHTHYLENE	4 U [MDL=4]	25 [MDL=4.4]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	12 [MDL=3.7]
ACETOPHENONE	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	66 U [MDL=66]	10 U [MDL=10]
ANTHRACENE	19 [MDL=4]	25 [MDL=4.4]	10 [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	15 [MDL=3.7]
ATRAZINE	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	65 U [MDL=65]	10 U [MDL=10]
BAP EQUIVALENT-HALFND	45.652 [MDL=NaN]	67.65 [MDL=NaN]	28.955 [MDL=NaN]	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]	24 U [MDL=NaN]	50.707 [MDL=NaN]
BAP EQUIVALENT-POS	43.652 [MDL=NaN]	65.23 [MDL=NaN]	27.005 [MDL=NaN]	3.8 U [MDL=NaN]	3.9 U [MDL=NaN]	24 U [MDL=NaN]	48.857 [MDL=NaN]
BENZALDEHYDE	15 U [MDL=15]	16 UJ [MDL=16]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	86 J [MDL=86]	13 U [MDL=13]
BENZO(A)ANTHRACENE	42 [MDL=4]	71 [MDL=4.4]	24 [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	24 [MDL=3.7]
BENZO(A)PYRENE	33 [MDL=4]	48 [MDL=4.4]	21 [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	38 [MDL=3.7]
BENZO(B)FLUORANTHENE	39 [MDL=4]	96 [MDL=4.4]	23 [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	56 [MDL=3.7]
BENZO(G,H,I)PERYLENE	25 [MDL=4]	4.4 U [MDL=4.4]	14 [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	32 [MDL=3.7]
BENZO(K)FLUORANTHENE	21 [MDL=4]	45 [MDL=4.4]	18 [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	22 [MDL=3.7]
BIS(2-CHLOROETHOXY)METHANE	27 U [MDL=27]	29 U [MDL=29]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	160 U [MDL=160]	25 U [MDL=25]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.7 U [MDL=2.7]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]	14 U [MDL=14]	2.2 U [MDL=2.2]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	45 J [MDL=25]	36 B [MDL=22]	56 B [MDL=22]	34 B [MDL=22]	140 U [MDL=140]	61 B [MDL=21]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	13 U [MDL=13]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	72 U [MDL=72]	11 U [MDL=11]
CAPROLACTAM	45 U [MDL=45]	49 U [MDL=49]	44 U [MDL=44]	43 U [MDL=43]	44 U [MDL=44]	270 U [MDL=270]	42 U [MDL=42]
CARBAZOLE	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
CHRYSENE	42 [MDL=1.3]	80 [MDL=1.5]	25 [MDL=1.3]	1.3 U [MDL=1.3]	1.3 U [MDL=1.3]	7.9 U [MDL=7.9]	37 [MDL=1.2]
DIBENZO(A,H)ANTHRACENE	4 U [MDL=4]	4.4 U [MDL=4.4]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	3.7 U [MDL=3.7]
DIBENZOFURAN	4 U [MDL=4]	4.4 U [MDL=4.4]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	3.7 U [MDL=3.7]
DIETHYL PHTHALATE	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	110 U [MDL=110]	18 U [MDL=18]
DIMETHYL PHTHALATE	21 U [MDL=21]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	120 U [MDL=120]	19 U [MDL=19]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	290 J [MDL=20]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]	110 U [MDL=110]	17 U [MDL=17]
DI-N-OCTYL PHTHALATE	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
FLUORANTHENE	80 [MDL=4]	120 [MDL=4.4]	49 [MDL=3.9]	7.9 [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	42 [MDL=3.7]
FLUORENE	11 [MDL=4]	4.4 U [MDL=4.4]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	3.7 U [MDL=3.7]
HEXACHLOROBENZENE	2.6 U [MDL=2.6]	2.8 U [MDL=2.8]	2.5 U [MDL=2.5]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]	15 U [MDL=15]	2.4 U [MDL=2.4]
HEXACHLOROBUTADIENE	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
HEXACHLOROCYCLOPENTADIENE	33 UR [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
HEXACHLOROETHANE	11 U [MDL=11]	12 U [MDL=12]	11 U [MDL=11]	10 U [MDL=10]	11 U [MDL=11]	65 U [MDL=65]	10 U [MDL=10]
INDENO(1,2,3-CD)PYRENE	23 [MDL=4]	4.4 U [MDL=4.4]	11 [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	26 [MDL=3.7]
ISOPHORONE	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	93 U [MDL=93]	15 U [MDL=15]
NAPHTHALENE	10 [MDL=4]	9.4 [MDL=4.4]	3.9 U [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	3.7 U [MDL=3.7]
NITROBENZENE	2.7 U [MDL=2.7]	2.9 U [MDL=2.9]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	16 U [MDL=16]	2.5 U [MDL=2.5]
N-NITROSODIMETHYLAMINE	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	110 U [MDL=110]	18 U [MDL=18]
N-NITROSO-DI-N-PROPYLAMINE	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
N-NITROSODIPHENYLAMINE	26 U [MDL=26]	28 U [MDL=28]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	150 U [MDL=150]	24 U [MDL=24]
PENTACHLOROPHENOL	98 U [MDL=98]	110 U [MDL=110]	95 U [MDL=95]	93 U [MDL=93]	94 U [MDL=94]	570 U [MDL=570]	90 U [MDL=90]
PHENANTHRENE	64 [MDL=4]	43 [MDL=4.4]	38 [MDL=3.9]	3.8 U [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	22 [MDL=3.7]
PHENOL	33 U [MDL=33]	36 U [MDL=36]	32 U [MDL=32]	31 U [MDL=31]	32 U [MDL=32]	190 U [MDL=190]	30 U [MDL=30]
PYRENE	68 [MDL=4]	110 [MDL=4.4]	36 [MDL=3.9]	7.9 [MDL=3.8]	3.9 U [MDL=3.9]	24 U [MDL=24]	44 [MDL=3.7]
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	19 NJ [MDL=1.1]
1,1,1,2-TETRACHLOROETHANE	0.56 U [MDL=0.56]	0.88 U [MDL=0.88]	0.63 U [MDL=0.63]	0.67 U [MDL=0.67]	0.58 U [MDL=0.58]	1.8 U [MDL=1.8]	0.70 U [MDL=0.7]
1,1,1-TRICHLOROETHANE	0.51 U [MDL=0.51]	0.79 U [MDL=0.79]	0.57 U [MDL=0.57]	0.60 U [MDL=0.6]	0.52 U [MDL=0.52]	1.6 U [MDL=1.6]	0.63 U [MDL=0.63]
1,1,2,2-TETRACHLOROETHANE	0.31 U [MDL=0.31]	0.48 U [MDL=0.48]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.96 U [MDL=0.96]	0.39 U [MDL=0.39]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.2 U [MDL=1.2]	1.8 U [MDL=1.8]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	3.7 U [MDL=3.7]	1.5 U [MDL=1.5]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-877 D-SB-877-6-8 4/25/2012	SB-878 D-SB-878-0-1 4/24/2012	SB-878 D-SB-878-1-2 4/24/2012	SB-878 D-SB-878-2-4 4/24/2012	SB-878 D-SB-878-4-6 4/24/2012	SB-878 D-SB-878-6-8 4/24/2012	SB-879 D-SB-879-0-1 4/25/2012
1,1-DICHLOROETHANE	0.33 U [MDL=0.33]	0.51 U [MDL=0.51]	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.34 U [MDL=0.34]	1 U [MDL=1]	0.41 U [MDL=0.41]
1,1-DICHLOROETHENE	0.47 U [MDL=0.47]	0.74 U [MDL=0.74]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]	0.49 U [MDL=0.49]	1.5 U [MDL=1.5]	0.59 U [MDL=0.59]
1,1-DICHLOROPROPENE	0.27 U [MDL=0.27]	0.43 U [MDL=0.43]	0.31 U [MDL=0.31]	0.32 U [MDL=0.32]	0.28 U [MDL=0.28]	0.85 U [MDL=0.85]	0.34 U [MDL=0.34]
1,2,3-TRICHLOROBENZENE	0.35 U [MDL=0.35]	0.54 U [MDL=0.54]	0.39 U [MDL=0.39]	0.41 U [MDL=0.41]	0.35 U [MDL=0.35]	1.1 U [MDL=1.1]	0.43 U [MDL=0.43]
1,2,3-TRICHLOROPROPANE	0.82 U [MDL=0.82]	1.3 U [MDL=1.3]	0.92 U [MDL=0.92]	0.97 U [MDL=0.97]	0.84 U [MDL=0.84]	2.6 U [MDL=2.6]	1 U [MDL=1]
1,2,3-TRIMETHYLBENZENE	0.15 U [MDL=0.15]	0.24 U [MDL=0.24]	0.17 U [MDL=0.17]	0.18 U [MDL=0.18]	0.16 U [MDL=0.16]	0.48 U [MDL=0.48]	0.19 U [MDL=0.19]
1,2,4-TRICHLOROBENZENE	0.25 U [MDL=0.25]	0.38 U [MDL=0.38]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.25 U [MDL=0.25]	0.77 U [MDL=0.77]	0.31 U [MDL=0.31]
1,2,4-TRIMETHYLBENZENE	0.59 U [MDL=0.59]	0.92 U [MDL=0.92]	0.66 U [MDL=0.66]	0.70 U [MDL=0.7]	0.61 U [MDL=0.61]	1.8 U [MDL=1.8]	0.74 U [MDL=0.74]
1,2-DIBROMO-3-CHLOROPROPANE	1.2 U [MDL=1.2]	1.8 U [MDL=1.8]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	3.7 U [MDL=3.7]	1.5 U [MDL=1.5]
1,2-DIBROMOETHANE	0.45 U [MDL=0.45]	0.71 U [MDL=0.71]	0.51 U [MDL=0.51]	0.54 U [MDL=0.54]	0.47 U [MDL=0.47]	1.4 U [MDL=1.4]	0.57 U [MDL=0.57]
1,2-DICHLOROBENZENE	0.33 U [MDL=0.33]	0.51 U [MDL=0.51]	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.34 U [MDL=0.34]	1 U [MDL=1]	0.41 U [MDL=0.41]
1,2-DICHLOROETHANE	0.31 U [MDL=0.31]	0.48 U [MDL=0.48]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.96 U [MDL=0.96]	0.39 U [MDL=0.39]
1,2-DICHLOROPROPANE	0.63 U [MDL=0.63]	0.98 U [MDL=0.98]	0.70 U [MDL=0.7]	0.74 U [MDL=0.74]	0.64 U [MDL=0.64]	2 U [MDL=2]	0.78 U [MDL=0.78]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.32 U [MDL=0.32]	0.50 U [MDL=0.5]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.99 U [MDL=0.99]	0.40 U [MDL=0.4]
1,3-DICHLOROPROPANE	0.31 U [MDL=0.31]	0.48 U [MDL=0.48]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.96 U [MDL=0.96]	0.39 U [MDL=0.39]
1,4-DICHLOROBENZENE	0.60 U [MDL=0.6]	0.94 U [MDL=0.94]	0.67 U [MDL=0.67]	0.71 U [MDL=0.71]	0.62 U [MDL=0.62]	1.9 U [MDL=1.9]	0.75 U [MDL=0.75]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	0.85 U [MDL=0.85]	1.3 U [MDL=1.3]	0.96 U [MDL=0.96]	1 U [MDL=1]	0.88 U [MDL=0.88]	2.7 U [MDL=2.7]	1.1 U [MDL=1.1]
2-BUTANONE	1.3 U [MDL=1.3]	2 U [MDL=2]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	24 J [MDL=4]	1.6 U [MDL=1.6]
2-CHLOROETHYL VINYL ETHER	1.3 U [MDL=1.3]	2 U [MDL=2]	1.4 U [MDL=1.4]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	4 U [MDL=4]	1.6 U [MDL=1.6]
2-CHLOROTOLUENE	0.36 U [MDL=0.36]	0.57 U [MDL=0.57]	0.41 U [MDL=0.41]	0.43 U [MDL=0.43]	0.37 U [MDL=0.37]	1.1 U [MDL=1.1]	0.45 U [MDL=0.45]
2-HEXANONE	0.57 U [MDL=0.57]	0.89 U [MDL=0.89]	0.64 U [MDL=0.64]	0.68 U [MDL=0.68]	0.59 U [MDL=0.59]	1.8 U [MDL=1.8]	0.71 U [MDL=0.71]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.37 U [MDL=0.37]	0.58 U [MDL=0.58]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]	0.38 U [MDL=0.38]	1.2 U [MDL=1.2]	0.46 U [MDL=0.46]
4-ISOPROPYLTOLUENE	0.19 U [MDL=0.19]	0.30 U [MDL=0.3]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.20 U [MDL=0.2]	0.60 U [MDL=0.6]	0.24 U [MDL=0.24]
4-METHYL-2-PENTANONE	0.49 U [MDL=0.49]	0.77 U [MDL=0.77]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.50 U [MDL=0.5]	1.5 U [MDL=1.5]	0.61 U [MDL=0.61]
ACETONE	21 B [MDL=5.7]	14 B [MDL=8.9]	6.4 U [MDL=6.4]	6.8 U [MDL=6.8]	5.9 U [MDL=5.9]	130 B [MDL=18]	7.1 U [MDL=7.1]
BENZENE	0.21 U [MDL=0.21]	0.33 U [MDL=0.33]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]	0.65 U [MDL=0.65]	0.26 U [MDL=0.26]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.30 U [MDL=0.3]	0.47 U [MDL=0.47]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.94 U [MDL=0.94]	0.37 U [MDL=0.37]
BROMOCHLOROMETHANE	0.64 U [MDL=0.64]	1 U [MDL=1]	0.72 U [MDL=0.72]	0.76 U [MDL=0.76]	0.66 U [MDL=0.66]	2 U [MDL=2]	0.80 U [MDL=0.8]
BROMODICHLOROMETHANE	0.25 U [MDL=0.25]	0.40 U [MDL=0.4]	0.29 U [MDL=0.29]	0.30 U [MDL=0.3]	0.26 U [MDL=0.26]	0.79 U [MDL=0.79]	0.32 U [MDL=0.32]
BROMOFORM	0.30 U [MDL=0.3]	0.47 U [MDL=0.47]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.94 U [MDL=0.94]	0.37 U [MDL=0.37]
BROMOMETHANE	0.49 U [MDL=0.49]	0.77 U [MDL=0.77]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.50 U [MDL=0.5]	1.5 U [MDL=1.5]	0.61 U [MDL=0.61]
CARBON DISULFIDE	0.40 U [MDL=0.4]	0.62 U [MDL=0.62]	0.45 U [MDL=0.45]	1.8 J [MDL=0.47]	1.6 J [MDL=0.41]	6.2 J [MDL=1.2]	0.50 U [MDL=0.5]
CARBON TETRACHLORIDE	0.34 U [MDL=0.34]	0.52 U [MDL=0.52]	0.38 U [MDL=0.38]	0.40 U [MDL=0.4]	0.35 U [MDL=0.35]	1 U [MDL=1]	0.42 U [MDL=0.42]
CHLOROBENZENE	0.30 U [MDL=0.3]	0.47 U [MDL=0.47]	0.34 U [MDL=0.34]	0.35 U [MDL=0.35]	0.31 U [MDL=0.31]	0.94 U [MDL=0.94]	0.37 U [MDL=0.37]
CHLORODIBROMOMETHANE	0.50 U [MDL=0.5]	0.78 U [MDL=0.78]	0.56 U [MDL=0.56]	0.59 U [MDL=0.59]	0.51 U [MDL=0.51]	1.6 U [MDL=1.6]	0.62 U [MDL=0.62]
CHLOROETHANE	0.78 U [MDL=0.78]	1.2 U [MDL=1.2]	0.88 U [MDL=0.88]	0.92 U [MDL=0.92]	0.80 U [MDL=0.8]	2.4 U [MDL=2.4]	0.97 U [MDL=0.97]
CHLOROFORM	0.26 U [MDL=0.26]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.82 U [MDL=0.82]	0.33 U [MDL=0.33]
CHLOROMETHANE	0.37 U [MDL=0.37]	0.58 U [MDL=0.58]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]	0.38 U [MDL=0.38]	1.2 U [MDL=1.2]	0.46 U [MDL=0.46]
CIS-1,2-DICHLOROETHENE	0.33 U [MDL=0.33]	0.51 U [MDL=0.51]	0.37 U [MDL=0.37]	0.39 U [MDL=0.39]	0.34 U [MDL=0.34]	1 U [MDL=1]	0.41 U [MDL=0.41]
CIS-1,3-DICHLOROPROPENE	0.31 U [MDL=0.31]	0.48 U [MDL=0.48]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.96 U [MDL=0.96]	0.39 U [MDL=0.39]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.57 U [MDL=0.57]	0.89 U [MDL=0.89]	0.64 U [MDL=0.64]	0.68 U [MDL=0.68]	0.59 U [MDL=0.59]	1.8 U [MDL=1.8]	0.71 U [MDL=0.71]
DICHLORODIFLUOROMETHANE	0.45 U [MDL=0.45]	0.71 U [MDL=0.71]	0.51 U [MDL=0.51]	0.54 U [MDL=0.54]	0.47 U [MDL=0.47]	1.4 U [MDL=1.4]	0.57 U [MDL=0.57]
DIISOPROPYL ETHER	1.4 U [MDL=1.4]	2.1 U [MDL=2.1]	1.5 U [MDL=1.5]	1.6 U [MDL=1.6]	1.4 U [MDL=1.4]	4.3 U [MDL=4.3]	1.7 U [MDL=1.7]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-877 D-SB-877-6-8 4/25/2012	SB-878 D-SB-878-0-1 4/24/2012	SB-878 D-SB-878-1-2 4/24/2012	SB-878 D-SB-878-2-4 4/24/2012	SB-878 D-SB-878-4-6 4/24/2012	SB-878 D-SB-878-6-8 4/24/2012	SB-879 D-SB-879-0-1 4/25/2012
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.20 U [MDL=0.2]	0.31 U [MDL=0.31]	0.22 U [MDL=0.22]	0.24 U [MDL=0.24]	0.21 U [MDL=0.21]	0.62 U [MDL=0.62]	0.25 U [MDL=0.25]
ETHYLBENZENE	0.24 U [MDL=0.24]	0.37 U [MDL=0.37]	0.27 U [MDL=0.27]	0.28 U [MDL=0.28]	0.24 U [MDL=0.24]	0.74 U [MDL=0.74]	0.29 U [MDL=0.29]
HEXACHLOROBUTADIENE	1.1 U [MDL=1.1]	1.7 U [MDL=1.7]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	3.4 U [MDL=3.4]	1.4 U [MDL=1.4]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.15 U [MDL=0.15]	0.23 U [MDL=0.23]	0.16 U [MDL=0.16]	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.45 U [MDL=0.45]	0.18 U [MDL=0.18]
M+P-XYLENES	1.1 U [MDL=1.1]	1.7 U [MDL=1.7]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	3.4 U [MDL=3.4]	1.4 U [MDL=1.4]
METHYL ACETATE	--	25 NJ [MDL=2]	3.9 NJ [MDL=1.4]	--	--	--	5.8 NJ [MDL=1.6]
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.39 U [MDL=0.39]	0.61 U [MDL=0.61]	0.44 U [MDL=0.44]	0.46 U [MDL=0.46]	0.40 U [MDL=0.4]	1.2 U [MDL=1.2]	0.49 U [MDL=0.49]
METHYLENE CHLORIDE	0.61 U [MDL=0.61]	0.95 U [MDL=0.95]	0.68 U [MDL=0.68]	1 J [MDL=0.72]	0.63 U [MDL=0.63]	1.9 U [MDL=1.9]	1.5 B [MDL=0.76]
NAPHTHALENE	0.17 U [MDL=0.17]	0.27 U [MDL=0.27]	0.19 U [MDL=0.19]	0.20 U [MDL=0.2]	0.18 U [MDL=0.18]	2.5 J [MDL=0.54]	0.22 U [MDL=0.22]
N-BUTYLBENZENE	0.21 U [MDL=0.21]	0.33 U [MDL=0.33]	0.23 U [MDL=0.23]	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]	0.65 U [MDL=0.65]	0.26 U [MDL=0.26]
N-PROPYLBENZENE	0.36 U [MDL=0.36]	0.57 U [MDL=0.57]	0.41 U [MDL=0.41]	0.43 U [MDL=0.43]	0.37 U [MDL=0.37]	1.1 U [MDL=1.1]	0.45 U [MDL=0.45]
O-XYLENE	0.32 U [MDL=0.32]	0.50 U [MDL=0.5]	0.36 U [MDL=0.36]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.99 U [MDL=0.99]	0.40 U [MDL=0.4]
SEC-BUTYLBENZENE	0.16 U [MDL=0.16]	0.26 U [MDL=0.26]	0.18 U [MDL=0.18]	0.19 U [MDL=0.19]	0.17 U [MDL=0.17]	0.51 U [MDL=0.51]	0.20 U [MDL=0.2]
STYRENE	0.14 U [MDL=0.14]	0.21 U [MDL=0.21]	0.15 U [MDL=0.15]	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.43 U [MDL=0.43]	0.17 U [MDL=0.17]
TERT-AMYL METHYL ETHER	0.34 U [MDL=0.34]	0.52 U [MDL=0.52]	0.38 U [MDL=0.38]	0.40 U [MDL=0.4]	0.35 U [MDL=0.35]	1 U [MDL=1]	0.42 U [MDL=0.42]
TERT-BUTYLBENZENE	0.26 U [MDL=0.26]	0.41 U [MDL=0.41]	0.30 U [MDL=0.3]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.82 U [MDL=0.82]	0.33 U [MDL=0.33]
TERTIARY-BUTYL ALCOHOL	6.9 UR [MDL=6.9]	11 UR [MDL=11]	7.8 UR [MDL=7.8]	8.2 UR [MDL=8.2]	7.1 UR [MDL=7.1]	22 UR [MDL=22]	8.6 UR [MDL=8.6]
TETRACHLOROETHENE	0.47 U [MDL=0.47]	0.74 U [MDL=0.74]	0.53 U [MDL=0.53]	0.56 U [MDL=0.56]	0.49 U [MDL=0.49]	1.5 U [MDL=1.5]	0.59 U [MDL=0.59]
TOLUENE	0.25 U [MDL=0.25]	0.38 U [MDL=0.38]	0.28 U [MDL=0.28]	0.29 U [MDL=0.29]	0.25 U [MDL=0.25]	0.77 U [MDL=0.77]	0.31 U [MDL=0.31]
TOTAL XYLENES	0.61 U [MDL=0.61]	0.95 U [MDL=0.95]	0.68 U [MDL=0.68]	0.72 U [MDL=0.72]	0.63 U [MDL=0.63]	1.9 U [MDL=1.9]	0.76 U [MDL=0.76]
TRANS-1,2-DICHLOROETHENE	0.37 U [MDL=0.37]	0.58 U [MDL=0.58]	0.42 U [MDL=0.42]	0.44 U [MDL=0.44]	0.38 U [MDL=0.38]	1.2 U [MDL=1.2]	0.46 U [MDL=0.46]
TRANS-1,3-DICHLOROPROPENE	0.49 U [MDL=0.49]	0.77 U [MDL=0.77]	0.55 U [MDL=0.55]	0.58 U [MDL=0.58]	0.50 U [MDL=0.5]	1.5 U [MDL=1.5]	0.61 U [MDL=0.61]
TRICHLOROETHENE	0.38 U [MDL=0.38]	0.60 U [MDL=0.6]	0.43 U [MDL=0.43]	0.45 U [MDL=0.45]	0.39 U [MDL=0.39]	1.2 U [MDL=1.2]	0.48 U [MDL=0.48]
TRICHLOROFLUOROMETHANE	0.31 U [MDL=0.31]	0.48 U [MDL=0.48]	0.35 U [MDL=0.35]	0.37 U [MDL=0.37]	0.32 U [MDL=0.32]	0.96 U [MDL=0.96]	0.39 U [MDL=0.39]
VINYL ACETATE	0.23 UR [MDL=0.23]	0.35 UR [MDL=0.35]	0.26 UR [MDL=0.26]	0.27 UR [MDL=0.27]	0.23 UR [MDL=0.23]	0.71 UR [MDL=0.71]	0.28 UR [MDL=0.28]
VINYL CHLORIDE	0.35 U [MDL=0.35]	0.55 U [MDL=0.55]	0.40 U [MDL=0.4]	0.42 U [MDL=0.42]	0.36 U [MDL=0.36]	1.1 U [MDL=1.1]	0.44 U [MDL=0.44]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-877 D-SB-877-6-8 4/25/2012	SB-878 D-SB-878-0-1 4/24/2012	SB-878 D-SB-878-1-2 4/24/2012	SB-878 D-SB-878-2-4 4/24/2012	SB-878 D-SB-878-4-6 4/24/2012	SB-878 D-SB-878-6-8 4/24/2012	SB-879 D-SB-879-0-1 4/25/2012
TOTAL PAHS	--	--	--	--	--	--	--
PCBS (UG/KG)							
AROCLOR-1016	26 U [MDL=26]	28 U [MDL=28]	25 U [MDL=25]	24 U [MDL=24]	25 U [MDL=25]	60 U [MDL=60]	23 U [MDL=23]
AROCLOR-1221	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]	46 U [MDL=46]	18 U [MDL=18]
AROCLOR-1232	17 U [MDL=17]	19 U [MDL=19]	16 U [MDL=16]	16 U [MDL=16]	17 U [MDL=17]	40 U [MDL=40]	16 U [MDL=16]
AROCLOR-1242	16 U [MDL=16]	17 U [MDL=17]	15 U [MDL=15]	15 U [MDL=15]	15 U [MDL=15]	37 U [MDL=37]	15 U [MDL=15]
AROCLOR-1248	21 U [MDL=21]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	49 U [MDL=49]	19 U [MDL=19]
AROCLOR-1254	21 U [MDL=21]	23 U [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	49 U [MDL=49]	19 U [MDL=19]
AROCLOR-1260	21 U [MDL=21]	24 J [MDL=23]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	49 U [MDL=49]	19 U [MDL=19]
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	7.6 U [MDL=7.6]	41 UJ [MDL=41]	7.3 UJ [MDL=7.3]	14 UJ [MDL=14]	0.73 UJ [MDL=0.73]	35 UJ [MDL=35]	14 U [MDL=14]
4,4'-DDE	4.8 U [MDL=4.8]	26 U [MDL=26]	4.6 U [MDL=4.6]	9 U [MDL=9]	0.46 U [MDL=0.46]	22 U [MDL=22]	8.7 U [MDL=8.7]
4,4'-DDT	7.7 U [MDL=7.7]	42 U [MDL=42]	7.4 U [MDL=7.4]	15 U [MDL=15]	0.74 U [MDL=0.74]	36 U [MDL=36]	14 U [MDL=14]
ALDRIN	15 U [MDL=15]	80 U [MDL=80]	14 U [MDL=14]	28 U [MDL=28]	1.4 U [MDL=1.4]	69 U [MDL=69]	27 U [MDL=27]
ALPHA-BHC	8.9 U [MDL=8.9]	48 U [MDL=48]	8.6 U [MDL=8.6]	17 U [MDL=17]	0.86 U [MDL=0.86]	42 U [MDL=42]	16 U [MDL=16]
ALPHA-CHLORDANE	11 U [MDL=11]	62 U [MDL=62]	11 U [MDL=11]	22 U [MDL=22]	1.1 U [MDL=1.1]	54 U [MDL=54]	21 U [MDL=21]
BETA-BHC	13 U [MDL=13]	73 U [MDL=73]	13 U [MDL=13]	25 U [MDL=25]	1.3 U [MDL=1.3]	63 U [MDL=63]	25 U [MDL=25]
DELTA-BHC	15 U [MDL=15]	80 U [MDL=80]	14 U [MDL=14]	28 U [MDL=28]	1.4 U [MDL=1.4]	69 U [MDL=69]	27 U [MDL=27]
DIELDRIN	5.7 U [MDL=5.7]	31 U [MDL=31]	5.5 U [MDL=5.5]	11 U [MDL=11]	0.55 U [MDL=0.55]	27 U [MDL=27]	10 U [MDL=10]
ENDOSULFAN I	6.4 U [MDL=6.4]	34 UJ [MDL=34]	6.1 UJ [MDL=6.1]	12 UJ [MDL=12]	0.61 UJ [MDL=0.61]	30 UJ [MDL=30]	12 U [MDL=12]
ENDOSULFAN II	10 U [MDL=10]	54 U [MDL=54]	9.6 U [MDL=9.6]	19 U [MDL=19]	0.97 U [MDL=0.97]	47 U [MDL=47]	18 U [MDL=18]
ENDOSULFAN SULFATE	11 U [MDL=11]	58 U [MDL=58]	10 U [MDL=10]	20 U [MDL=20]	1 U [MDL=1]	50 U [MDL=50]	19 U [MDL=19]
ENDRIN	6.1 U [MDL=6.1]	33 U [MDL=33]	5.9 U [MDL=5.9]	12 U [MDL=12]	0.59 U [MDL=0.59]	29 U [MDL=29]	11 U [MDL=11]
ENDRIN ALDEHYDE	12 U [MDL=12]	66 U [MDL=66]	12 U [MDL=12]	23 U [MDL=23]	1.2 U [MDL=1.2]	57 U [MDL=57]	22 U [MDL=22]
ENDRIN KETONE	7.7 U [MDL=7.7]	42 U [MDL=42]	7.4 U [MDL=7.4]	15 U [MDL=15]	0.74 U [MDL=0.74]	36 U [MDL=36]	14 U [MDL=14]
GAMMA-BHC (LINDANE)	9 U [MDL=9]	49 UJ [MDL=49]	8.7 UJ [MDL=8.7]	17 UJ [MDL=17]	0.87 UJ [MDL=0.87]	42 UJ [MDL=42]	17 U [MDL=17]
GAMMA-CHLORDANE	5.1 U [MDL=5.1]	28 U [MDL=28]	4.9 U [MDL=4.9]	9.7 U [MDL=9.7]	0.50 U [MDL=0.5]	24 U [MDL=24]	9.4 U [MDL=9.4]
HEPTACHLOR	13 U [MDL=13]	73 UJ [MDL=73]	13 UJ [MDL=13]	25 UJ [MDL=25]	1.3 UJ [MDL=1.3]	63 UJ [MDL=63]	25 U [MDL=25]
HEPTACHLOR EPOXIDE	9.8 U [MDL=9.8]	53 U [MDL=53]	9.4 U [MDL=9.4]	18 U [MDL=18]	0.94 U [MDL=0.94]	46 U [MDL=46]	18 U [MDL=18]
METHOXYCHLOR	18 U [MDL=18]	99 U [MDL=99]	18 U [MDL=18]	35 U [MDL=35]	1.8 U [MDL=1.8]	86 U [MDL=86]	33 U [MDL=33]
TOXAPHENE	230 U [MDL=230]	1300 U [MDL=1300]	220 U [MDL=220]	440 U [MDL=440]	22 U [MDL=22]	1100 U [MDL=1100]	420 U [MDL=420]
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-877	SB-878	SB-878	SB-878	SB-878	SB-878	SB-879
SAMPLE ID	D-SB-877-6-8	D-SB-878-0-1	D-SB-878-1-2	D-SB-878-2-4	D-SB-878-4-6	D-SB-878-6-8	D-SB-879-0-1
SAMPLE DATE	4/25/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/25/2012
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	20 B [MDL=11]	48 [MDL=12]	19 J [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	220 [MDL=27]	59 B [MDL=10]
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	56 U [MDL=56]	61 U [MDL=61]	54 U [MDL=54]	53 U [MDL=53]	54 U [MDL=54]	130 U [MDL=130]	52 U [MDL=52]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-879	SB-879	SB-879	SB-879	SB-880	SB-880	SB-880
SAMPLE ID	D-SB-879-1-2	D-SB-879-2-4	D-SB-879-4-6	D-SB-879-6-8	D-SB-880-0-1	D-SB-880-1-2	D-SB-880-2-4
SAMPLE DATE	4/25/2012	4/25/2012	4/25/2012	4/25/2012	4/24/2012	4/24/2012	4/24/2012
METALS (MG/KG)							
ANTIMONY	0.41 UL [MDL=0.41]	0.41 UL [MDL=0.41]	2.1 UL [MDL=2.1]	4.1 UL [MDL=4.1]	0.42 UL [MDL=0.42]	0.35 UL [MDL=0.35]	0.44 UL [MDL=0.44]
ARSENIC	2.9 [MDL=0.31]	3.8 [MDL=0.32]	4.9 J [MDL=1.6]	6.4 J [MDL=3.2]	3 [MDL=0.32]	2.7 [MDL=0.27]	3.4 [MDL=0.34]
BARIUM	33 J [MDL=0.074]	12 J [MDL=0.075]	50 J [MDL=0.39]	29 J [MDL=0.75]	46 [MDL=0.077]	43 [MDL=0.063]	20 J [MDL=0.08]
BERYLLIUM	0.91 [MDL=0.045]	1.2 [MDL=0.046]	1.7 J [MDL=0.24]	2.6 J [MDL=0.46]	0.64 B [MDL=0.047]	1.1 [MDL=0.038]	2 [MDL=0.048]
CADMIUM	0.1 J [MDL=0.038]	0.065 J [MDL=0.038]	0.20 U [MDL=0.2]	0.38 U [MDL=0.38]	0.065 J [MDL=0.039]	0.14 J [MDL=0.032]	0.15 J [MDL=0.041]
CHROMIUM	14 J [MDL=0.21]	16 J [MDL=0.21]	17 J [MDL=1.1]	22 J [MDL=2.1]	12 [MDL=0.22]	13 [MDL=0.18]	23 [MDL=0.23]
COBALT	6.2 [MDL=0.17]	8.9 [MDL=0.17]	19 [MDL=0.87]	21 L [MDL=1.7]	3.8 [MDL=0.17]	11 [MDL=0.14]	19 [MDL=0.18]
COPPER	12 [MDL=0.77]	26 [MDL=0.79]	23 L [MDL=4]	28 L [MDL=7.8]	7.4 [MDL=0.8]	12 [MDL=0.66]	28 [MDL=0.83]
IRON	--	--	--	--	--	--	--
LEAD	13 J [MDL=0.2]	6.9 J [MDL=0.2]	20 J [MDL=1]	26 J [MDL=2]	5.2 [MDL=0.21]	15 [MDL=0.17]	5.7 [MDL=0.21]
MANGANESE	--	--	--	--	--	--	--
MERCURY	0.043 J [MDL=0.015]	0.018 U [MDL=0.018]	0.089 J [MDL=0.02]	0.42 [MDL=0.018]	0.029 B [MDL=0.019]	0.045 B [MDL=0.016]	0.018 U [MDL=0.018]
MOLYBDENUM	0.34 J [MDL=0.28]	0.29 J [MDL=0.29]	1.5 U [MDL=1.5]	2.9 U [MDL=2.9]	0.29 U [MDL=0.29]	0.29 J [MDL=0.24]	0.3 J [MDL=0.3]
NICKEL	11 [MDL=0.28]	21 [MDL=0.29]	28 [MDL=1.5]	46 [MDL=2.9]	8.8 [MDL=0.29]	12 [MDL=0.24]	38 [MDL=0.3]
SELENIUM	0.47 U [MDL=0.47]	0.48 U [MDL=0.48]	2.5 U [MDL=2.5]	4.8 U [MDL=4.8]	0.55 J [MDL=0.49]	0.40 U [MDL=0.4]	0.51 U [MDL=0.51]
SILVER	0.10 UL [MDL=0.1]	0.11 UL [MDL=0.11]	0.55 UL [MDL=0.55]	1.1 UL [MDL=1.1]	0.11 U [MDL=0.11]	0.089 U [MDL=0.089]	0.11 U [MDL=0.11]
THALLIUM	0.57 U [MDL=0.57]	0.58 U [MDL=0.58]	3 U [MDL=3]	5.8 U [MDL=5.8]	0.60 U [MDL=0.6]	0.49 U [MDL=0.49]	0.62 U [MDL=0.62]
VANADIUM	28 J [MDL=0.13]	28 J [MDL=0.13]	28 J [MDL=0.66]	28 J [MDL=1.3]	28 [MDL=0.13]	28 [MDL=0.11]	43 [MDL=0.14]
ZINC	33 [MDL=1]	27 [MDL=1.1]	53 [MDL=5.5]	140 [MDL=11]	18 [MDL=1.1]	42 [MDL=0.89]	54 [MDL=1.1]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.71 J [MDL=0.3]	0.32 U [MDL=0.32]	0.47 J [MDL=0.32]	0.33 U [MDL=0.33]	0.30 U [MDL=0.3]	0.29 U [MDL=0.29]	0.31 U [MDL=0.31]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
1,4-DIOXANE	97 U [MDL=97]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	25 UJ [MDL=25]	24 U [MDL=24]	25 U [MDL=25]
2,2'-OXYBIS(1-CHLOROPROPANE)	42 U [MDL=42]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	11 UJ [MDL=11]	10 U [MDL=10]	11 U [MDL=11]
2,4,5-TRICHLOROPHENOL	110 U [MDL=110]	30 U [MDL=30]	30 U [MDL=30]	30 U [MDL=30]	28 UJ [MDL=28]	27 U [MDL=27]	28 U [MDL=28]
2,4,6-TRICHLOROPHENOL	350 U [MDL=350]	95 U [MDL=95]	96 U [MDL=96]	96 U [MDL=96]	89 UJ [MDL=89]	86 U [MDL=86]	91 U [MDL=91]
2,4-DICHLOROPHENOL	88 U [MDL=88]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	22 UJ [MDL=22]	22 U [MDL=22]	23 U [MDL=23]
2,4-DIMETHYLPHENOL	88 U [MDL=88]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	22 UJ [MDL=22]	22 U [MDL=22]	23 U [MDL=23]
2,4-DINITROPHENOL	350 U [MDL=350]	95 U [MDL=95]	96 U [MDL=96]	96 U [MDL=96]	89 UJ [MDL=89]	86 U [MDL=86]	91 U [MDL=91]
2,4-DINITROTOLUENE	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
2,6-DINITROTOLUENE	93 U [MDL=93]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]	23 UJ [MDL=23]	23 U [MDL=23]	24 U [MDL=24]
2-CHLORONAPHTHALENE	15 U [MDL=15]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.7 UJ [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
2-CHLOROPHENOL	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
2-METHYLNAPHTHALENE	15 U [MDL=15]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	8.3 [MDL=4]	5.1 J [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
2-METHYLPHENOL	350 U [MDL=350]	95 U [MDL=95]	96 U [MDL=96]	96 U [MDL=96]	89 UJ [MDL=89]	86 U [MDL=86]	91 U [MDL=91]
2-NITROANILINE	40 U [MDL=40]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 UJ [MDL=10]	9.8 U [MDL=9.8]	10 U [MDL=10]
2-NITROPHENOL	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
3&4-METHYLPHENOL	88 U [MDL=88]	24 U [MDL=24]	24 U [MDL=24]	24 U [MDL=24]	22 UJ [MDL=22]	22 U [MDL=22]	23 U [MDL=23]
3,3'-DICHLOROBENZIDINE	79 U [MDL=79]	21 U [MDL=21]	21 U [MDL=21]	22 U [MDL=22]	20 UJ [MDL=20]	19 U [MDL=19]	20 U [MDL=20]
3-NITROANILINE	70 U [MDL=70]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	18 UJ [MDL=18]	17 U [MDL=17]	18 U [MDL=18]
4,6-DINITRO-2-METHYLPHENOL	350 U [MDL=350]	95 U [MDL=95]	96 U [MDL=96]	96 U [MDL=96]	89 UJ [MDL=89]	86 U [MDL=86]	91 U [MDL=91]
4-BROMOPHENYL PHENYL ETHER	57 U [MDL=57]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	15 UJ [MDL=15]	14 U [MDL=14]	15 U [MDL=15]
4-CHLORO-3-METHYLPHENOL	93 U [MDL=93]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]	23 UJ [MDL=23]	23 U [MDL=23]	24 U [MDL=24]
4-CHLOROANILINE	75 U [MDL=75]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	19 UJ [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
4-CHLOROPHENYL PHENYL ETHER	57 U [MDL=57]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	15 UJ [MDL=15]	14 U [MDL=14]	15 U [MDL=15]
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	110 U [MDL=110]	31 U [MDL=31]	31 U [MDL=31]	31 U [MDL=31]	29 UJ [MDL=29]	28 U [MDL=28]	29 U [MDL=29]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-879 D-SB-879-1-2 4/25/2012	SB-879 D-SB-879-2-4 4/25/2012	SB-879 D-SB-879-4-6 4/25/2012	SB-879 D-SB-879-6-8 4/25/2012	SB-880 D-SB-880-0-1 4/24/2012	SB-880 D-SB-880-1-2 4/24/2012	SB-880 D-SB-880-2-4 4/24/2012
4-NITROPHENOL	350 U [MDL=350]	95 U [MDL=95]	96 U [MDL=96]	96 U [MDL=96]	89 UJ [MDL=89]	86 U [MDL=86]	91 U [MDL=91]
ACENAPHTHENE	15 U [MDL=15]	3.9 U [MDL=3.9]	12 [MDL=3.9]	11 [MDL=4]	3.7 UJ [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
ACENAPHTHYLENE	48 [MDL=15]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	6.3 J [MDL=3.7]	4.4 J [MDL=3.6]	6.4 J [MDL=3.7]
ACETOPHENONE	41 U [MDL=41]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 UJ [MDL=10]	9.9 U [MDL=9.9]	10 U [MDL=10]
ANTHRACENE	49 [MDL=15]	3.9 U [MDL=3.9]	20 [MDL=3.9]	14 [MDL=4]	8.7 J [MDL=3.7]	5.3 J [MDL=3.6]	6.1 J [MDL=3.7]
ATRAZINE	40 U [MDL=40]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 UJ [MDL=10]	9.8 U [MDL=9.8]	10 U [MDL=10]
BAP EQUIVALENT-HALFND	226.33 [MDL=NaN]	3.9 U [MDL=NaN]	65.916 [MDL=NaN]	28.264 [MDL=NaN]	28.468 [MDL=NaN]	15.298 [MDL=NaN]	6.3145 [MDL=NaN]
BAP EQUIVALENT-POS	218.83 [MDL=NaN]	3.9 U [MDL=NaN]	63.966 [MDL=NaN]	26.264 [MDL=NaN]	26.618 [MDL=NaN]	13.12 [MDL=NaN]	2.226 [MDL=NaN]
BENZALDEHYDE	53 U [MDL=53]	14 U [MDL=14]	14 U [MDL=14]	14 U [MDL=14]	13 UJ [MDL=13]	13 UJ [MDL=13]	14 UJ [MDL=14]
BENZO(A)ANTHRACENE	66 [MDL=15]	3.9 U [MDL=3.9]	49 [MDL=3.9]	18 [MDL=4]	20 J [MDL=3.7]	11 [MDL=3.6]	22 [MDL=3.7]
BENZO(A)PYRENE	170 [MDL=15]	3.9 U [MDL=3.9]	49 [MDL=3.9]	20 [MDL=4]	21 J [MDL=3.7]	12 [MDL=3.6]	3.7 U [MDL=3.7]
BENZO(B)FLUORANTHENE	300 [MDL=15]	3.9 U [MDL=3.9]	64 [MDL=3.9]	28 [MDL=4]	26 J [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
BENZO(G,H,I)PERYLENE	130 [MDL=15]	3.9 U [MDL=3.9]	37 [MDL=3.9]	17 [MDL=4]	12 J [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
BENZO(K)FLUORANTHENE	110 [MDL=15]	3.9 U [MDL=3.9]	31 [MDL=3.9]	14 [MDL=4]	11 J [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
BIS(2-CHLOROETHOXY)METHANE	97 U [MDL=97]	26 U [MDL=26]	26 U [MDL=26]	26 U [MDL=26]	25 UJ [MDL=25]	24 U [MDL=24]	25 U [MDL=25]
BIS(2-CHLOROETHYL)ETHER	8.8 U [MDL=8.8]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.2 UJ [MDL=2.2]	2.2 U [MDL=2.2]	2.3 U [MDL=2.3]
BIS(2-ETHYLHEXYL)PHTHALATE	97 B [MDL=84]	39 B [MDL=22]	40 B [MDL=23]	41 B [MDL=23]	21 UJ [MDL=21]	21 U [MDL=21]	22 U [MDL=22]
BUTYL BENZYL PHTHALATE	44 U [MDL=44]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	11 UJ [MDL=11]	11 U [MDL=11]	11 U [MDL=11]
CAPROLACTAM	160 U [MDL=160]	44 U [MDL=44]	44 U [MDL=44]	44 U [MDL=44]	41 UJ [MDL=41]	40 U [MDL=40]	42 U [MDL=42]
CARBAZOLE	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
CHRYSENE	130 [MDL=4.8]	1.3 U [MDL=1.3]	56 [MDL=1.3]	24 [MDL=1.3]	28 J [MDL=1.2]	20 [MDL=1.2]	26 [MDL=1.2]
DIBENZO(A,H)ANTHRACENE	15 U [MDL=15]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4 U [MDL=4]	3.7 UJ [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
DIBENZOFURAN	15 U [MDL=15]	3.9 U [MDL=3.9]	8.2 J [MDL=3.9]	13 J [MDL=4]	3.7 UJ [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
DIETHYL PHTHALATE	70 U [MDL=70]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	18 UJ [MDL=18]	17 U [MDL=17]	18 U [MDL=18]
DIMETHYL PHTHALATE	75 U [MDL=75]	20 U [MDL=20]	20 U [MDL=20]	20 U [MDL=20]	19 UJ [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
DI-N-BUTYL PHTHALATE	66 U [MDL=66]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	17 UJ [MDL=17]	16 U [MDL=16]	17 U [MDL=17]
DI-N-OCTYL PHTHALATE	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
FLUORANTHENE	81 [MDL=15]	3.9 U [MDL=3.9]	96 [MDL=3.9]	43 [MDL=4]	34 J [MDL=3.7]	19 [MDL=3.6]	34 [MDL=3.7]
FLUORENE	15 U [MDL=15]	3.9 U [MDL=3.9]	12 [MDL=3.9]	14 [MDL=4]	3.7 UJ [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
HEXACHLOROBENZENE	9.3 U [MDL=9.3]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.3 UJ [MDL=2.3]	2.3 U [MDL=2.3]	2.4 U [MDL=2.4]
HEXACHLOROBUTADIENE	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
HEXACHLOROCYCLOPENTADIENE	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
HEXACHLOROETHANE	40 U [MDL=40]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	10 UJ [MDL=10]	9.7 U [MDL=9.7]	10 U [MDL=10]
INDENO(1,2,3-CD)PYRENE	110 [MDL=15]	3.9 U [MDL=3.9]	33 [MDL=3.9]	15 [MDL=4]	8.8 J [MDL=3.7]	3.6 U [MDL=3.6]	3.7 U [MDL=3.7]
ISOPHORONE	57 U [MDL=57]	15 U [MDL=15]	16 U [MDL=16]	16 U [MDL=16]	15 UJ [MDL=15]	14 U [MDL=14]	15 U [MDL=15]
NAPHTHALENE	15 U [MDL=15]	3.9 U [MDL=3.9]	12 [MDL=3.9]	17 [MDL=4]	11 J [MDL=3.7]	3.6 U [MDL=3.6]	4.2 J [MDL=3.7]
NITROBENZENE	9.7 U [MDL=9.7]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.5 UJ [MDL=2.5]	2.4 U [MDL=2.4]	2.5 U [MDL=2.5]
N-NITROSODIMETHYLAMINE	70 U [MDL=70]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	18 UJ [MDL=18]	17 U [MDL=17]	18 U [MDL=18]
N-NITROSO-DI-N-PROPYLAMINE	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
N-NITROSODIPHENYLAMINE	93 U [MDL=93]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]	23 UJ [MDL=23]	23 U [MDL=23]	24 U [MDL=24]
PENTACHLOROPHENOL	350 U [MDL=350]	95 U [MDL=95]	96 U [MDL=96]	96 U [MDL=96]	89 UJ [MDL=89]	86 U [MDL=86]	91 U [MDL=91]
PHENANTHRENE	34 [MDL=15]	3.9 U [MDL=3.9]	79 [MDL=3.9]	52 [MDL=4]	20 J [MDL=3.7]	9.8 [MDL=3.6]	11 [MDL=3.7]
PHENOL	120 U [MDL=120]	32 U [MDL=32]	32 U [MDL=32]	32 U [MDL=32]	30 UJ [MDL=30]	29 U [MDL=29]	31 U [MDL=31]
PYRENE	120 [MDL=15]	3.9 U [MDL=3.9]	76 [MDL=3.9]	35 [MDL=4]	34 J [MDL=3.7]	23 [MDL=3.6]	31 [MDL=3.7]
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.74 U [MDL=0.74]	0.56 U [MDL=0.56]	0.63 U [MDL=0.63]	0.58 U [MDL=0.58]	0.90 U [MDL=0.9]	0.72 U [MDL=0.72]	0.55 U [MDL=0.55]
1,1,1-TRICHLOROETHANE	0.67 U [MDL=0.67]	0.50 U [MDL=0.5]	0.57 U [MDL=0.57]	0.52 U [MDL=0.52]	0.81 U [MDL=0.81]	0.65 U [MDL=0.65]	0.50 U [MDL=0.5]
1,1,2,2-TETRACHLOROETHANE	0.41 U [MDL=0.41]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.49 U [MDL=0.49]	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.6 U [MDL=1.6]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.9 U [MDL=1.9]	1.5 U [MDL=1.5]	1.1 U [MDL=1.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-879 D-SB-879-1-2 4/25/2012	SB-879 D-SB-879-2-4 4/25/2012	SB-879 D-SB-879-4-6 4/25/2012	SB-879 D-SB-879-6-8 4/25/2012	SB-880 D-SB-880-0-1 4/24/2012	SB-880 D-SB-880-1-2 4/24/2012	SB-880 D-SB-880-2-4 4/24/2012
1,1-DICHLOROETHANE	0.43 U [MDL=0.43]	0.32 U [MDL=0.32]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.52 U [MDL=0.52]	0.42 U [MDL=0.42]	0.32 U [MDL=0.32]
1,1-DICHLOROETHENE	0.62 U [MDL=0.62]	0.47 U [MDL=0.47]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.76 U [MDL=0.76]	0.60 U [MDL=0.6]	0.46 U [MDL=0.46]
1,1-DICHLOROPROPENE	0.36 U [MDL=0.36]	0.27 U [MDL=0.27]	0.30 U [MDL=0.3]	0.28 U [MDL=0.28]	0.44 U [MDL=0.44]	0.35 U [MDL=0.35]	0.27 U [MDL=0.27]
1,2,3-TRICHLOROBENZENE	0.45 U [MDL=0.45]	0.34 U [MDL=0.34]	0.39 U [MDL=0.39]	0.35 U [MDL=0.35]	0.55 U [MDL=0.55]	0.44 U [MDL=0.44]	0.34 U [MDL=0.34]
1,2,3-TRICHLOROPROPANE	1.1 U [MDL=1.1]	0.81 U [MDL=0.81]	0.91 U [MDL=0.91]	0.84 U [MDL=0.84]	1.3 U [MDL=1.3]	1 U [MDL=1]	0.80 U [MDL=0.8]
1,2,3-TRIMETHYLBENZENE	0.20 U [MDL=0.2]	0.15 U [MDL=0.15]	0.17 U [MDL=0.17]	0.16 U [MDL=0.16]	0.25 U [MDL=0.25]	0.20 U [MDL=0.2]	0.15 U [MDL=0.15]
1,2,4-TRICHLOROBENZENE	0.32 U [MDL=0.32]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]	0.24 U [MDL=0.24]
1,2,4-TRIMETHYLBENZENE	0.78 U [MDL=0.78]	0.58 U [MDL=0.58]	0.66 U [MDL=0.66]	0.61 U [MDL=0.61]	0.95 U [MDL=0.95]	0.75 U [MDL=0.75]	0.57 U [MDL=0.57]
1,2-DIBROMO-3-CHLOROPROPANE	1.6 U [MDL=1.6]	1.2 U [MDL=1.2]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.9 U [MDL=1.9]	1.5 U [MDL=1.5]	1.1 U [MDL=1.1]
1,2-DIBROMOETHANE	0.60 U [MDL=0.6]	0.45 U [MDL=0.45]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.73 U [MDL=0.73]	0.58 U [MDL=0.58]	0.44 U [MDL=0.44]
1,2-DICHLOROBENZENE	0.43 U [MDL=0.43]	0.32 U [MDL=0.32]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.52 U [MDL=0.52]	0.42 U [MDL=0.42]	0.32 U [MDL=0.32]
1,2-DICHLOROETHANE	0.41 U [MDL=0.41]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.49 U [MDL=0.49]	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]
1,2-DICHLOROPROPANE	0.82 U [MDL=0.82]	0.62 U [MDL=0.62]	0.70 U [MDL=0.7]	0.64 U [MDL=0.64]	1 U [MDL=1]	0.80 U [MDL=0.8]	0.61 U [MDL=0.61]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.51 U [MDL=0.51]	0.41 U [MDL=0.41]	0.31 U [MDL=0.31]
1,3-DICHLOROPROPANE	0.41 U [MDL=0.41]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.49 U [MDL=0.49]	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]
1,4-DICHLOROBENZENE	0.79 U [MDL=0.79]	0.59 U [MDL=0.59]	0.67 U [MDL=0.67]	0.62 U [MDL=0.62]	0.96 U [MDL=0.96]	0.76 U [MDL=0.76]	0.58 U [MDL=0.58]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	1.1 U [MDL=1.1]	0.84 U [MDL=0.84]	0.95 U [MDL=0.95]	0.88 U [MDL=0.88]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	0.83 U [MDL=0.83]
2-BUTANONE	1.7 U [MDL=1.7]	1.3 U [MDL=1.3]	1.7 J [MDL=1.4]	4.9 J [MDL=1.3]	2 U [MDL=2]	1.6 U [MDL=1.6]	1.2 U [MDL=1.2]
2-CHLOROETHYL VINYL ETHER	1.7 U [MDL=1.7]	1.3 U [MDL=1.3]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	2 U [MDL=2]	1.6 U [MDL=1.6]	1.2 U [MDL=1.2]
2-CHLOROTOLUENE	0.48 U [MDL=0.48]	0.36 U [MDL=0.36]	0.41 U [MDL=0.41]	0.37 U [MDL=0.37]	0.58 U [MDL=0.58]	0.46 U [MDL=0.46]	0.35 U [MDL=0.35]
2-HEXANONE	0.75 U [MDL=0.75]	0.57 U [MDL=0.57]	0.64 U [MDL=0.64]	0.59 U [MDL=0.59]	0.92 U [MDL=0.92]	0.73 U [MDL=0.73]	0.56 U [MDL=0.56]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.49 U [MDL=0.49]	0.37 U [MDL=0.37]	0.42 U [MDL=0.42]	0.38 U [MDL=0.38]	0.60 U [MDL=0.6]	0.48 U [MDL=0.48]	0.36 U [MDL=0.36]
4-ISOPROPYLTOLUENE	0.25 U [MDL=0.25]	0.19 U [MDL=0.19]	0.21 U [MDL=0.21]	0.20 U [MDL=0.2]	0.31 U [MDL=0.31]	0.24 U [MDL=0.24]	0.19 U [MDL=0.19]
4-METHYL-2-PENTANONE	0.65 U [MDL=0.65]	0.48 U [MDL=0.48]	0.55 U [MDL=0.55]	0.50 U [MDL=0.5]	0.79 U [MDL=0.79]	0.63 U [MDL=0.63]	0.48 U [MDL=0.48]
ACETONE	7.5 U [MDL=7.5]	5.7 B [MDL=5.7]	20 B [MDL=6.4]	34 B [MDL=5.9]	9.2 U [MDL=9.2]	7.3 U [MDL=7.3]	5.6 U [MDL=5.6]
BENZENE	0.27 U [MDL=0.27]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.33 U [MDL=0.33]	0.27 U [MDL=0.27]	0.20 U [MDL=0.2]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.48 U [MDL=0.48]	0.38 U [MDL=0.38]	0.29 U [MDL=0.29]
BROMOCHLOROMETHANE	0.85 U [MDL=0.85]	0.64 U [MDL=0.64]	0.72 U [MDL=0.72]	0.66 U [MDL=0.66]	1 U [MDL=1]	0.82 U [MDL=0.82]	0.63 U [MDL=0.63]
BROMODICHLOROMETHANE	0.33 U [MDL=0.33]	0.25 U [MDL=0.25]	0.28 U [MDL=0.28]	0.26 U [MDL=0.26]	0.41 U [MDL=0.41]	0.32 U [MDL=0.32]	0.25 U [MDL=0.25]
BROMOFORM	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.48 U [MDL=0.48]	0.38 U [MDL=0.38]	0.29 U [MDL=0.29]
BROMOMETHANE	0.65 U [MDL=0.65]	0.48 U [MDL=0.48]	0.55 U [MDL=0.55]	0.50 U [MDL=0.5]	0.79 U [MDL=0.79]	0.63 U [MDL=0.63]	0.48 U [MDL=0.48]
CARBON DISULFIDE	0.53 U [MDL=0.53]	0.40 U [MDL=0.4]	1.8 J [MDL=0.45]	1.7 J [MDL=0.41]	0.64 U [MDL=0.64]	2.1 J [MDL=0.51]	0.39 U [MDL=0.39]
CARBON TETRACHLORIDE	0.44 U [MDL=0.44]	0.33 U [MDL=0.33]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.54 U [MDL=0.54]	0.43 U [MDL=0.43]	0.33 U [MDL=0.33]
CHLOROBENZENE	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]	0.33 U [MDL=0.33]	0.31 U [MDL=0.31]	0.48 U [MDL=0.48]	0.38 U [MDL=0.38]	0.29 U [MDL=0.29]
CHLORODIBROMOMETHANE	0.66 U [MDL=0.66]	0.49 U [MDL=0.49]	0.56 U [MDL=0.56]	0.51 U [MDL=0.51]	0.80 U [MDL=0.8]	0.64 U [MDL=0.64]	0.49 U [MDL=0.49]
CHLOROETHANE	1 U [MDL=1]	0.77 U [MDL=0.77]	0.87 U [MDL=0.87]	0.80 U [MDL=0.8]	1.3 U [MDL=1.3]	1 U [MDL=1]	0.76 U [MDL=0.76]
CHLOROFORM	0.35 U [MDL=0.35]	0.26 U [MDL=0.26]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.42 U [MDL=0.42]	0.34 U [MDL=0.34]	0.26 U [MDL=0.26]
CHLOROMETHANE	0.49 U [MDL=0.49]	0.37 U [MDL=0.37]	0.42 U [MDL=0.42]	0.38 U [MDL=0.38]	0.60 U [MDL=0.6]	0.48 U [MDL=0.48]	0.36 U [MDL=0.36]
CIS-1,2-DICHLOROETHENE	0.43 U [MDL=0.43]	0.32 U [MDL=0.32]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.52 U [MDL=0.52]	0.42 U [MDL=0.42]	0.32 U [MDL=0.32]
CIS-1,3-DICHLOROPROPENE	0.41 U [MDL=0.41]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.49 U [MDL=0.49]	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.75 U [MDL=0.75]	0.57 U [MDL=0.57]	0.64 U [MDL=0.64]	0.59 U [MDL=0.59]	0.92 U [MDL=0.92]	0.73 U [MDL=0.73]	0.56 U [MDL=0.56]
DICHLORODIFLUOROMETHANE	0.60 U [MDL=0.6]	0.45 U [MDL=0.45]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.73 U [MDL=0.73]	0.58 U [MDL=0.58]	0.44 U [MDL=0.44]
DIISOPROPYL ETHER	1.8 U [MDL=1.8]	1.3 U [MDL=1.3]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	2.2 U [MDL=2.2]	1.7 U [MDL=1.7]	1.3 U [MDL=1.3]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-879 D-SB-879-1-2 4/25/2012	SB-879 D-SB-879-2-4 4/25/2012	SB-879 D-SB-879-4-6 4/25/2012	SB-879 D-SB-879-6-8 4/25/2012	SB-880 D-SB-880-0-1 4/24/2012	SB-880 D-SB-880-1-2 4/24/2012	SB-880 D-SB-880-2-4 4/24/2012
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.26 U [MDL=0.26]	0.20 U [MDL=0.2]	0.22 U [MDL=0.22]	0.21 U [MDL=0.21]	0.32 U [MDL=0.32]	0.25 U [MDL=0.25]	0.19 U [MDL=0.19]
ETHYLBENZENE	0.31 U [MDL=0.31]	0.23 U [MDL=0.23]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.38 U [MDL=0.38]	0.30 U [MDL=0.3]	0.23 U [MDL=0.23]
HEXACHLOROBUTADIENE	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.7 U [MDL=1.7]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.19 U [MDL=0.19]	0.14 U [MDL=0.14]	0.16 U [MDL=0.16]	0.15 U [MDL=0.15]	0.23 U [MDL=0.23]	0.19 U [MDL=0.19]	0.14 U [MDL=0.14]
M+P-XYLENES	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.7 U [MDL=1.7]	1.4 U [MDL=1.4]	1.1 U [MDL=1.1]
METHYL ACETATE	3.7 NJ [MDL=1.7]	--	--	--	2.3 NJ [MDL=2]	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.51 U [MDL=0.51]	0.39 U [MDL=0.39]	0.44 U [MDL=0.44]	0.40 U [MDL=0.4]	0.63 U [MDL=0.63]	0.50 U [MDL=0.5]	0.38 U [MDL=0.38]
METHYLENE CHLORIDE	0.80 U [MDL=0.8]	0.60 U [MDL=0.6]	1.8 B [MDL=0.68]	1 B [MDL=0.63]	0.97 U [MDL=0.97]	0.78 U [MDL=0.78]	0.59 U [MDL=0.59]
NAPHTHALENE	0.23 U [MDL=0.23]	0.17 U [MDL=0.17]	0.19 U [MDL=0.19]	0.18 U [MDL=0.18]	0.55 J [MDL=0.28]	0.35 B [MDL=0.22]	0.23 B [MDL=0.17]
N-BUTYLBENZENE	0.27 U [MDL=0.27]	0.21 U [MDL=0.21]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.33 U [MDL=0.33]	0.27 U [MDL=0.27]	0.20 U [MDL=0.2]
N-PROPYLBENZENE	0.48 U [MDL=0.48]	0.36 U [MDL=0.36]	0.41 U [MDL=0.41]	0.37 U [MDL=0.37]	0.58 U [MDL=0.58]	0.46 U [MDL=0.46]	0.35 U [MDL=0.35]
O-XYLENE	0.42 U [MDL=0.42]	0.31 U [MDL=0.31]	0.35 U [MDL=0.35]	0.33 U [MDL=0.33]	0.51 U [MDL=0.51]	0.41 U [MDL=0.41]	0.31 U [MDL=0.31]
SEC-BUTYLBENZENE	0.22 U [MDL=0.22]	0.16 U [MDL=0.16]	0.18 U [MDL=0.18]	0.17 U [MDL=0.17]	0.26 U [MDL=0.26]	0.21 U [MDL=0.21]	0.16 U [MDL=0.16]
STYRENE	0.18 U [MDL=0.18]	0.13 U [MDL=0.13]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.22 U [MDL=0.22]	0.17 U [MDL=0.17]	0.13 U [MDL=0.13]
TERT-AMYL METHYL ETHER	0.44 U [MDL=0.44]	0.33 U [MDL=0.33]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.54 U [MDL=0.54]	0.43 U [MDL=0.43]	0.33 U [MDL=0.33]
TERT-BUTYLBENZENE	0.35 U [MDL=0.35]	0.26 U [MDL=0.26]	0.29 U [MDL=0.29]	0.27 U [MDL=0.27]	0.42 U [MDL=0.42]	0.34 U [MDL=0.34]	0.26 U [MDL=0.26]
TERTIARY-BUTYL ALCOHOL	9.1 UR [MDL=9.1]	6.8 UR [MDL=6.8]	7.7 UR [MDL=7.7]	7.1 UR [MDL=7.1]	11 UR [MDL=11]	8.8 UR [MDL=8.8]	6.7 UR [MDL=6.7]
TETRACHLOROETHENE	0.62 U [MDL=0.62]	0.47 U [MDL=0.47]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.76 U [MDL=0.76]	0.60 U [MDL=0.6]	0.46 U [MDL=0.46]
TOLUENE	0.32 U [MDL=0.32]	0.24 U [MDL=0.24]	0.27 U [MDL=0.27]	0.25 U [MDL=0.25]	0.39 U [MDL=0.39]	0.31 U [MDL=0.31]	0.24 U [MDL=0.24]
TOTAL XYLENES	0.80 U [MDL=0.8]	0.60 U [MDL=0.6]	0.68 U [MDL=0.68]	0.63 U [MDL=0.63]	0.97 U [MDL=0.97]	0.78 U [MDL=0.78]	0.59 U [MDL=0.59]
TRANS-1,2-DICHLOROETHENE	0.49 U [MDL=0.49]	0.37 U [MDL=0.37]	0.42 U [MDL=0.42]	0.38 U [MDL=0.38]	0.60 U [MDL=0.6]	0.48 U [MDL=0.48]	0.36 U [MDL=0.36]
TRANS-1,3-DICHLOROPROPENE	0.65 U [MDL=0.65]	0.48 U [MDL=0.48]	0.55 U [MDL=0.55]	0.50 U [MDL=0.5]	0.79 U [MDL=0.79]	0.63 U [MDL=0.63]	0.48 U [MDL=0.48]
TRICHLOROETHENE	0.50 U [MDL=0.5]	0.38 U [MDL=0.38]	0.43 U [MDL=0.43]	0.39 U [MDL=0.39]	0.61 U [MDL=0.61]	0.49 U [MDL=0.49]	0.37 U [MDL=0.37]
TRICHLOROFLUOROMETHANE	0.41 U [MDL=0.41]	0.31 U [MDL=0.31]	0.34 U [MDL=0.34]	0.32 U [MDL=0.32]	0.49 U [MDL=0.49]	0.39 U [MDL=0.39]	0.30 U [MDL=0.3]
VINYL ACETATE	0.30 UR [MDL=0.3]	0.22 UR [MDL=0.22]	0.25 UR [MDL=0.25]	0.23 UR [MDL=0.23]	0.36 UR [MDL=0.36]	0.29 UR [MDL=0.29]	0.22 UR [MDL=0.22]
VINYL CHLORIDE	0.47 U [MDL=0.47]	0.35 U [MDL=0.35]	0.40 U [MDL=0.4]	0.36 U [MDL=0.36]	0.57 U [MDL=0.57]	0.45 U [MDL=0.45]	0.34 U [MDL=0.34]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-879	SB-879	SB-879	SB-879	SB-880	SB-880	SB-880
SAMPLE ID	D-SB-879-1-2	D-SB-879-2-4	D-SB-879-4-6	D-SB-879-6-8	D-SB-880-0-1	D-SB-880-1-2	D-SB-880-2-4
SAMPLE DATE	4/25/2012	4/25/2012	4/25/2012	4/25/2012	4/24/2012	4/24/2012	4/24/2012
TOTAL PAHS	--	--	--	--	--	--	--
PCBS (UG/KG)							
AROCLOR-1016	23 U [MDL=23]	25 U [MDL=25]	25 U [MDL=25]	25 U [MDL=25]	24 U [MDL=24]	23 U [MDL=23]	24 U [MDL=24]
AROCLOR-1221	18 U [MDL=18]	19 U [MDL=19]	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	17 U [MDL=17]	18 U [MDL=18]
AROCLOR-1232	15 U [MDL=15]	16 U [MDL=16]	17 U [MDL=17]	17 U [MDL=17]	16 U [MDL=16]	15 U [MDL=15]	16 U [MDL=16]
AROCLOR-1242	14 U [MDL=14]	15 U [MDL=15]	15 U [MDL=15]	16 U [MDL=16]	15 U [MDL=15]	14 U [MDL=14]	15 U [MDL=15]
AROCLOR-1248	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
AROCLOR-1254	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
AROCLOR-1260	19 U [MDL=19]	20 U [MDL=20]	20 U [MDL=20]	21 U [MDL=21]	19 U [MDL=19]	18 U [MDL=18]	19 U [MDL=19]
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	34 U [MDL=34]	7.3 U [MDL=7.3]	7.4 U [MDL=7.4]	7.5 U [MDL=7.5]	70 UJ [MDL=70]	67 UJ [MDL=67]	14 UJ [MDL=14]
4,4'-DDE	21 U [MDL=21]	4.6 U [MDL=4.6]	4.6 U [MDL=4.6]	4.7 U [MDL=4.7]	44 U [MDL=44]	42 U [MDL=42]	8.8 U [MDL=8.8]
4,4'-DDT	35 U [MDL=35]	7.4 U [MDL=7.4]	7.5 U [MDL=7.5]	7.6 U [MDL=7.6]	71 U [MDL=71]	68 U [MDL=68]	14 U [MDL=14]
ALDRIN	66 U [MDL=66]	14 U [MDL=14]	14 U [MDL=14]	15 U [MDL=15]	140 U [MDL=140]	130 U [MDL=130]	27 U [MDL=27]
ALPHA-BHC	40 U [MDL=40]	8.6 U [MDL=8.6]	8.7 U [MDL=8.7]	8.8 U [MDL=8.8]	82 U [MDL=82]	79 U [MDL=79]	17 U [MDL=17]
ALPHA-CHLORDANE	52 U [MDL=52]	11 U [MDL=11]	11 U [MDL=11]	11 U [MDL=11]	110 U [MDL=110]	100 U [MDL=100]	21 U [MDL=21]
BETA-BHC	61 U [MDL=61]	13 U [MDL=13]	13 U [MDL=13]	13 U [MDL=13]	120 U [MDL=120]	120 U [MDL=120]	25 U [MDL=25]
DELTA-BHC	66 U [MDL=66]	14 U [MDL=14]	14 U [MDL=14]	15 U [MDL=15]	140 U [MDL=140]	130 U [MDL=130]	27 U [MDL=27]
DIELDRIN	26 U [MDL=26]	5.5 U [MDL=5.5]	5.6 U [MDL=5.6]	5.7 U [MDL=5.7]	53 U [MDL=53]	51 U [MDL=51]	11 U [MDL=11]
ENDOSULFAN I	29 U [MDL=29]	6.1 U [MDL=6.1]	6.2 U [MDL=6.2]	6.3 U [MDL=6.3]	59 UJ [MDL=59]	56 UJ [MDL=56]	12 UJ [MDL=12]
ENDOSULFAN II	45 U [MDL=45]	9.6 U [MDL=9.6]	9.7 U [MDL=9.7]	9.9 U [MDL=9.9]	92 U [MDL=92]	89 U [MDL=89]	19 U [MDL=19]
ENDOSULFAN SULFATE	48 U [MDL=48]	10 U [MDL=10]	10 U [MDL=10]	11 U [MDL=11]	98 U [MDL=98]	94 U [MDL=94]	20 U [MDL=20]
ENDRIN	28 U [MDL=28]	5.9 U [MDL=5.9]	5.9 U [MDL=5.9]	6 U [MDL=6]	56 U [MDL=56]	54 U [MDL=54]	11 U [MDL=11]
ENDRIN ALDEHYDE	55 U [MDL=55]	12 U [MDL=12]	12 U [MDL=12]	12 U [MDL=12]	110 U [MDL=110]	110 U [MDL=110]	23 U [MDL=23]
ENDRIN KETONE	35 U [MDL=35]	7.4 U [MDL=7.4]	7.5 U [MDL=7.5]	7.6 U [MDL=7.6]	71 U [MDL=71]	68 U [MDL=68]	14 U [MDL=14]
GAMMA-BHC (LINDANE)	41 U [MDL=41]	8.7 U [MDL=8.7]	8.8 U [MDL=8.8]	8.9 U [MDL=8.9]	83 UJ [MDL=83]	80 UJ [MDL=80]	17 UJ [MDL=17]
GAMMA-CHLORDANE	23 U [MDL=23]	4.9 U [MDL=4.9]	5 U [MDL=5]	5.1 U [MDL=5.1]	47 U [MDL=47]	45 U [MDL=45]	9.5 U [MDL=9.5]
HEPTACHLOR	61 U [MDL=61]	13 U [MDL=13]	13 U [MDL=13]	13 U [MDL=13]	120 UJ [MDL=120]	120 UJ [MDL=120]	25 UJ [MDL=25]
HEPTACHLOR EPOXIDE	44 U [MDL=44]	9.4 U [MDL=9.4]	9.5 U [MDL=9.5]	9.7 U [MDL=9.7]	90 U [MDL=90]	87 U [MDL=87]	18 U [MDL=18]
METHOXYCHLOR	83 U [MDL=83]	18 U [MDL=18]	18 U [MDL=18]	18 U [MDL=18]	170 U [MDL=170]	160 U [MDL=160]	34 U [MDL=34]
TOXAPHENE	1000 U [MDL=1000]	220 U [MDL=220]	230 U [MDL=230]	230 U [MDL=230]	2100 U [MDL=2100]	2100 U [MDL=2100]	430 U [MDL=430]
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-879	SB-879	SB-879	SB-879	SB-880	SB-880	SB-880
SAMPLE ID	D-SB-879-1-2	D-SB-879-2-4	D-SB-879-4-6	D-SB-879-6-8	D-SB-880-0-1	D-SB-880-1-2	D-SB-880-2-4
SAMPLE DATE	4/25/2012	4/25/2012	4/25/2012	4/25/2012	4/24/2012	4/24/2012	4/24/2012
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	29 B [MDL=10]	11 U [MDL=11]	15 B [MDL=11]	2000 [MDL=110]	250 [MDL=52]	82 [MDL=10]	25 [MDL=11]
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	51 U [MDL=51]	54 U [MDL=54]	55 U [MDL=55]	55 U [MDL=55]	52 U [MDL=52]	50 U [MDL=50]	52 U [MDL=52]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	SB-880	SB-880	SB-881	SB-881	SB-881	SB-881	SB-881
SAMPLE ID	D-SB-880-4-6	D-SB-880-6-8	D-SB-881-0-1	D-SB-881-1-2	D-SB-881-2-4	D-SB-881-4-6	D-SB-881-6-8
SAMPLE DATE	4/24/2012	4/24/2012	4/25/2012	4/25/2012	4/25/2012	4/25/2012	4/25/2012
METALS (MG/KG)							
ANTIMONY	1.7 UL [MDL=1.7]	2 UL [MDL=2]	0.43 UL [MDL=0.43]	0.35 UL [MDL=0.35]	0.42 UL [MDL=0.42]	2 UL [MDL=2]	0.52 UL [MDL=0.52]
ARSENIC	14 [MDL=1.3]	4.5 J [MDL=1.5]	2.5 [MDL=0.33]	2.3 [MDL=0.27]	3.8 [MDL=0.32]	5.8 J [MDL=1.6]	3.1 [MDL=0.4]
BARIUM	41 J [MDL=0.31]	24 J [MDL=0.36]	150 J [MDL=0.078]	77 J [MDL=0.063]	14 J [MDL=0.076]	23 J [MDL=0.37]	10 J [MDL=0.094]
BERYLLIUM	2.1 J [MDL=0.19]	3.8 [MDL=0.22]	0.62 [MDL=0.047]	0.46 [MDL=0.038]	1.3 [MDL=0.046]	4.2 [MDL=0.22]	1 [MDL=0.057]
CADMIUM	0.32 J [MDL=0.16]	0.23 J [MDL=0.18]	0.21 J [MDL=0.039]	0.12 J [MDL=0.032]	0.07 J [MDL=0.038]	0.33 J [MDL=0.19]	0.062 J [MDL=0.048]
CHROMIUM	19 [MDL=0.86]	22 [MDL=1]	12 J [MDL=0.22]	9.6 J [MDL=0.18]	18 J [MDL=0.21]	23 J [MDL=1]	10 J [MDL=0.27]
COBALT	21 [MDL=0.69]	23 [MDL=0.81]	4.4 [MDL=0.18]	3.1 [MDL=0.14]	9.7 [MDL=0.17]	17 [MDL=0.83]	9.3 [MDL=0.21]
COPPER	24 [MDL=3.2]	37 [MDL=3.8]	6.7 [MDL=0.81]	6.4 [MDL=0.66]	13 [MDL=0.79]	32 [MDL=3.9]	11 [MDL=0.98]
IRON	--	--	--	--	--	--	--
LEAD	24 [MDL=0.82]	18 [MDL=0.97]	11 J [MDL=0.21]	8.4 J [MDL=0.17]	6.2 J [MDL=0.2]	16 J [MDL=0.99]	8.3 J [MDL=0.25]
MANGANESE	--	--	--	--	--	--	--
MERCURY	1.3 [MDL=0.019]	0.21 [MDL=0.016]	0.016 U [MDL=0.016]	0.016 U [MDL=0.016]	0.027 J [MDL=0.02]	0.019 U [MDL=0.019]	0.063 J [MDL=0.023]
MOLYBDENUM	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	0.44 J [MDL=0.3]	0.26 J [MDL=0.24]	0.29 J [MDL=0.29]	1.4 U [MDL=1.4]	1 J [MDL=0.36]
NICKEL	26 [MDL=1.2]	44 [MDL=1.4]	7.3 [MDL=0.3]	5.7 [MDL=0.24]	20 [MDL=0.29]	48 [MDL=1.4]	13 [MDL=0.36]
SELENIUM	1.9 U [MDL=1.9]	2.3 U [MDL=2.3]	0.49 U [MDL=0.49]	0.40 U [MDL=0.4]	0.48 U [MDL=0.48]	2.3 U [MDL=2.3]	0.60 U [MDL=0.6]
SILVER	0.43 UL [MDL=0.43]	0.51 UL [MDL=0.51]	0.11 UL [MDL=0.11]	0.089 UL [MDL=0.089]	0.11 UL [MDL=0.11]	0.52 UL [MDL=0.52]	0.13 UL [MDL=0.13]
THALLIUM	2.4 U [MDL=2.4]	2.8 U [MDL=2.8]	1.9 J [MDL=0.6]	0.49 U [MDL=0.49]	0.59 U [MDL=0.59]	2.9 U [MDL=2.9]	0.73 U [MDL=0.73]
VANADIUM	24 [MDL=0.52]	32 [MDL=0.61]	40 J [MDL=0.13]	24 J [MDL=0.11]	25 J [MDL=0.13]	36 J [MDL=0.63]	20 J [MDL=0.16]
ZINC	91 [MDL=4.3]	150 [MDL=5.1]	27 [MDL=1.1]	19 [MDL=0.89]	42 [MDL=1.1]	120 [MDL=5.2]	31 [MDL=1.3]
MISCELLANEOUS PARAMETERS							
PERCENT SOLIDS (%)	--	--	--	--	--	--	--
HEXAVALENT CHROMIUM (MG/KG)	0.32 U [MDL=0.32]	0.32 U [MDL=0.32]	0.75 J [MDL=0.3]	0.29 U [MDL=0.29]	0.61 J [MDL=0.32]	0.32 U [MDL=0.32]	0.38 U [MDL=0.38]
MERCURY (METHYL) (UG/KG)	--	--	--	--	--	--	--
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
1,4-DIOXANE	26 U [MDL=26]	26 U [MDL=26]	24 U [MDL=24]	470 U [MDL=470]	26 U [MDL=26]	26 U [MDL=26]	31 U [MDL=31]
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	200 U [MDL=200]	11 U [MDL=11]	11 U [MDL=11]	13 U [MDL=13]
2,4,5-TRICHLOROPHENOL	30 U [MDL=30]	29 U [MDL=29]	27 U [MDL=27]	530 U [MDL=530]	30 U [MDL=30]	29 U [MDL=29]	35 U [MDL=35]
2,4,6-TRICHLOROPHENOL	95 U [MDL=95]	94 U [MDL=94]	87 U [MDL=87]	1700 U [MDL=1700]	96 U [MDL=96]	94 U [MDL=94]	110 U [MDL=110]
2,4-DICHLOROPHENOL	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]	420 U [MDL=420]	24 U [MDL=24]	23 U [MDL=23]	28 U [MDL=28]
2,4-DIMETHYLPHENOL	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]	420 U [MDL=420]	24 U [MDL=24]	23 U [MDL=23]	28 U [MDL=28]
2,4-DINITROPHENOL	95 U [MDL=95]	94 U [MDL=94]	87 U [MDL=87]	1700 U [MDL=1700]	96 U [MDL=96]	94 U [MDL=94]	110 UR [MDL=110]
2,4-DINITROTOLUENE	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
2,6-DINITROTOLUENE	25 U [MDL=25]	25 U [MDL=25]	23 U [MDL=23]	450 U [MDL=450]	25 U [MDL=25]	25 U [MDL=25]	30 U [MDL=30]
2-CHLORONAPHTHALENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.6 U [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
2-CHLOROPHENOL	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
2-METHYLNAPHTHALENE	9.5 [MDL=3.9]	3.9 U [MDL=3.9]	3.6 U [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
2-METHYLPHENOL	95 U [MDL=95]	94 U [MDL=94]	87 U [MDL=87]	1700 U [MDL=1700]	96 U [MDL=96]	94 U [MDL=94]	110 U [MDL=110]
2-NITROANILINE	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	190 U [MDL=190]	11 U [MDL=11]	11 U [MDL=11]	13 U [MDL=13]
2-NITROPHENOL	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
3&4-METHYLPHENOL	24 U [MDL=24]	24 U [MDL=24]	22 U [MDL=22]	420 U [MDL=420]	24 U [MDL=24]	23 U [MDL=23]	28 U [MDL=28]
3,3'-DICHLOROBENZIDINE	21 U [MDL=21]	21 U [MDL=21]	20 U [MDL=20]	380 U [MDL=380]	22 U [MDL=22]	21 U [MDL=21]	25 U [MDL=25]
3-NITROANILINE	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	340 U [MDL=340]	19 U [MDL=19]	19 U [MDL=19]	22 U [MDL=22]
4,6-DINITRO-2-METHYLPHENOL	95 U [MDL=95]	94 U [MDL=94]	87 U [MDL=87]	1700 U [MDL=1700]	96 U [MDL=96]	94 U [MDL=94]	110 U [MDL=110]
4-BROMOPHENYL PHENYL ETHER	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	280 U [MDL=280]	16 U [MDL=16]	15 U [MDL=15]	18 U [MDL=18]
4-CHLORO-3-METHYLPHENOL	25 U [MDL=25]	25 U [MDL=25]	23 U [MDL=23]	450 U [MDL=450]	25 U [MDL=25]	25 U [MDL=25]	30 U [MDL=30]
4-CHLOROANILINE	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	360 U [MDL=360]	20 U [MDL=20]	20 U [MDL=20]	24 U [MDL=24]
4-CHLOROPHENYL PHENYL ETHER	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	280 U [MDL=280]	16 U [MDL=16]	15 U [MDL=15]	18 U [MDL=18]
4-METHYLPHENOL	--	--	--	--	--	--	--
4-NITROANILINE	31 U [MDL=31]	31 U [MDL=31]	28 U [MDL=28]	550 U [MDL=550]	31 U [MDL=31]	30 U [MDL=30]	37 U [MDL=37]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-880 D-SB-880-4-6 4/24/2012	SB-880 D-SB-880-6-8 4/24/2012	SB-881 D-SB-881-0-1 4/25/2012	SB-881 D-SB-881-1-2 4/25/2012	SB-881 D-SB-881-2-4 4/25/2012	SB-881 D-SB-881-4-6 4/25/2012	SB-881 D-SB-881-6-8 4/25/2012
4-NITROPHENOL	95 U [MDL=95]	94 U [MDL=94]	87 U [MDL=87]	1700 U [MDL=1700]	96 U [MDL=96]	94 U [MDL=94]	110 U [MDL=110]
ACENAPHTHENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.6 U [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
ACENAPHTHYLENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	13 [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
ACETOPHENONE	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	200 U [MDL=200]	11 U [MDL=11]	11 U [MDL=11]	13 U [MDL=13]
ANTHRACENE	6.2 J [MDL=3.9]	3.9 U [MDL=3.9]	21 [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
ATRAZINE	11 U [MDL=11]	11 U [MDL=11]	10 U [MDL=10]	190 U [MDL=190]	11 U [MDL=11]	11 U [MDL=11]	13 U [MDL=13]
BAP EQUIVALENT-HALFND	8.982 [MDL=NaN]	3.9 U [MDL=NaN]	123.768 [MDL=NaN]	70 U [MDL=NaN]	5.2795 [MDL=NaN]	3.9 U [MDL=NaN]	4.6 U [MDL=NaN]
BAP EQUIVALENT-POS	4.887 [MDL=NaN]	3.9 U [MDL=NaN]	121.968 [MDL=NaN]	70 U [MDL=NaN]	0.97 [MDL=NaN]	3.9 U [MDL=NaN]	4.6 U [MDL=NaN]
BENZALDEHYDE	14 UJ [MDL=14]	14 UJ [MDL=14]	13 U [MDL=13]	250 U [MDL=250]	14 U [MDL=14]	14 U [MDL=14]	17 U [MDL=17]
BENZO(A)ANTHRACENE	20 [MDL=3.9]	3.9 U [MDL=3.9]	93 [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
BENZO(A)PYRENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	94 [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
BENZO(B)FLUORANTHENE	27 [MDL=3.9]	3.9 U [MDL=3.9]	130 [MDL=3.6]	70 U [MDL=70]	9.6 [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
BENZO(G,H,I)PERYLENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	58 [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
BENZO(K)FLUORANTHENE	16 [MDL=3.9]	3.9 U [MDL=3.9]	47 [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
BIS(2-CHLOROETHOXY)METHANE	26 U [MDL=26]	26 U [MDL=26]	24 U [MDL=24]	470 U [MDL=470]	26 U [MDL=26]	26 U [MDL=26]	31 U [MDL=31]
BIS(2-CHLOROETHYL)ETHER	2.4 U [MDL=2.4]	2.4 U [MDL=2.4]	2.2 U [MDL=2.2]	42 U [MDL=42]	2.4 U [MDL=2.4]	2.3 U [MDL=2.3]	2.8 U [MDL=2.8]
BIS(2-ETHYLHEXYL)PHTHALATE	23 U [MDL=23]	22 U [MDL=22]	51 B [MDL=21]	400 U [MDL=400]	26 B [MDL=23]	34 B [MDL=22]	27 U [MDL=27]
BUTYL BENZYL PHTHALATE	12 U [MDL=12]	12 U [MDL=12]	11 U [MDL=11]	210 U [MDL=210]	12 U [MDL=12]	12 U [MDL=12]	14 U [MDL=14]
CAPROLACTAM	44 U [MDL=44]	44 U [MDL=44]	40 U [MDL=40]	780 U [MDL=780]	44 U [MDL=44]	43 U [MDL=43]	52 U [MDL=52]
CARBAZOLE	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
CHRYSENE	27 [MDL=1.3]	1.3 U [MDL=1.3]	98 [MDL=1.2]	23 U [MDL=23]	10 [MDL=1.3]	1.3 U [MDL=1.3]	1.5 U [MDL=1.5]
DIBENZO(A,H)ANTHRACENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.6 U [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
DIBENZOFURAN	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.6 U [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
DIETHYL PHTHALATE	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	340 U [MDL=340]	19 U [MDL=19]	19 U [MDL=19]	22 U [MDL=22]
DIMETHYL PHTHALATE	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	360 U [MDL=360]	20 U [MDL=20]	20 U [MDL=20]	24 U [MDL=24]
DI-N-BUTYL PHTHALATE	18 U [MDL=18]	18 U [MDL=18]	16 U [MDL=16]	320 U [MDL=320]	18 U [MDL=18]	18 U [MDL=18]	21 U [MDL=21]
DI-N-OCTYL PHTHALATE	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
FLUORANTHENE	46 [MDL=3.9]	4.4 J [MDL=3.9]	130 [MDL=3.6]	70 U [MDL=70]	11 [MDL=3.9]	8.1 [MDL=3.9]	4.6 U [MDL=4.6]
FLUORENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	3.9 J [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
HEXACHLOROBENZENE	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	2.3 U [MDL=2.3]	45 U [MDL=45]	2.5 U [MDL=2.5]	2.5 U [MDL=2.5]	3 U [MDL=3]
HEXACHLOROBUTADIENE	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
HEXACHLOROCYCLOPENTADIENE	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
HEXACHLOROETHANE	11 U [MDL=11]	11 U [MDL=11]	9.8 U [MDL=9.8]	190 U [MDL=190]	11 U [MDL=11]	11 U [MDL=11]	13 U [MDL=13]
INDENO(1,2,3-CD)PYRENE	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	51 [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
ISOPHORONE	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	410 J [MDL=280]	16 U [MDL=16]	15 U [MDL=15]	18 U [MDL=18]
NAPHTHALENE	19 [MDL=3.9]	13 [MDL=3.9]	3.6 U [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
NITROBENZENE	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	2.4 U [MDL=2.4]	47 U [MDL=47]	2.6 U [MDL=2.6]	2.6 U [MDL=2.6]	3.1 U [MDL=3.1]
N-NITROSODIMETHYLAMINE	19 U [MDL=19]	19 U [MDL=19]	17 U [MDL=17]	340 U [MDL=340]	19 U [MDL=19]	19 U [MDL=19]	22 U [MDL=22]
N-NITROSO-DI-N-PROPYLAMINE	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
N-NITROSODIPHENYLAMINE	25 U [MDL=25]	25 U [MDL=25]	23 U [MDL=23]	450 U [MDL=450]	25 U [MDL=25]	25 U [MDL=25]	30 U [MDL=30]
PENTACHLOROPHENOL	95 U [MDL=95]	94 U [MDL=94]	87 U [MDL=87]	1700 U [MDL=1700]	96 U [MDL=96]	94 U [MDL=94]	110 U [MDL=110]
PHENANTHRENE	25 [MDL=3.9]	7.2 J [MDL=3.9]	56 [MDL=3.6]	70 U [MDL=70]	13 [MDL=3.9]	8.8 [MDL=3.9]	4.6 U [MDL=4.6]
PHENOL	32 U [MDL=32]	32 U [MDL=32]	30 U [MDL=30]	570 U [MDL=570]	32 U [MDL=32]	32 U [MDL=32]	38 U [MDL=38]
PYRENE	36 [MDL=3.9]	3.9 J [MDL=3.9]	130 [MDL=3.6]	70 U [MDL=70]	3.9 U [MDL=3.9]	3.9 U [MDL=3.9]	4.6 U [MDL=4.6]
VOLATILES (UG/KG)							
.BETA.-SESQUIPHELLANDRENE	--	--	--	--	--	--	--
1,1,1,2-TETRACHLOROETHANE	0.67 U [MDL=0.67]	0.56 U [MDL=0.56]	0.72 U [MDL=0.72]	0.61 U [MDL=0.61]	0.56 U [MDL=0.56]	0.69 U [MDL=0.69]	0.87 U [MDL=0.87]
1,1,1-TRICHLOROETHANE	0.61 U [MDL=0.61]	0.50 U [MDL=0.5]	0.65 U [MDL=0.65]	0.55 U [MDL=0.55]	0.51 U [MDL=0.51]	0.62 U [MDL=0.62]	0.78 U [MDL=0.78]
1,1,2,2-TETRACHLOROETHANE	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.40 U [MDL=0.4]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.48 U [MDL=0.48]
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.8 U [MDL=1.8]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-880 D-SB-880-4-6 4/24/2012	SB-880 D-SB-880-6-8 4/24/2012	SB-881 D-SB-881-0-1 4/25/2012	SB-881 D-SB-881-1-2 4/25/2012	SB-881 D-SB-881-2-4 4/25/2012	SB-881 D-SB-881-4-6 4/25/2012	SB-881 D-SB-881-6-8 4/25/2012
1,1-DICHLOROETHANE	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.42 U [MDL=0.42]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.40 U [MDL=0.4]	0.50 U [MDL=0.5]
1,1-DICHLOROETHENE	0.57 U [MDL=0.57]	0.47 U [MDL=0.47]	0.61 U [MDL=0.61]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.58 U [MDL=0.58]	0.73 U [MDL=0.73]
1,1-DICHLOROPROPENE	0.33 U [MDL=0.33]	0.27 U [MDL=0.27]	0.35 U [MDL=0.35]	0.30 U [MDL=0.3]	0.27 U [MDL=0.27]	0.33 U [MDL=0.33]	0.42 U [MDL=0.42]
1,2,3-TRICHLOROBENZENE	0.41 U [MDL=0.41]	0.34 U [MDL=0.34]	0.44 U [MDL=0.44]	0.37 U [MDL=0.37]	0.34 U [MDL=0.34]	0.42 U [MDL=0.42]	0.53 U [MDL=0.53]
1,2,3-TRICHLOROPROPANE	0.98 U [MDL=0.98]	0.81 U [MDL=0.81]	1 U [MDL=1]	0.89 U [MDL=0.89]	0.81 U [MDL=0.81]	1 U [MDL=1]	1.3 U [MDL=1.3]
1,2,3-TRIMETHYLBENZENE	0.18 U [MDL=0.18]	0.15 U [MDL=0.15]	0.20 U [MDL=0.2]	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.19 U [MDL=0.19]	0.24 U [MDL=0.24]
1,2,4-TRICHLOROBENZENE	0.29 U [MDL=0.29]	0.24 U [MDL=0.24]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]	0.30 U [MDL=0.3]	0.38 U [MDL=0.38]
1,2,4-TRIMETHYLBENZENE	0.71 U [MDL=0.71]	0.59 U [MDL=0.59]	0.76 U [MDL=0.76]	0.64 U [MDL=0.64]	0.59 U [MDL=0.59]	0.72 U [MDL=0.72]	0.91 U [MDL=0.91]
1,2-DIBROMO-3-CHLOROPROPANE	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.2 U [MDL=1.2]	1.4 U [MDL=1.4]	1.8 U [MDL=1.8]
1,2-DIBROMOETHANE	0.54 U [MDL=0.54]	0.45 U [MDL=0.45]	0.58 U [MDL=0.58]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	0.56 U [MDL=0.56]	0.70 U [MDL=0.7]
1,2-DICHLOROBENZENE	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.42 U [MDL=0.42]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.40 U [MDL=0.4]	0.50 U [MDL=0.5]
1,2-DICHLOROETHANE	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.40 U [MDL=0.4]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.48 U [MDL=0.48]
1,2-DICHLOROPROPANE	0.75 U [MDL=0.75]	0.62 U [MDL=0.62]	0.80 U [MDL=0.8]	0.68 U [MDL=0.68]	0.62 U [MDL=0.62]	0.77 U [MDL=0.77]	0.97 U [MDL=0.97]
1,3,5-TRIMETHYLBENZENE	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	0.38 U [MDL=0.38]	0.32 U [MDL=0.32]	0.41 U [MDL=0.41]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.49 U [MDL=0.49]
1,3-DICHLOROPROPANE	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.40 U [MDL=0.4]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.48 U [MDL=0.48]
1,4-DICHLOROBENZENE	0.72 U [MDL=0.72]	0.60 U [MDL=0.6]	0.77 U [MDL=0.77]	0.65 U [MDL=0.65]	0.60 U [MDL=0.6]	0.73 U [MDL=0.73]	0.92 U [MDL=0.92]
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-	--	--	--	--	--	--	--
1-BUTANOL	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--
2,2-DICHLOROPROPANE	1 U [MDL=1]	0.85 U [MDL=0.85]	1.1 U [MDL=1.1]	0.93 U [MDL=0.93]	0.85 U [MDL=0.85]	1 U [MDL=1]	1.3 U [MDL=1.3]
2-BUTANONE	1.5 U [MDL=1.5]	2.3 J [MDL=1.3]	1.6 U [MDL=1.6]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	22 J [MDL=2]
2-CHLOROETHYL VINYL ETHER	1.5 U [MDL=1.5]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	1.4 U [MDL=1.4]	1.3 U [MDL=1.3]	1.6 U [MDL=1.6]	2 U [MDL=2]
2-CHLOROTOLUENE	0.44 U [MDL=0.44]	0.36 U [MDL=0.36]	0.47 U [MDL=0.47]	0.39 U [MDL=0.39]	0.36 U [MDL=0.36]	0.45 U [MDL=0.45]	0.56 U [MDL=0.56]
2-HEXANONE	0.69 U [MDL=0.69]	0.57 U [MDL=0.57]	0.73 U [MDL=0.73]	0.62 U [MDL=0.62]	0.57 U [MDL=0.57]	0.70 U [MDL=0.7]	0.88 U [MDL=0.88]
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
4-CHLOROTOLUENE	0.45 U [MDL=0.45]	0.37 U [MDL=0.37]	0.48 U [MDL=0.48]	0.40 U [MDL=0.4]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]	0.57 U [MDL=0.57]
4-ISOPROPYLTOLUENE	0.23 U [MDL=0.23]	0.19 U [MDL=0.19]	0.24 U [MDL=0.24]	0.21 U [MDL=0.21]	0.19 U [MDL=0.19]	0.23 U [MDL=0.23]	0.29 U [MDL=0.29]
4-METHYL-2-PENTANONE	0.59 U [MDL=0.59]	0.49 U [MDL=0.49]	0.63 U [MDL=0.63]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.60 U [MDL=0.6]	0.76 U [MDL=0.76]
ACETONE	25 K [MDL=6.9]	24 K [MDL=5.7]	11 B [MDL=7.3]	6.2 U [MDL=6.2]	5.7 U [MDL=5.7]	7 U [MDL=7]	120 B [MDL=8.8]
BENZENE	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]
BICYCLO[4.4.1]UNDECA-1,3,5,7,9-PENTAENE	--	--	--	--	--	--	--
BROMOBENZENE	0.36 U [MDL=0.36]	0.30 U [MDL=0.3]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.30 U [MDL=0.3]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]
BROMOCHLOROMETHANE	0.77 U [MDL=0.77]	0.64 U [MDL=0.64]	0.83 U [MDL=0.83]	0.70 U [MDL=0.7]	0.64 U [MDL=0.64]	0.79 U [MDL=0.79]	0.99 U [MDL=0.99]
BROMODICHLOROMETHANE	0.30 U [MDL=0.3]	0.25 U [MDL=0.25]	0.33 U [MDL=0.33]	0.28 U [MDL=0.28]	0.25 U [MDL=0.25]	0.31 U [MDL=0.31]	0.39 U [MDL=0.39]
BROMOFORM	0.36 U [MDL=0.36]	0.30 U [MDL=0.3]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.30 U [MDL=0.3]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]
BROMOMETHANE	0.59 U [MDL=0.59]	0.49 U [MDL=0.49]	0.63 U [MDL=0.63]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.60 U [MDL=0.6]	0.76 U [MDL=0.76]
CARBON DISULFIDE	1.9 J [MDL=0.48]	1.6 J [MDL=0.4]	0.51 U [MDL=0.51]	1.8 J [MDL=0.43]	0.40 U [MDL=0.4]	0.49 U [MDL=0.49]	4 J [MDL=0.62]
CARBON TETRACHLORIDE	0.40 U [MDL=0.4]	0.33 U [MDL=0.33]	0.43 U [MDL=0.43]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.41 U [MDL=0.41]	0.52 U [MDL=0.52]
CHLOROBENZENE	0.36 U [MDL=0.36]	0.30 U [MDL=0.3]	0.38 U [MDL=0.38]	0.33 U [MDL=0.33]	0.30 U [MDL=0.3]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]
CHLORODIBROMOMETHANE	0.60 U [MDL=0.6]	0.50 U [MDL=0.5]	0.64 U [MDL=0.64]	0.54 U [MDL=0.54]	0.50 U [MDL=0.5]	0.61 U [MDL=0.61]	0.77 U [MDL=0.77]
CHLOROETHANE	0.94 U [MDL=0.94]	0.78 U [MDL=0.78]	1 U [MDL=1]	0.85 U [MDL=0.85]	0.78 U [MDL=0.78]	0.96 U [MDL=0.96]	1.2 U [MDL=1.2]
CHLOROFORM	0.32 U [MDL=0.32]	0.26 U [MDL=0.26]	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.41 U [MDL=0.41]
CHLOROMETHANE	0.45 U [MDL=0.45]	0.37 U [MDL=0.37]	0.48 U [MDL=0.48]	0.40 U [MDL=0.4]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]	0.57 U [MDL=0.57]
CIS-1,2-DICHLOROETHENE	0.39 U [MDL=0.39]	0.32 U [MDL=0.32]	0.42 U [MDL=0.42]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.40 U [MDL=0.4]	0.50 U [MDL=0.5]
CIS-1,3-DICHLOROPROPENE	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.40 U [MDL=0.4]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.48 U [MDL=0.48]
CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, (	--	--	--	--	--	--	--
DIBROMOMETHANE	0.69 U [MDL=0.69]	0.57 U [MDL=0.57]	0.73 U [MDL=0.73]	0.62 U [MDL=0.62]	0.57 U [MDL=0.57]	0.70 U [MDL=0.7]	0.88 U [MDL=0.88]
DICHLORODIFLUOROMETHANE	0.54 U [MDL=0.54]	0.45 U [MDL=0.45]	0.58 U [MDL=0.58]	0.49 U [MDL=0.49]	0.45 U [MDL=0.45]	0.56 U [MDL=0.56]	0.70 UJ [MDL=0.7]
DIISOPROPYL ETHER	1.6 U [MDL=1.6]	1.4 U [MDL=1.4]	1.7 U [MDL=1.7]	1.5 U [MDL=1.5]	1.4 U [MDL=1.4]	1.7 U [MDL=1.7]	2.1 U [MDL=2.1]

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-880 D-SB-880-4-6 4/24/2012	SB-880 D-SB-880-6-8 4/24/2012	SB-881 D-SB-881-0-1 4/25/2012	SB-881 D-SB-881-1-2 4/25/2012	SB-881 D-SB-881-2-4 4/25/2012	SB-881 D-SB-881-4-6 4/25/2012	SB-881 D-SB-881-6-8 4/25/2012
DISILOXANE, HEXAMETHYL-	--	--	--	--	--	--	--
ETHYL TERT-BUTYL ETHER	0.24 U [MDL=0.24]	0.20 U [MDL=0.2]	0.26 U [MDL=0.26]	0.22 U [MDL=0.22]	0.20 U [MDL=0.2]	0.24 U [MDL=0.24]	0.31 U [MDL=0.31]
ETHYLBENZENE	0.28 U [MDL=0.28]	0.23 U [MDL=0.23]	0.30 U [MDL=0.3]	0.26 U [MDL=0.26]	0.24 U [MDL=0.24]	0.29 U [MDL=0.29]	0.36 U [MDL=0.36]
HEXACHLOROBUTADIENE	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.7 U [MDL=1.7]
INDANE	--	--	--	--	--	--	--
ISOPROPYLBENZENE	0.17 U [MDL=0.17]	0.14 U [MDL=0.14]	0.19 U [MDL=0.19]	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.18 U [MDL=0.18]	0.22 U [MDL=0.22]
M+P-XYLENES	1.3 U [MDL=1.3]	1.1 U [MDL=1.1]	1.4 U [MDL=1.4]	1.2 U [MDL=1.2]	1.1 U [MDL=1.1]	1.3 U [MDL=1.3]	1.7 U [MDL=1.7]
METHYL ACETATE	--	--	38 NJ [MDL=1.6]	--	--	--	--
METHYL CYCLOHEXANE	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	0.47 U [MDL=0.47]	0.39 U [MDL=0.39]	0.50 U [MDL=0.5]	0.42 U [MDL=0.42]	0.39 U [MDL=0.39]	0.48 U [MDL=0.48]	0.60 U [MDL=0.6]
METHYLENE CHLORIDE	0.73 U [MDL=0.73]	0.60 U [MDL=0.6]	0.78 U [MDL=0.78]	0.66 U [MDL=0.66]	0.61 U [MDL=0.61]	1.3 B [MDL=0.75]	0.94 U [MDL=0.94]
NAPHTHALENE	0.24 B [MDL=0.21]	0.73 B [MDL=0.17]	0.22 U [MDL=0.22]	0.24 B [MDL=0.19]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]
N-BUTYLBENZENE	0.25 U [MDL=0.25]	0.21 U [MDL=0.21]	0.27 U [MDL=0.27]	0.23 U [MDL=0.23]	0.21 U [MDL=0.21]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]
N-PROPYLBENZENE	0.44 U [MDL=0.44]	0.36 U [MDL=0.36]	0.47 U [MDL=0.47]	0.39 U [MDL=0.39]	0.36 U [MDL=0.36]	0.45 U [MDL=0.45]	0.56 U [MDL=0.56]
O-XYLENE	0.38 U [MDL=0.38]	0.32 U [MDL=0.32]	0.41 U [MDL=0.41]	0.35 U [MDL=0.35]	0.32 U [MDL=0.32]	0.39 U [MDL=0.39]	0.49 U [MDL=0.49]
SEC-BUTYLBENZENE	0.20 U [MDL=0.2]	0.16 U [MDL=0.16]	0.21 U [MDL=0.21]	0.18 U [MDL=0.18]	0.16 U [MDL=0.16]	0.20 U [MDL=0.2]	0.25 U [MDL=0.25]
STYRENE	0.16 U [MDL=0.16]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.15 U [MDL=0.15]	0.14 U [MDL=0.14]	0.17 U [MDL=0.17]	0.21 U [MDL=0.21]
TERT-AMYL METHYL ETHER	0.40 U [MDL=0.4]	0.33 U [MDL=0.33]	0.43 U [MDL=0.43]	0.36 U [MDL=0.36]	0.33 U [MDL=0.33]	0.41 U [MDL=0.41]	0.52 U [MDL=0.52]
TERT-BUTYLBENZENE	0.32 U [MDL=0.32]	0.26 U [MDL=0.26]	0.34 U [MDL=0.34]	0.29 U [MDL=0.29]	0.26 U [MDL=0.26]	0.32 U [MDL=0.32]	0.41 U [MDL=0.41]
TERTIARY-BUTYL ALCOHOL	8.3 UR [MDL=8.3]	6.9 UR [MDL=6.9]	8.9 UR [MDL=8.9]	7.5 UR [MDL=7.5]	6.9 UR [MDL=6.9]	8.5 UR [MDL=8.5]	11 UR [MDL=11]
TETRACHLOROETHENE	0.57 U [MDL=0.57]	0.47 U [MDL=0.47]	0.61 U [MDL=0.61]	0.51 U [MDL=0.51]	0.47 U [MDL=0.47]	0.58 U [MDL=0.58]	0.73 U [MDL=0.73]
TOLUENE	0.29 U [MDL=0.29]	0.24 U [MDL=0.24]	0.31 U [MDL=0.31]	0.27 U [MDL=0.27]	0.24 U [MDL=0.24]	0.30 U [MDL=0.3]	0.38 U [MDL=0.38]
TOTAL XYLENES	0.73 U [MDL=0.73]	0.60 U [MDL=0.6]	0.78 U [MDL=0.78]	0.66 U [MDL=0.66]	0.61 U [MDL=0.61]	0.75 U [MDL=0.75]	0.94 U [MDL=0.94]
TRANS-1,2-DICHLOROETHENE	0.45 U [MDL=0.45]	0.37 U [MDL=0.37]	0.48 U [MDL=0.48]	0.40 U [MDL=0.4]	0.37 U [MDL=0.37]	0.46 U [MDL=0.46]	0.57 U [MDL=0.57]
TRANS-1,3-DICHLOROPROPENE	0.59 U [MDL=0.59]	0.49 U [MDL=0.49]	0.63 U [MDL=0.63]	0.53 U [MDL=0.53]	0.49 U [MDL=0.49]	0.60 U [MDL=0.6]	0.76 U [MDL=0.76]
TRICHLOROETHENE	0.46 U [MDL=0.46]	0.38 U [MDL=0.38]	0.49 U [MDL=0.49]	0.41 U [MDL=0.41]	0.38 U [MDL=0.38]	0.47 U [MDL=0.47]	0.59 U [MDL=0.59]
TRICHLOROFLUOROMETHANE	0.37 U [MDL=0.37]	0.31 U [MDL=0.31]	0.40 U [MDL=0.4]	0.34 U [MDL=0.34]	0.31 U [MDL=0.31]	0.38 U [MDL=0.38]	0.48 U [MDL=0.48]
VINYL ACETATE	0.27 UR [MDL=0.27]	0.23 UR [MDL=0.23]	0.29 UR [MDL=0.29]	0.25 UR [MDL=0.25]	0.23 UR [MDL=0.23]	0.28 UR [MDL=0.28]	0.35 UR [MDL=0.35]
VINYL CHLORIDE	0.42 U [MDL=0.42]	0.35 U [MDL=0.35]	0.45 U [MDL=0.45]	0.38 U [MDL=0.38]	0.35 U [MDL=0.35]	0.43 U [MDL=0.43]	0.55 U [MDL=0.55]
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
2-METHYLNAPHTHALENE	--	--	--	--	--	--	--
ACENAPHTHENE	--	--	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--	--	--
ANTHRACENE	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	--	--	--	--	--	--	--
BAP EQUIVALENT-UCL	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	--	--	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	--
CHRYSENE	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	--	--	--	--
FLUORENE	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--	--	--
PYRENE	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	SB-880 D-SB-880-4-6 4/24/2012	SB-880 D-SB-880-6-8 4/24/2012	SB-881 D-SB-881-0-1 4/25/2012	SB-881 D-SB-881-1-2 4/25/2012	SB-881 D-SB-881-2-4 4/25/2012	SB-881 D-SB-881-4-6 4/25/2012	SB-881 D-SB-881-6-8 4/25/2012
TOTAL PAHS	--	--	--	--	--	--	--
PCBS (UG/KG)							
AROCLOR-1016	25 U [MDL=25]	25 U [MDL=25]	23 U [MDL=23]	22 U [MDL=22]	25 U [MDL=25]	24 U [MDL=24]	30 U [MDL=30]
AROCLOR-1221	19 U [MDL=19]	19 U [MDL=19]	18 U [MDL=18]	17 U [MDL=17]	19 U [MDL=19]	19 U [MDL=19]	23 U [MDL=23]
AROCLOR-1232	17 U [MDL=17]	16 U [MDL=16]	15 U [MDL=15]	15 U [MDL=15]	17 U [MDL=17]	16 U [MDL=16]	20 U [MDL=20]
AROCLOR-1242	15 U [MDL=15]	15 U [MDL=15]	14 U [MDL=14]	14 U [MDL=14]	16 U [MDL=16]	15 U [MDL=15]	18 U [MDL=18]
AROCLOR-1248	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	20 U [MDL=20]	20 U [MDL=20]	24 U [MDL=24]
AROCLOR-1254	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	20 U [MDL=20]	20 U [MDL=20]	24 U [MDL=24]
AROCLOR-1260	20 U [MDL=20]	20 U [MDL=20]	19 U [MDL=19]	18 U [MDL=18]	20 U [MDL=20]	20 U [MDL=20]	24 U [MDL=24]
TOTAL AROCLOR	--	--	--	--	--	--	--
PESTICIDES (UG/KG)							
4,4'-DDD	7.4 UJ [MDL=7.4]	7.3 UJ [MDL=7.3]	34 U [MDL=34]	33 U [MDL=33]	7.4 U [MDL=7.4]	7.2 U [MDL=7.2]	8.7 U [MDL=8.7]
4,4'-DDE	4.6 U [MDL=4.6]	4.6 U [MDL=4.6]	21 U [MDL=21]	21 U [MDL=21]	4.7 U [MDL=4.7]	4.5 U [MDL=4.5]	5.5 U [MDL=5.5]
4,4'-DDT	7.5 U [MDL=7.5]	7.4 U [MDL=7.4]	35 U [MDL=35]	33 U [MDL=33]	7.5 U [MDL=7.5]	7.3 U [MDL=7.3]	8.9 U [MDL=8.9]
ALDRIN	14 U [MDL=14]	14 U [MDL=14]	66 U [MDL=66]	64 U [MDL=64]	14 U [MDL=14]	14 U [MDL=14]	17 U [MDL=17]
ALPHA-BHC	8.7 U [MDL=8.7]	8.6 U [MDL=8.6]	40 U [MDL=40]	39 U [MDL=39]	8.7 U [MDL=8.7]	8.5 U [MDL=8.5]	10 U [MDL=10]
ALPHA-CHLORDANE	11 U [MDL=11]	11 U [MDL=11]	52 U [MDL=52]	50 U [MDL=50]	11 U [MDL=11]	11 U [MDL=11]	13 U [MDL=13]
BETA-BHC	13 U [MDL=13]	13 U [MDL=13]	60 U [MDL=60]	58 U [MDL=58]	13 U [MDL=13]	13 U [MDL=13]	15 U [MDL=15]
DELTA-BHC	14 U [MDL=14]	14 U [MDL=14]	66 U [MDL=66]	64 U [MDL=64]	14 U [MDL=14]	14 U [MDL=14]	17 U [MDL=17]
DIELDRIN	5.6 U [MDL=5.6]	5.5 U [MDL=5.5]	26 U [MDL=26]	25 U [MDL=25]	5.6 U [MDL=5.6]	5.5 U [MDL=5.5]	6.6 U [MDL=6.6]
ENDOSULFAN I	6.2 UJ [MDL=6.2]	6.1 UJ [MDL=6.1]	28 U [MDL=28]	28 U [MDL=28]	6.2 U [MDL=6.2]	6 U [MDL=6]	7.3 U [MDL=7.3]
ENDOSULFAN II	9.8 U [MDL=9.8]	9.6 U [MDL=9.6]	45 U [MDL=45]	44 U [MDL=44]	9.8 U [MDL=9.8]	9.5 U [MDL=9.5]	12 U [MDL=12]
ENDOSULFAN SULFATE	10 U [MDL=10]	10 U [MDL=10]	48 U [MDL=48]	46 U [MDL=46]	10 U [MDL=10]	10 U [MDL=10]	12 U [MDL=12]
ENDRIN	6 U [MDL=6]	5.9 U [MDL=5.9]	27 U [MDL=27]	27 U [MDL=27]	6 U [MDL=6]	5.8 U [MDL=5.8]	7 U [MDL=7]
ENDRIN ALDEHYDE	12 U [MDL=12]	12 U [MDL=12]	55 U [MDL=55]	53 U [MDL=53]	12 U [MDL=12]	12 U [MDL=12]	14 U [MDL=14]
ENDRIN KETONE	7.5 U [MDL=7.5]	7.4 U [MDL=7.4]	35 U [MDL=35]	33 U [MDL=33]	7.5 U [MDL=7.5]	7.3 U [MDL=7.3]	8.9 U [MDL=8.9]
GAMMA-BHC (LINDANE)	8.8 UJ [MDL=8.8]	8.7 UJ [MDL=8.7]	41 U [MDL=41]	39 U [MDL=39]	8.9 U [MDL=8.9]	8.6 U [MDL=8.6]	10 U [MDL=10]
GAMMA-CHLORDANE	5 U [MDL=5]	4.9 U [MDL=4.9]	23 U [MDL=23]	22 U [MDL=22]	5 U [MDL=5]	4.9 U [MDL=4.9]	5.9 U [MDL=5.9]
HEPTACHLOR	13 UJ [MDL=13]	13 UJ [MDL=13]	60 U [MDL=60]	58 U [MDL=58]	13 U [MDL=13]	13 U [MDL=13]	15 U [MDL=15]
HEPTACHLOR EPOXIDE	9.5 U [MDL=9.5]	9.4 U [MDL=9.4]	44 U [MDL=44]	42 U [MDL=42]	9.6 U [MDL=9.6]	9.3 U [MDL=9.3]	11 U [MDL=11]
METHOXYCHLOR	18 U [MDL=18]	18 U [MDL=18]	82 U [MDL=82]	80 U [MDL=80]	18 U [MDL=18]	17 U [MDL=17]	21 U [MDL=21]
TOXAPHENE	230 U [MDL=230]	220 U [MDL=220]	1000 U [MDL=1000]	1000 U [MDL=1000]	230 U [MDL=230]	220 U [MDL=220]	270 U [MDL=270]
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALDRIN	--	--	--	--	--	--	--
ALPHA-BHC	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
BETA-BHC	--	--	--	--	--	--	--
DELTA-BHC	--	--	--	--	--	--	--
DIELDRIN	--	--	--	--	--	--	--
ENDOSULFAN I	--	--	--	--	--	--	--
ENDOSULFAN II	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
ENDRIN KETONE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
HEPTACHLOR	--	--	--	--	--	--	--

APPENDIX C
SOIL DATA FROM PREVIOUS INVESTIGATIONS
BLOCK D PANHANDLE
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	**SB-880**	**SB-880**	**SB-881**	**SB-881**	**SB-881**	**SB-881**	**SB-881**
SAMPLE ID	**D-SB-880-4-6**	**D-SB-880-6-8**	**D-SB-881-0-1**	**D-SB-881-1-2**	**D-SB-881-2-4**	**D-SB-881-4-6**	**D-SB-881-6-8**
SAMPLE DATE	**4/24/2012**	**4/24/2012**	**4/25/2012**	**4/25/2012**	**4/25/2012**	**4/25/2012**	**4/25/2012**
HEPTACHLOR EPOXIDE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOXAPHENE	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C10-C32)	52 [MDL=11]	11 U [MDL=11]	74 B [MDL=10]	62 B [MDL=9.8]	45 B [MDL=11]	46 B [MDL=11]	70 B [MDL=13]
PETROLEUM HYDROCARBONS (UG/KG)							
DIESEL RANGE ORGANICS	--	--	--	--	--	--	--
GASOLINE RANGE ORGANICS	--	--	--	--	--	--	--
TPH (C06-C10)	55 U [MDL=55]	54 U [MDL=54]	50 U [MDL=50]	49 U [MDL=49]	55 U [MDL=55]	54 U [MDL=54]	65 U [MDL=65]

APPENDIX D—RESIDUAL-RISK ANALYSIS

Residual Risk Analysis Conducted to Support Remedial Action Plans for Tax Block E Soils Lockheed Martin Middle River Complex 2323 Eastern Boulevard Middle River, Maryland

Prepared for:

Lockheed Martin Corporation

Prepared by:

Tetra Tech, Inc.

October 31, 2013

Michael Martin, P.G.
Regional Manager

Lee Ann Sinagoga
Project Manager

TABLE OF CONTENTS

Section **Page**

ACRONYMS iii

1 INTRODUCTION 1-1

2 METHODOLOGY 2-1

3 RESULTS AND CONCLUSIONS 3-1

4 REFERENCES 4-1

List of Tables

Table **Page**

Table 2-1 Summary of Residual Risk Analysis Results 2-5

Attachments

Attachment A— Data Histograms; Remedial Goal Calculations

Attachment B—Detailed Residual Risk Analysis Tables

Attachment C—Final Cumulative Risk Estimates (Post Residual Risk Analysis)

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ACRONYMS

As	Arsenic
BaPEq	benzo(a)pyrene equivalents
bgs	below ground surface
COC	Chemical(s) of concern
COPC	Chemical(s) of potential concern
EPC	exposure point concentration
HI	hazard index
HHRA	human health risk assessment
MDE	Maryland Department of the Environment
µg/kg	micrograms per kilogram
mg/kg	milligram per kilogram
Nap	Naphthalene
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PRG	preliminary remedial goal
RAO	Remedial action objective
RAP	remedial action plan
RRA	residual risk analysis
RSL	regional screening level
TCB	Trichlorobenzene
UCL	upper confidence limit
USEPA	United States Environmental Protection Agency

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Section 1
Introduction

The *Human Health Risk Assessment (HHRA) for Blocks D, E, F, G, and H Soils, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland* (Tetra Tech, 2012) identified chemicals of concern (COC) in the tax block soils that require remediation if the typical industrial worker is the receptor of concern. This document was prepared to support the remedial action plans (RAP) for the Tax Block D soils, assuming current and future industrial land use. In addition, because a portion of Tax Block D, often referred to as the panhandle, is being considered for recreational land use, an analysis for this area was prepared using recreational exposure assumptions. The residual risk analysis contained herein uses a risk assessment approach to select those locations that should be remediated so that risk management goals established by the Maryland Department of the Environment (MDE) are achieved:

- Maryland Department of the Environment cumulative cancer and non-cancer risk benchmarks for receptors exposed to chemicals of concern in an exposure unit (i.e., an area in which receptor activities typically occur) are $1x10^{-5}$ (i.e., a one-in-one hundred thousand excess probability of developing cancer) and a hazard index (HI) of one, respectively. (Potential adverse non-carcinogenic health effects may occur if the calculated hazard index for a target organ exceeds 1.) Risk estimates greater than these benchmarks are not considered acceptable by the Maryland Department of Environment.

- "Hot spot" areas in soil will also be addressed by the remedial action plan. The Maryland Department of the Environment defines a "hot spot" as a location with a cancer risk estimate exceeding $1x10^{-4}$ (i.e., a one-in-ten thousand probability of developing cancer) or an HI greater than 100.

Stated alternatively, this analysis will indicate locations that must be remediated to achieve risk management goals or remedial action objectives (RAOs) as they are referred to in the RAP prepared for Tax Block D, while ensuring that "representative" soil concentrations do not exceed the risk-based preliminary remedial goals (PRGs) established for Tax Block D soils. For purposes of human health risk assessment, a "representative" soil concentration (also referred to as the exposure point concentration [EPC]) is typically defined as the 95% upper confidence

limit (UCL) on the arithmetic mean. A 95% UCL is defined as a value that, when repeatedly calculated for randomly drawn subsets of size n, equals or exceeds the true population mean 95% of the time. The 95% UCL provides a measure of uncertainty in the mean.

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Section 2
Methodology

The residual risk analysis (RRA) was conducted in the six steps described in the following narrative. The "main" portion of Tax Block D (i.e., Tax Block D minus the panhandle portion that extends to the southeast) was evaluated separately from the "panhandle" portion of Tax Block D.:

Step 1: Identification of Chemicals of Concern:

The HHRA results indicate that carcinogenic polycyclic aromatic hydrocarbons (PAHs), evaluated in terms of benzo(a)pyrene equivalent (BaPEq) concentrations, are the predominant Chemicals of Concern (COC) for an industrial worker hypothetically exposed to soils in Tax Block D. Arsenic, hexavalent chromium, and BaPEq were the COC for recreational users hypothetically exposed to soils in Tax Block D pan handle. Risk estimates are presented in Table 4-4 of the HHRA (Tetra Tech, 2012); BaPEq were calculated per methodology presented in the HHRA. In addition, arsenic soil concentrations exceeding the MDE-approved background concentration (12 mg/kg) in the main portion of Block D were targeted for removal.

Step 2: Determination of Preliminary Remedial Goals

Risk-based preliminary remedial goals (PRGs) for the industrial worker and the recreational user were calculated for all COC; these goals are presented in Section 6 of the HHRA (Tetra Tech, 2012). In this residual risk analysis, the PRG selected for BaPEq for the industrial worker is 2.9 milligrams per kilogram (mg/kg). This concentration represents the $1x10^{-5}$ cancer risk level.

All risk-based remedial goals used in this RRA were verified using the USEPA regional screening level (RSL) calculator (***http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search***); the

associated calculation spreadsheets are in Attachment A. Attachment A also includes histograms that display the distribution of BaPEq concentrations in Tax Block D soils. The histograms demonstrate that risk estimates are strongly influenced by elevated concentrations detected at relatively few sampling locations within the tax block.

Step 3: Ranking of Locations

Sample locations in Block D were ranked according to BaPEq concentrations (and thus also according to risk). Surface soil (i.e., soils from the ground surface to two feet in depth) locations were ranked separately from subsurface (vadose zone) soil (i.e., soil between two feet below ground surface [bgs] and the typical depth to groundwater in a particular soil block). If more than one soil sample was available for the depth interval, the maximum concentration was used to rank the location. The results of the ranking for surface and subsurface soils are presented in the detailed residual risk analysis tables provided in Attachment B. Total cancer risk estimates (i.e., for all COC, not just the PAHs) are also provided, by sample location, for the hypothetical typical industrial worker and hypothetical resident.

Additional risk-estimate information is provided for recreational users for Block D because Lockheed Martin Corporation is currently evaluating the possibility of transferring the panhandle portion of Block D to the local community for use as a park. As noted above, the panhandle is a portion of Block D extending to the southeast of the main portion of Block D. Because of this potential division of Block D, this analysis evaluated the main portion of Block D separately from the panhandle portion of Block D. (Note that cancer risk estimates presented in the HHRA [Tetra Tech, 2012] for the typical Block D industrial worker are evaluated as one exposure unit [i.e., as the entire block, including the panhandle region]; these estimates approach but do not exceed the MDE risk management benchmark. Thus, remediation of Block D soils is not necessary if the future use of the entire block is industrial. However, cancer risk estimates developed for chemical concentrations detected in the main portion only of Block D do exceed MDE risk management benchmarks; thus, the RRA is appropriate for this portion of Block D when the industrial worker is the receptor of concern. This difference in risk estimates is a function of the fact that the lower BaPEq concentrations generally detected in the panhandle portion of Block D tend to lower the EPC for BaPEq concentrations when the Block D data is evaluated as one dataset.)

Step 4: Iteratively Remove Samples and Recalculate Exposure Point Concentration

The information presented for Tax Block D in the Attachment B tables was reviewed to select an initial set of locations for RRA. Locations that appeared to contribute most significantly to risk estimates (using professional judgment) calculated for evaluated receptors were considered a reasonable starting point for the analysis. The selected data points (assuming removal via excavation) were replaced by an assumed contaminant concentration of 10 micrograms per kilogram (µg/kg), a concentration that assumes clean backfill is used, and the exposure point concentration (EPC) [equal to the 95% upper confidence limit (UCL) on the arithmetic mean] for BaPEq was recalculated using the substituted (clean fill) concentrations. This concentration (10 µg/kg) is used as the replacement, non-detect value because the detection limits for BaPEq in samples not impacted by these chemicals tend to range between 1–20 µg/kg. If the recalculated EPC exceeded the preliminary remedial goal for a receptor, additional locations were iteratively (one at a time) removed from the dataset and replaced with the default concentration (10 µg/kg). The EPC was then recalculated until the resultant EPC was equal or less than the preliminary remedial goal. Table 2-1 is a summary of the results RRA for Tax Block D; detailed risk analysis tables are in Attachment B.

Step 5: Address Cumulative Risk Issue

In Tax Block D BaPEqs are the predominant COC. The residual risk analysis focused on reducing the EPC for BaPEq, thus reducing risk. Additionally, because arsenic is also a COC for the industrial worker, any arsenic location above background (12 mg/kg) was also targeted for removal. As a final check, risk estimates were recalculated for all chemicals of potential concern (COPCs) initially identified in the HHRA to ensure that risk management goals established for the project are achieved by the remediation of the locations targeted by the RRA (see Attachment C).

Step 6: Margin of Safety

Locations targeted for remediation were reviewed to determine if any adjacent locations should be targeted. As such, the RRA results reflect a margin of safety. For example, if sample location "X" was targeted for remediation and was located near sample location "Y", which was not

targeted for remediation, but demonstrated an elevated COC concentration (i.e., one that exceeds the preliminary remedial goal), then sample location "Y" may have been added to the list of targeted locations. Professional judgment factors used to select additional sample locations targeted for remediation were based on several factors, including professional judgment. Primary factors considered include concentrations at non-targeted locations near (horizontally or vertically) targeted locations, and the spatial distribution of data (e.g., the sample density [or lack thereof]) in an area where exceedances of PRGs occur. Comments in Table 2-1 indicate if professional judgment was used to add locations. Table 2-1 also indicates when a location meets the MDE definition of an industrial "hot spot": a location with a cancer risk estimate exceeding $1x10^{-4}$ (i.e., a one-in-ten thousand probability of developing cancer) or an HI greater than 100. All locations meeting the MDE "hot spot" definition (see Section 1) were also targeted for remediation.

Table 2-1

Summary of Residual Risk Analysis Results
Lockheed Martin, Middle River Complex
Middle River, Maryland
Page 1 of 2

BLOCK D EXCLUDING PANHANDLE		
Location	**Industrial - Recommended for Removal**	**Comments**
Surface Soil (See detailed Table B-1)		
SB-060	X	Necessary to meet industrial preliminary remedial goals
SB-060A	X	Necessary to meet industrial preliminary remedial goals
SB-060D	X	Added because of co-location with SB-060 and SB-060A
SB-240B	X	Necessary to meet industrial preliminary remedial goals
SB-067	X	Added because of co-location with SB-240B.
SB-062D	X	Necessary to meet industrial preliminary remedial goals
SB-062	X	Added because of co-location with SB-062D.
SB-771	X	Added to address single elevated data point
SB-774	X	Added because of subsurface soil contamination at this location
SB-781	X	Added to address single elevated data point
SB-058	X	Added because surface soil impacts in an easily assessable cluster
SB-058B	X	Added because surface soil impacts in an easily assessable cluster
SB-058C	X	Added because surface soil impacts in an easily assessable cluster
13 of the 73 sampling locations (18 percent) and 18 of 101 samples (18 percent) are recommended for removal if the industrial worker is the receptor of concern. The remedial goal for the industrial worker for the BaPeqs is 2.9 mg/kg. The residual site 95% UCL for BaPeqs would be 0.63 mg/kg.		
Subsurface Soil (See Detailed Table B-2)		
SB-774	X	Added to address single elevated data point
No samples need to be removed to meet remedial goals for the industrial receptor. However, one of the 80 sampling locations (1.3 percent) and 1 of 90 samples (1.1 percent) is *recommended* for removal if the industrial worker is the receptor of concern. The remedial goal for the industrial worker for the BaPeqs is 2.9 mg/kg. The residual site 95% UCL for BaPeqs would be 190 ug/kg.		

Only sampling locations located in the vadose zone are included in the tables. Depth to groundwater is 4 feet at Blocks D.

Table 2-1

Summary of Residual Risk Analysis Results
Lockheed Martin, Middle River Complex
Middle River, Maryland
Page 2 of 2

BLOCK D PANHANDLE		
Location	**Residential/ Recreational Recommended for Removal**	**Comments**
	Surface Soil (See detailed Table B-3)	
SB-872	X	Necessary to meet recreational preliminary remedial goals
SB-875	X	Necessary to meet recreational preliminary remedial goals
SB-784	X	Necessary to meet recreational preliminary remedial goals
No samples need to be removed to meet the desired remedial goals for industrial exposures to BaPeqs. The site 95% UCL is 1.9 mg/kg. However, the locations listed would need to be excavated to achieve remedial goals for a residential or recreational land use scenario.		
	Subsurface Soil (See Detailed Table B-4)	
SB-874 [2-4']	X	Necessary to meet recreational preliminary remedial goals
No samples need to be removed to meet the desired remedial goals for industrial exposures to the BaPeqs. The residual site 95% UCL is 0.44 mg/kg (no samples removed).		

Only sampling locations located in the vadose zone are included in the tables. Depth to groundwater is 4 feet at Blocks D.

Section 3
Results and Conclusions

The results of the residual risk analysis (RRA) described in Section 2 are summarized in Table 2-1. The locations potentially targeted for remediation in the main portion of Block D, based on the residual risk analysis for the industrial worker (or on professional judgment considerations), are included in this table. The locations potentially targeted for the Block D panhandle based on the residual risk analysis for the recreational user are also identified in Table 2-1. All locations meeting the Maryland Department of the Environment (MDE) "hot spot" definition, which represents the $1x10^{-4}$ cancer risk level, are identified for removal in Table 2-1.Note that Table 2-1 includes samples targeted for potential remediation by RRA and professional judgment, while the Attachment B tables include only those samples targeted by residual risk analysis. In other words, sample locations in Attachment B are a sub-set of those in Table 2-1. Similarly, the exposure point concentrations (i.e., the 95% upper confidence limits for arithmetic mean concentrations) in Table 2-1 do not match the ones in Attachment B tables because the sample lists are not exactly the same.

A summary of the information presented in the Table 2-1 and in Attachment B follows:

- As expected, the locations meeting the MDE "hot spot" definition strongly influence the 95% upper confidence limit (UCL) for chemicals of concern (COC).
- Locations identified for potential remediation in the Block D panhandle under the residential land use scenario are similar to those identified for the recreational land use scenario. This is as expected, because the risk-based (at the $1x10^{-5}$ cancer risk level) preliminary remedial goal (PRG) for benzo(a)pyrene equivalents (BaPEq) developed for the resident (140 micrograms per kilogram [µg/kg]) is similar to the one developed for the recreational user (195 µg/kg). These goals are similar because the Maryland Department of the Environment exposure assumptions for the recreational land use scenario are very conservative; the recreational user is assumed to live close by and visit very frequently (250 days per year). The Maryland Department of the Environment cleanup standards (MDE, 2008) recommends using one of three values (52, 182, or 250 days per year) as the exposure frequency in the recreational user scenario, and the exposure frequency used in this analysis is the most conservative value.

- Tables B-1 and B-2 show residual risk analysis results for Block D excluding the panhandle soils; results are summarized on Table 2-1. Four surface soil samples are targeted for remediation in order to achieve the MDE cumulative cancer risk goal of $1x10^{-5}$ for an industrial worker (Table B-1). An additional nine locations are targeted based on considerations specified above in Step 6.

- The residual risk analysis indicates that Block D panhandle soils do not need remediation if future land use in the panhandle is industrial. A few samples in the panhandle are targeted for remediation if the future land use is recreational. However, two samples in the panhandle are identified for remediation (regardless of future land use) because they contain arsenic concentrations that exceed its background concentration (12 milligrams per kilogram [mg/kg]) or hexavalent chromium concentrations that exceed benchmarks (1 mg/kg) recently used by two state regulatory agencies (New Jersey and Missouri). The benchmark for hexavalent chromium is not risk-based, but rather a residential land use benchmark that has been used by the Missouri Department of Natural Resources (DNR) [Missouri DNR, 2010) and the New Jersey, Department of Environmental Protection (DEP) [NJDEP, 2009].

The conclusions presented above should be reviewed in light of the following caveats and uncertainties:

- Data for the Lockheed Martin Corporation Middle River Complex facility do not include a site-specific background dataset for soil. Risk-based preliminary remedial goals calculated for benzo(a)pyrene equivalents are within the range of anthropogenic background soil concentrations reported in literature. Because environs surrounding the site are highly developed, the risk-based preliminary remedial goal may actually be less than anthropogenic background concentrations, and thus are considered conservative.

- The final risk management decisions for the panhandle portion of Block D should consider the nature and proposed location of recreational facilities that may be developed (e.g., walking trails versus playground areas, etc.).

- The chemical profile of the fill material brought in to replace excavated soils is unknown at this time. This residual risk analysis uses a replacement concentration (10 micrograms per kilogram [µg/kg]) to calculate the exposure point concentration. However, anthropogenic background concentrations of polycyclic aromatic hydrocarbons (and thus, benzo(a)pyrene equivalents) may easily exceed this concentration. The exposure point concentration (i.e., the 95% upper confidence level on the arithmetic mean) and residual risk will need to be recalculated if fill soils contain benzo(a)pyrene equivalents at concentrations greater than 10 µg/kg.

In summary, a residual risk analysis was conducted by ranking soil samples in Tax Block D by chemicals of concern (COC) [i.e., benzo(a)pyrene] from highest to lowest concentration. Sampling locations with higher chemicals of concern concentrations were selected for

remediation, and the exposure point concentration was recalculated until it was equal to or less than the remedial goal. Industrial worker preliminary remedial goals were used for the main portion of Block D and recreational receptor remedial goals were used for the Block D panhandle (only). Soil volumes calculated using the locations selected in the residual risk analysis are lower than soil volumes calculated using a strict comparison of sample location concentrations to preliminary remedial goals, because not every sample location with benzo(a)pyrene equivalent exceeding 2.9 mg/kg(the preliminary remedial goals for the industrial scenario) needs to be remediated. The final benchmark or remedial action objective is to achieve a cumulative residual risk level of $1x10^{-5}$ for industrial workers in the main portion of Tax Block D and a cumulative residual risk level of $1x10^{-5}$ for recreational users in the panhandle area of Tax Block D. Risk estimates calculated for the construction worker receptor using residual concentrations (as determined by this residual risk analysis) do not exceed Maryland Department of the Environment risk management benchmarks for cancer ($1x10^{-5}$) and non-cancer (i.e., a hazard index > 1.0) effects.

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Section 4
References

1. Maryland Department of the Environment (MDE), 2008. *Cleanup Standards for Soil and Groundwater, Interim Final Guidance (Update No. 2.1)*. June.

2. Missouri Department of Natural Resources, 2010. *Soil and Water Sampling for Hexavalent Chromium in Northwest Missouri. Hazardous Waste Program Fact Sheet.* October.

3. State of New Jersey, Department of Environmental Protection, Office of Science, 2009. Derivation of an Ingestion-Based Soil Remediation Criterion for Cr^{+6} Based on the NTP Chronic Bioassay Data for Sodium Dichromate Dihydrate. June.

4. Tetra Tech, Inc. (Tetra Tech), 2012. *Human Health Risk Assessment (HHRA) for Blocks D, E, F, G, and H Soils, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland*. September.

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Attachment A
Data Histograms;
Remedial Goal Calculations

Figure A-1
Histogram of Benzo(a)pyrene Equivalent Concentrations in Surface Soil
Block D Panhandle Lockheed Martin
One-half Detection Limit = Non-detects

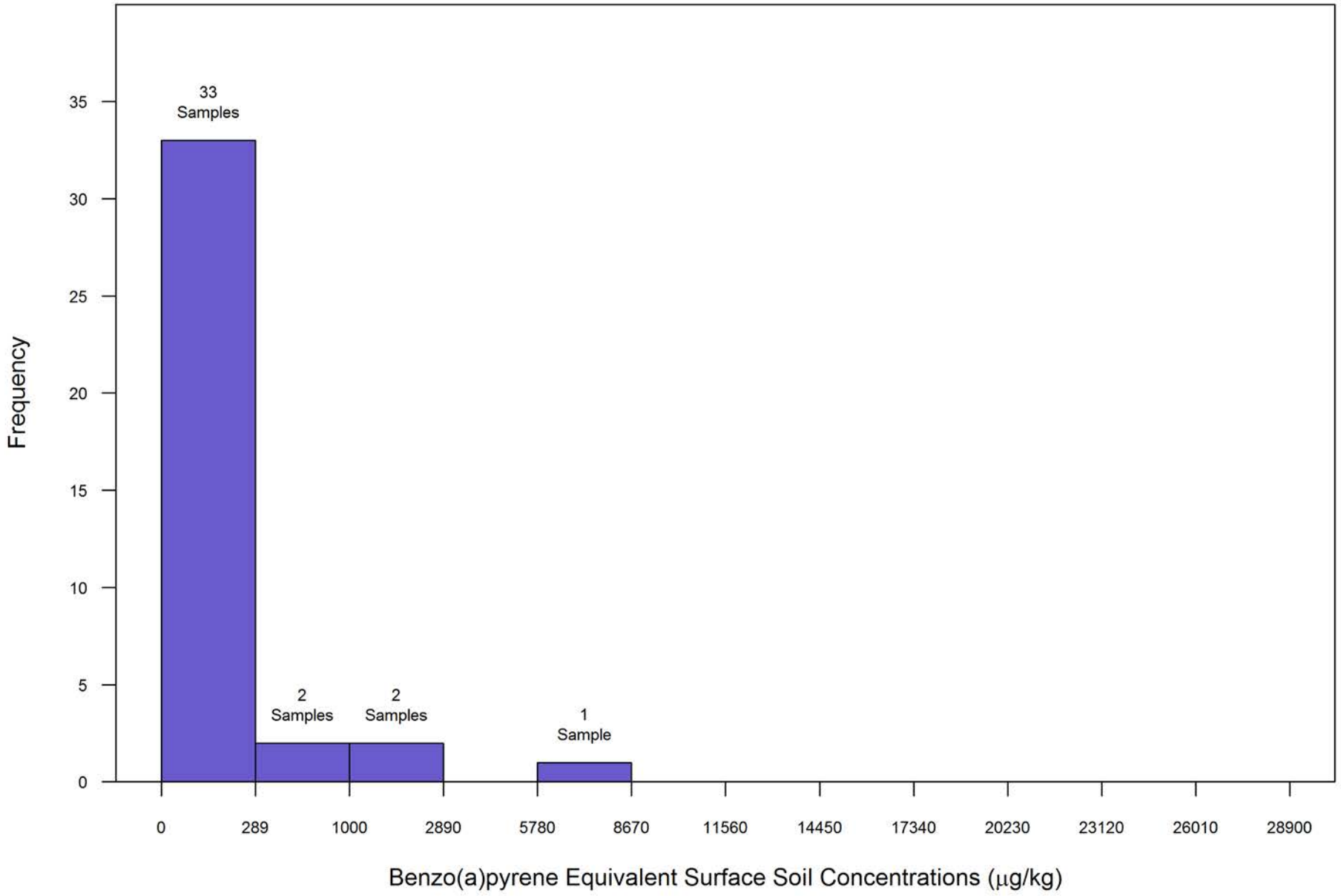


Figure A-2
Histogram of Benzo(a)pyrene Equivalent Concentrations in Surface Soil
Block D Panhandle Lockheed Martin
First Bin = Non-detects

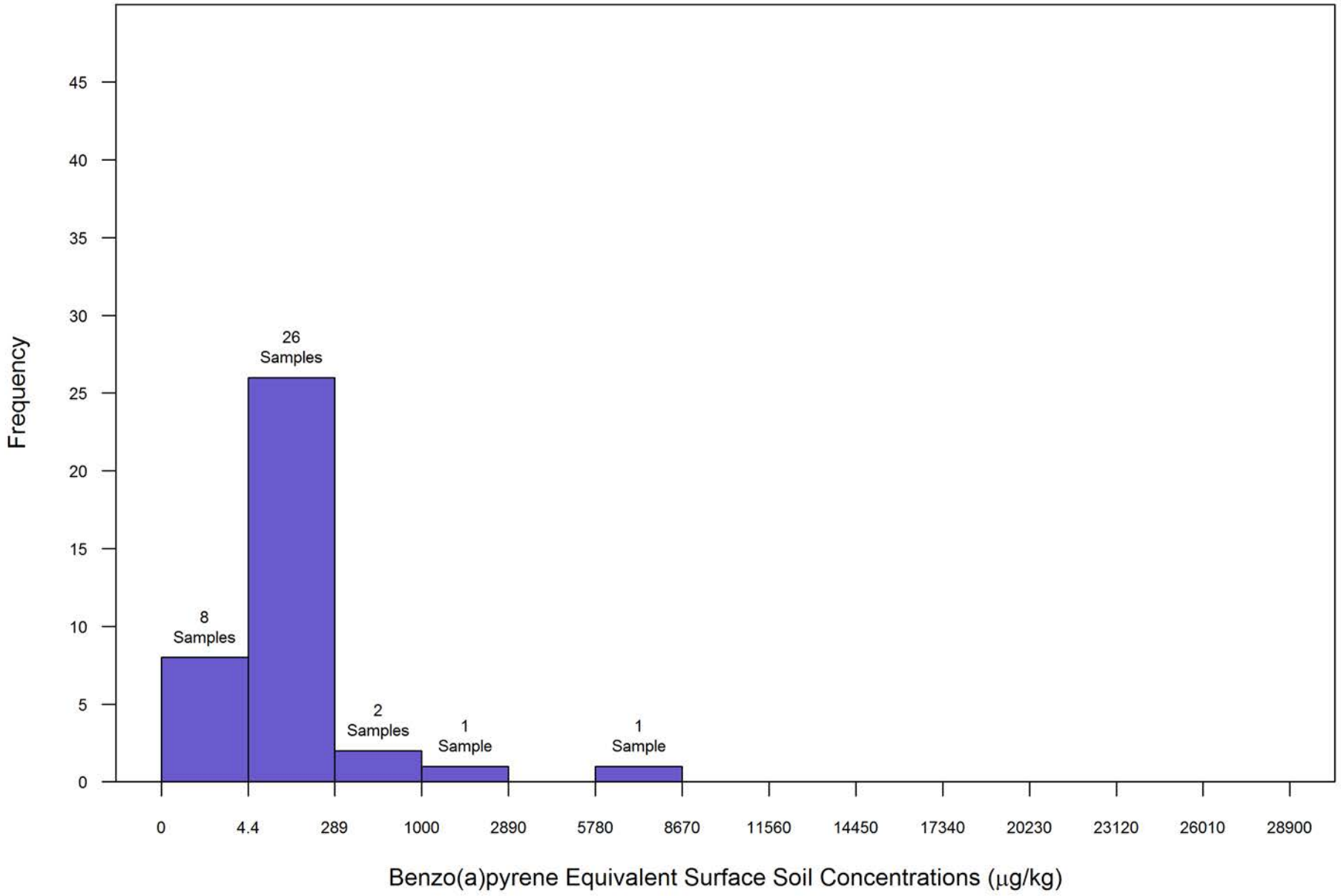


Figure A-3
Histogram of Benzo(a)pyrene Equivalent Concentrations in Subsurface Soil
Block D Panhandle Lockheed Martin
One-half Detection Limit = Non-detects

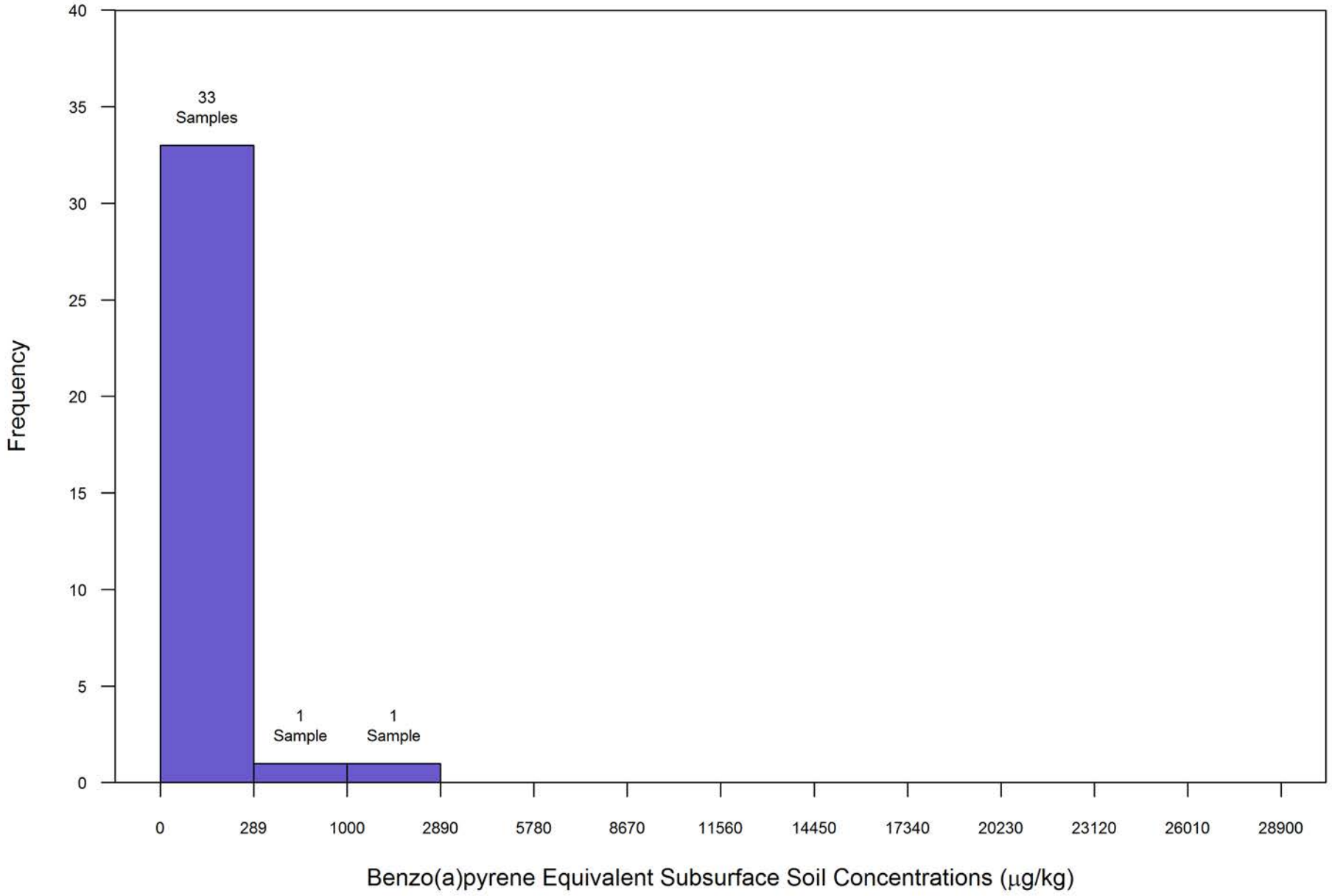


Figure A-4
Histogram of Benzo(a)pyrene Equivalent Concentrations in Subsurface Soil
Block D Panhandle Lockheed Martin
First Bin = Non-detects

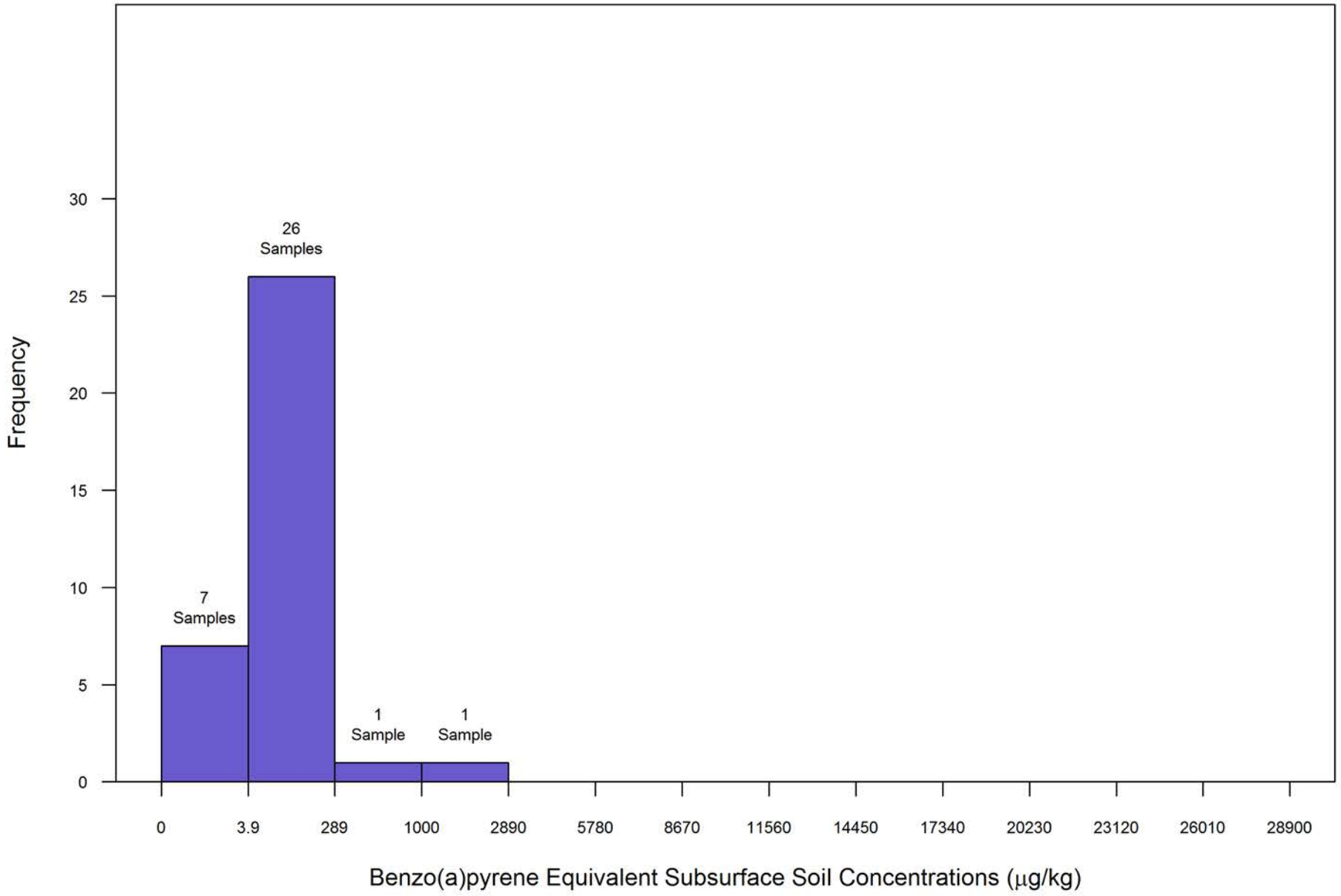


Figure A-5
Histogram of Benzo(a)pyrene Equivalent Concentrations in Surface Soil
Block D Excluding Panhandle Lockheed Martin
One-half Detection Limit = Non-detects

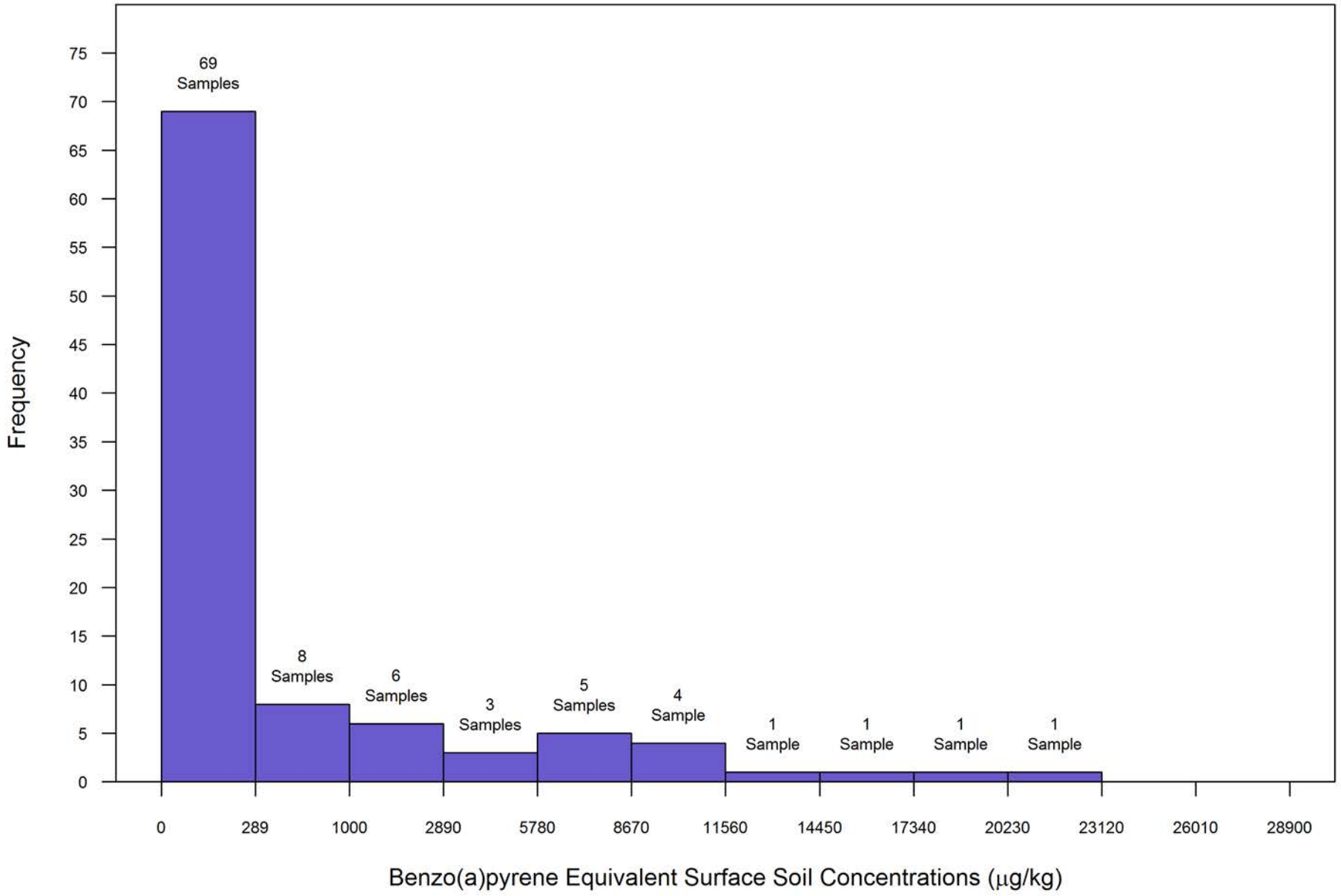


Figure A-6
Histogram of Benzo(a)pyrene Equivalent Concentrations in Surface Soil
Block D Excluding Panhandle Lockheed Martin
First Bin = Non-detects

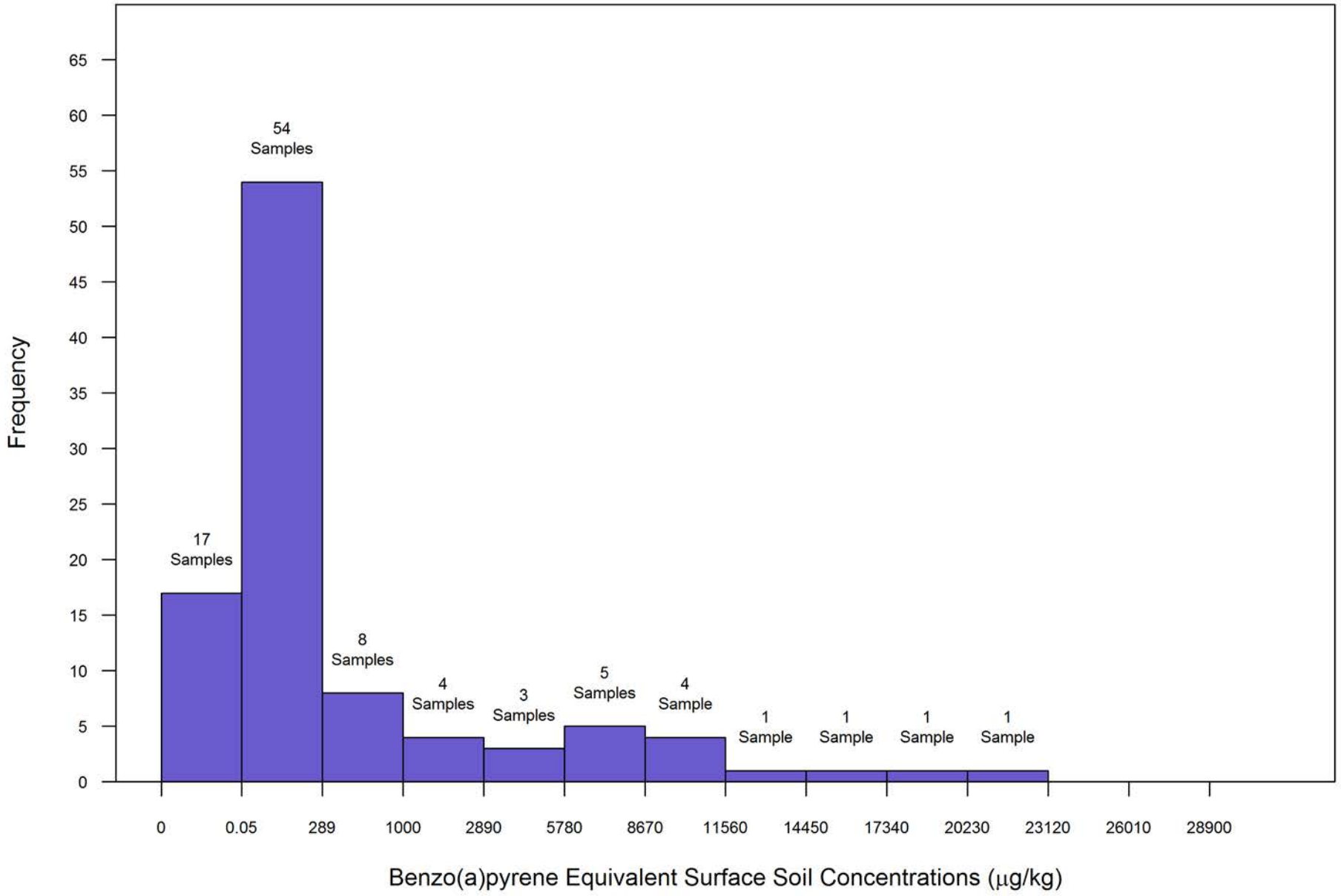


Figure A-7
Histogram of Benzo(a)pyrene Equivalent Concentrations in Subsurface Soil
Block D Excluding Panhandle Lockheed Martin
One-half Detection Limit = Non-detects

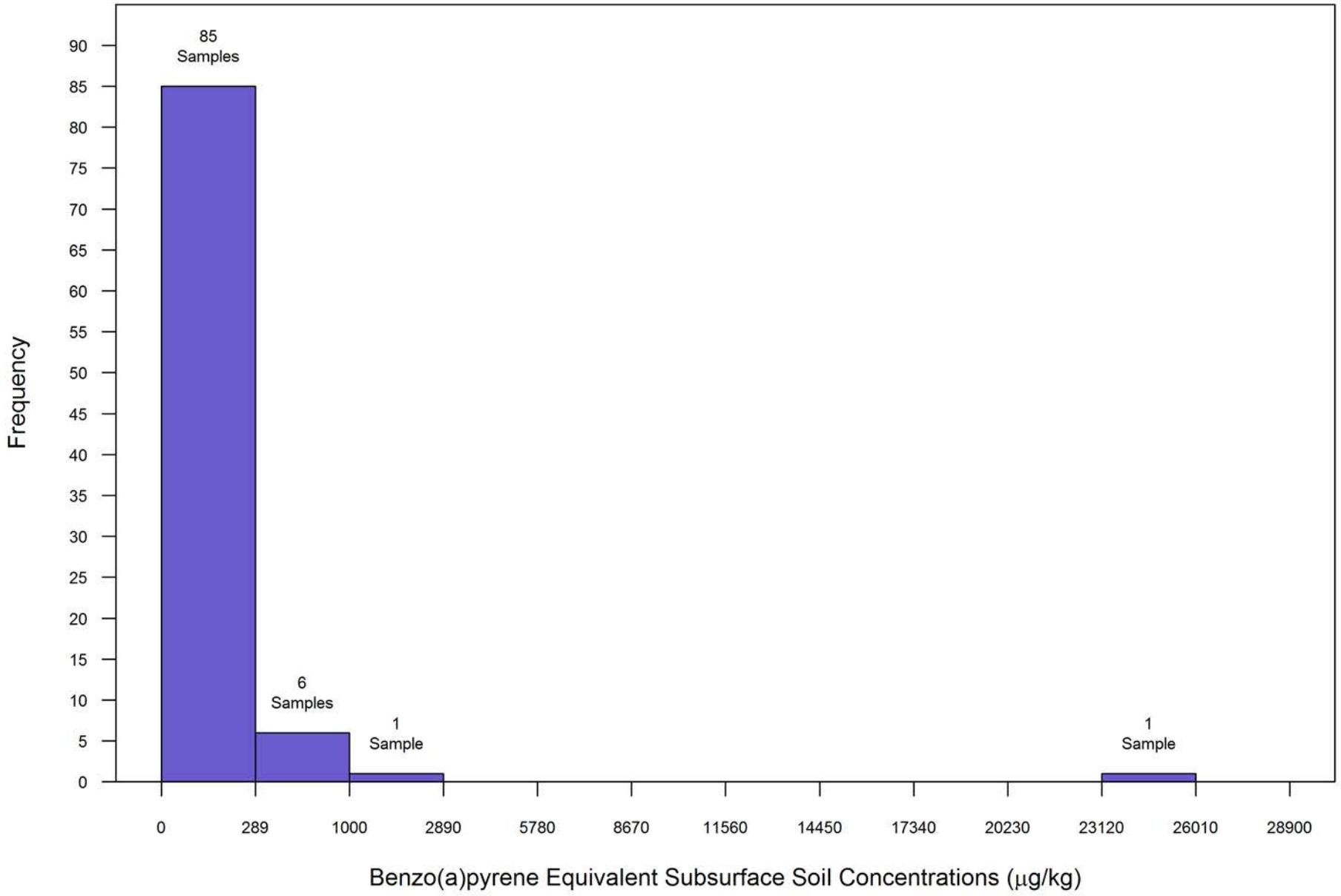
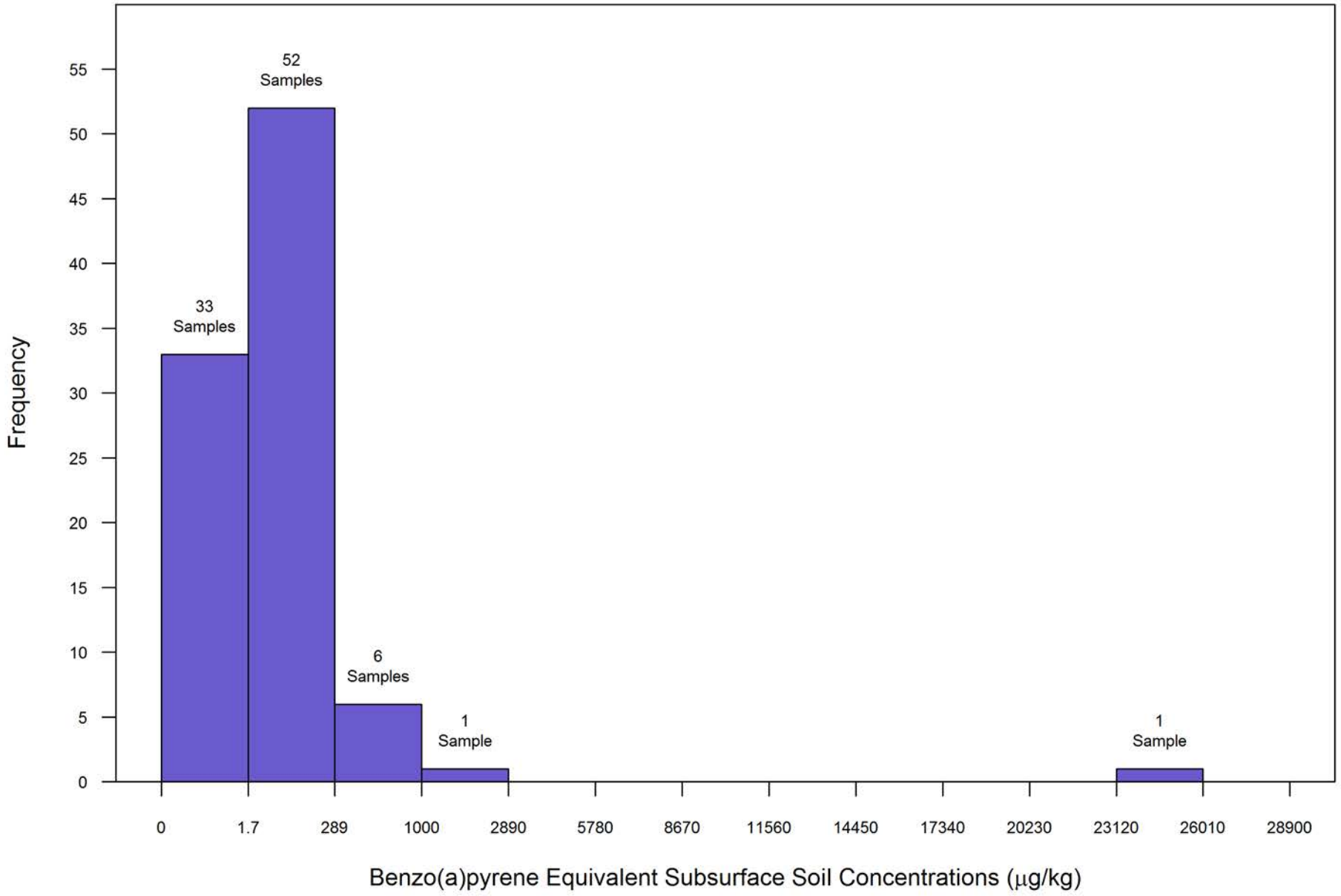


Figure A-8
Histogram of Benzo(a)pyrene Equivalent Concentrations in Subsurface Soil
Block D Excluding Panhandle Lockheed Martin
First Bin = Non-detects



Site-specific

Composite Worker Equation Inputs for Soil

Variable	Value
TR (target cancer risk) unitless	0.00001
THQ (target hazard quotient) unitless	1
AT_w (averaging time)	365
EF_w (exposure frequency) d/yr	250
ED_w (exposure duration) yr	25
ET_w (exposure time) hr	8
LT (lifetime) yr	70
BW_w (body weight)	70
IR_w (soil ingestion rate) mg/day	50
SA_w (surface area) cm^2/day	3300
AF_w (skin adhereence factor) mg/cm^2	0.2
City (Climate Zone) PEF Selection	Philadelphia, P
A_s (acres) PEF Selection	0.5
Q/C_{wp} (g/m^2-s per kg/m^3) PEF Selection	87.36898
V (fraction of vegetative cover) unitless	0.5
U_m (mean annual wind speed) m/s	4.29
U_t (equivalent threshold value)	11.32
F(x) (function dependant on U_m/U_t) unitless	0.0993
City (Climate Zone) VF Selection	Philadelphia, P
A_s (acres) VF Selection	0.5
Q/C_{wp} (g/m^2-s per kg/m^3) VF Selection	87.36898
foc (fraction organic carbon in soil) g/g	0.006
ρ$_b$ (dry soil bulk density) g/cm^3	1.5
ρ$_s$ (soil particle density) g/cm^3	2.65
θ$_w$ (water-filled soil porosity) L_{water}/L_{soil}	0.15
T (exposure interval) s	950000000

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Attachment B
Detailed Residual Risk Analysis Tables

Table B-1

Residual Risk Analysis Results - Block D Excluding Panhandle Area - Surface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth (feet)	BapEq Concentration[2] (µg/kg)	Total Incremental Lifetime Cancer Risk[3]				Comments
				Industrial	Commercial	Recreational	Residential	
SB-060	SB-60-SS	0 - 0	44	9E-07	4E-06	8E-06	1E-05	Samples that need removal to meet the industrial benzo(a)pyrene equivalent concentration (BaPEQ) preliminary remedial goal (PRG) of 2900 micrograms per kilogram (µg/kg) [= 2.9 milligrams per kilogram (mg/kg)]. Site 95% upper confidence limit (UCL) will be 2700 µg/kg.
	D-SB-60RE-1	1 - 1	23,000	8E-05	6E-04	1E-03	2E-03	
	D-SB-60RE-2	2 - 2	46	2E-07	1E-06	2E-06	3E-06	
SB-060A	D-SB-60REA-1	1 - 1	18,000	6E-05	5E-04	9E-04	1E-03	
SB-062D	D-SB-62RED-1	1 - 1	17,000	6E-05	5E-04	9E-04	1E-03	
SB-240B	D-SB-240REB-1	1 - 1	13,000	5E-05	4E-04	7E-04	1E-03	
SB-774	D-SB-774-SS	0 - 1	11,000	4E-05	3E-04	6E-04	9E-04	In addition to the samples identified above (for the industrial receptor), these samples need to be removed to meet the lifetime commercial preliminary remedial goal (360 µg/kg). Site 95% UCL will be 300 µg/kg.
SB-771	D-SB-771-SS	0 - 1	11,000	4E-05	3E-04	6E-04	8E-04	
SB-060D	D-SB-60RED-1	1 - 1	9,800	3E-05	3E-04	5E-04	7E-04	
SB-067	SB-67-SS	0 - 0	9,400	3E-05	3E-04	5E-04	7E-04	
SB-058	SB-58-SS	0 - 0		1E-06	5E-06	1E-05	1E-05	
	F-SB-58RE-1	1 - 1	720	2E-06	2E-05	4E-05	5E-05	
	F-SB-58RE-2	2 - 2	8,600	3E-05	2E-04	4E-04	6E-04	
SB-781	D-SS-781-01	0 - 1	8,300	3E-05	2E-04	4E-04	6E-04	
SB-062	SB-62-SS	0 - 0	7,600	3E-05	2E-04	4E-04	6E-04	
	D-SB-62RE-1	1 - 1	6,400	2E-05	2E-04	3E-04	5E-04	
	D-SB-62RE-2	2 - 2	1,100	4E-06	3E-05	5E-05	8E-05	
SB-058C	F-SB-58REC-2	2 - 2	6,400	2E-05	2E-04	3E-04	5E-04	
SB-064	SB-64-SS	0 - 0	4,200	2E-05	1E-04	2E-04	3E-04	
SB-243	SB-243-SS[6]	0.5 - 0.5	85	3E-07	9E-05	2E-04	2E-04	
	D-SB-243RE-1	1 - 1	3,300	1E-05	4E-06	8E-06	1E-05	
	SB-243-SS[12]	1 - 1	160	6E-07	2E-06	5E-06	7E-06	
	SB-243-SS[18]	1.5 - 1.5	91	3E-07	2E-06	4E-06	6E-06	
	D-SB-243RE-2	2 - 2	20	7E-08	6E-07	1E-06	2E-06	
SB-058B	F-SB-58REB-2	2 - 2	3,000	1E-05	8E-05	2E-04	2E-04	
SB-062C	D-SB-62REC-1	1 - 1	2,600	9E-06	7E-05	1E-04	2E-04	
SB-240	SB-240-SS[6]	0.5 - 0.5	72	3E-07	2E-06	4E-06	5E-06	In addition to samples identified above for the lifetime commercial receptor, these samples would need to be removed to meet lifetime recreational cleanup goal (195 µg/kg) and residential preliminary remedial goal (140 µg/kg). Site 95% UCL will be 110 µg/kg.
	D-SB-240RE-1	1 - 1	2,400	8E-06	7E-05	1E-04	2E-04	
	SB-240-SS[12]	1 - 1	82	3E-07	2E-06	4E-06	6E-06	
	SB-240-SS[18]	1.5 - 1.5	180	6E-07	5E-06	9E-06	1E-05	
	D-SB-240RE-2	2 - 2	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-066	SB-66-SS	0 - 0	0.64	3E-06	1E-05	2E-05	3E-05	
	D-SB-66RE-1	1 - 1	53	2E-07	1E-06	3E-06	4E-06	
	D-SB-66RE-2	2 - 2	1,500	5E-06	4E-05	8E-05	1E-04	
SB-060C	D-SB-60REC-1	1 - 1	650	2E-06	2E-05	3E-05	5E-05	
SB-062B	D-SB-62REB-1	1 - 1	550	2E-06	2E-05	3E-05	4E-05	
SB-239	SB-239-SS[6]	0.5 - 0.5	130	4E-07	4E-06	7E-06	1E-05	
	SB-239-SS[12]	1 - 1	340	1E-06	9E-06	2E-05	3E-05	
	SB-239-SS[18]	1.5 - 1.5	540	2E-06	1E-05	3E-05	4E-05	
	D-SB-239RE-2-AVG	2 - 2	160	5E-07	4E-06	8E-06	1E-05	
SB-777	D-SB-777-SS	0 - 1	460	2E-06	1E-05	2E-05	3E-05	
SB-061C	D-SB-61REC-1	1 - 1	390	1E-06	1E-05	2E-05	3E-05	
SB-240A	D-SB-240REA-1	1 - 1	370	1E-06	1E-05	2E-05	3E-05	

Table B-1

Residual Risk Analysis Results - Block D Excluding Panhandle Area - Surface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth (feet)	BapEq Concentration[2] (µg/kg)	Total Incremental Lifetime Cancer Risk[3]				Comments
				Industrial	Commercial	Recreational	Residential	
SB-242	SB-242-SS[6]	0.5 - 0.5	180	6E-07	5E-06	9E-06	1E-05	
	SB-242-SS[12]	1 - 1	150	5E-07	4E-06	8E-06	1E-05	
	SB-242-SS[18]	1.5 - 1.5	161 U	3E-07	2E-06	4E-06	6E-06	
SB-241	SB-241-SS[6]	0.5 - 0.5	160	6E-07	5E-06	8E-06	1E-05	
	SB-241-SS[12]	1 - 1	160	5E-07	4E-06	8E-06	1E-05	
SB-061A	D-SB-61REA-1	1 - 1	150	5E-07	4E-06	8E-06	1E-05	
SB-063	SB-63-SS	0 - 0	0.53	1E-06	5E-06	9E-06	1E-05	
	D-SB-63RE-1	1 - 1	140	5E-07	4E-06	7E-06	1E-05	
	D-SB-63RE-2-AVG	2 - 2	67	2E-07	2E-06	3E-06	5E-06	
SB-241	SB-241-SS[18]	1.5 - 1.5	140	5E-07	4E-06	7E-06	1E-05	
SB-243A	D-SB-243REA-2	2 - 2	130	5E-07	4E-06	7E-06	1E-05	
SB-058D	F-SB-58RED-2	2 - 2	130	5E-07	4E-06	7E-06	1E-05	
SB-058A	F-SB-58REA-2-AVG	2 - 2	120	4E-07	3E-06	6E-06	9E-06	
SB-594	D-SB-594-2	2 - 2	92	3E-07	3E-06	5E-06	7E-06	
SB-595	D-SB-595-2	2 - 2	85	3E-07	2E-06	4E-06	6E-06	
SB-061D	D-SB-61RED-1	1 - 1	82	3E-07	2E-06	4E-06	6E-06	
SB-768	D-SS-768-01	0 - 1	78	3E-07	2E-06	4E-06	6E-06	
SB-592D	D-SB-592D-2	2 - 2	53	2E-07	1E-06	3E-06	4E-06	
SB-772	D-SS-772-01	0 - 1	45	2E-07	1E-06	2E-06	3E-06	
SB-062A	D-SB-62REA-1	1 - 1	45	2E-07	1E-06	2E-06	3E-06	
SB-240D	D-SB-240RED-1	1 - 1	45	2E-07	1E-06	2E-06	3E-06	
SB-240C	D-SB-240REC-1	1 - 1	44	2E-07	1E-06	2E-06	3E-06	
SB-769	D-SS-769-01	0 - 1	39	1E-07	1E-06	2E-06	3E-06	
SB-066C	D-SB-66REC-2	2 - 2	38	1E-07	1E-06	2E-06	3E-06	
SB-592	D-SB-592-2	2 - 2	37	1E-07	1E-06	2E-06	3E-06	
SB-593	D-SB-593-2	2 - 2	33	1E-07	9E-07	2E-06	2E-06	
SB-592B	D-SB-592B-2	2 - 2	31	1E-07	9E-07	2E-06	2E-06	
SB-767	D-SS-767-01	0 - 1	31	1E-07	9E-07	2E-06	2E-06	
SB-060B	D-SB-60REB-1	1 - 1	24	8E-08	7E-07	1E-06	2E-06	
SB-061B	D-SB-61REB-1	1 - 1	23	8E-08	6E-07	1E-06	2E-06	
SB-057	SB-57-SS	0 - 0	0.06	1E-06	4E-06	8E-06	1E-05	
	F-SB-57RE-1	1 - 1	20	7E-08	6E-07	1E-06	2E-06	
	F-SB-57RE-2-AVG	2 - 2	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-770	D-SS-770-01	0 - 1	18	6E-08	5E-07	9E-07	1E-06	
SB-063A	D-SB-63REA-2	2 - 2	17	6E-08	5E-07	9E-07	1E-06	
SB-066A	D-SB-66REA-2	2 - 2	17	6E-08	5E-07	9E-07	1E-06	
SB-061	SB-61-SS	0 - 0		8E-07	3E-06	6E-06	9E-06	
	D-SB-61RE-1	1 - 1	17	6E-08	5E-07	9E-07	1E-06	
	D-SB-61RE-2-AVG	2 - 2	5.9	2E-08	2E-07	3E-07	4E-07	
SB-243D	D-SB-243RED-2	2 - 2	16	6E-08	4E-07	8E-07	1E-06	
SB-243C	D-SB-243REC-2	2 - 2	14	5E-08	4E-07	7E-07	1E-06	
SB-592A	D-SB-592A-2	2 - 2	7.1	2E-08	2E-07	4E-07	5E-07	
SB-779	D-SS-779-01	0 - 1	5.2	2E-08	1E-07	3E-07	4E-07	

Table B-1

Residual Risk Analysis Results - Block D Excluding Panhandle Area - Surface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth (feet)	BapEq Concentration[2] (µg/kg)	Total Incremental Lifetime Cancer Risk[3]				Comments
				Industrial	Commercial	Recreational	Residential	
SB-063C	D-SB-63REC-2	2 - 2	2.7	1E-08	8E-08	1E-07	2E-07	
SB-066B	D-SB-66REB-2	2 - 2	2.6	9E-09	7E-08	1E-07	2E-07	
SB-032	SB-32A-SS	0 - 0	3700 U	7E-06	5E-05	1E-04	1E-04	
SB-059	SB-59-SS	0 - 0	3500 U	7E-06	5E-05	1E-04	1E-04	
SB-031	SB-31A-SS	0 - 0	370 U	2E-06	8E-06	2E-05	2E-05	
SB-775	D-SS-775-01	0 - 1	4 U	7E-09	5E-08	1E-07	2E-07	
SB-776	D-SS-776-01	0 - 1	4 U	7E-09	5E-08	1E-07	2E-07	
SB-780	D-SS-780-01	0 - 1	4 U	7E-09	5E-08	1E-07	2E-07	
SB-773	D-SS-773-01	0 - 1	3.9 U	7E-09	5E-08	1E-07	1E-07	
SB-778	D-SS-778-01	0 - 1	3.8 U	7E-09	5E-08	1E-07	1E-07	
SB-766	D-SB-766-SS	0 - 1	3.6 U	6E-09	5E-08	9E-08	1E-07	
SB-063D	D-SB-63RED-2	2 - 2	1.6 U	3E-09	2E-08	4E-08	6E-08	
SB-243B	D-SB-243REB-2	2 - 2	1.6 U	3E-09	2E-08	4E-08	6E-08	
SB-063B	D-SB-63REB-2	2 - 2	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-066D	D-SB-66RED-2	2 - 2	1.5 U	3E-09	2E-08	4E-08	6E-08	

1 - Sample locations are listed in order from highest to lowest benzo(a)pyrene (BaPEq) concentrations.
2 - One half the non-detected value was used for the calculation of the benzo(a)pyrene equivalents. If all concentrations were non-detect then the detection limit for benzo(a)pyrene was used as the benzo(a)pyrene equivalent concentration. Original and duplicate samples were averaged when calculating the benzo(a)pyrene equivalent concentration.
3 - Total incremental lifetime cancer risk from exposure to all chemicals of potential concern in soil.

BaPEq - benzo(a)pyrene equivalent
µg/kg - microgram per kilogram
mg/kg - milligram per kilogram
NA - not available, sample was not analyzed for polycyclic aromatic hydrocarbons (PAHs)
PRG - preliminary remedial goal
U - not detected
UCL - upper confidence level

Table B-2

Residual Risk Analysis Results - Block D - Excluding Panhandle Area - Subsurface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth[2] (feet)	BaPEq Concentration[3] (ug/kg)	Total Incremental Lifetime Cancer Risk[4]				Comments
				Industrial	Commercial	Recreational	Residential	
SB-774	D-SB-774-03	3 - 3	24,000	8E-05	7E-04	1E-03	2E-03	Samples needing removal to meet lifetime commercial preliminary remedial goal (PRG) of 360 micrograms per kilogram (µg/kg). Site 95% upper confidence limit on arithmetic mean (95% UCL) is 290 µg/kg.
SB-777	D-SB-777-03	3 - 3	1,000	4E-06	3E-05	5E-05	8E-05	In addition to samples identified above for the lifetime commercial receptor, these samples would need to be removed to meet lifetime recreational cleanup goal of 195 µg/kg. Site 95% UCL would be 170 µg/kg.
SB-321	SB-321-0203	2 - 3	940	3E-06	3E-05	5E-05	7E-05	
SB-592	D-SB-592-3	3 - 3	850	3E-06	2E-05	4E-05	6E-05	
	D-SB-592-4	4 - 4	930	3E-06	3E-05	5E-05	7E-05	
SB-060A	D-SB-60REA-3-AVG	3 - 3	850	3E-06	2E-05	4E-05	6E-05	Samples needing removal to meet lifetime residential PRG of 140 ug/kg. Site 95% UCL would be 130 ug/kg.
SB-770	D-SB-770-03	3 - 3	670	2E-06	2E-05	3E-05	5E-05	
SB-063	D-SB-63RE-3	3 - 3	380	1E-06	1E-05	2E-05	3E-05	
	D-SB-63RE-4	4 - 4	160	5E-07	4E-06	8E-06	1E-05	
SB-240	D-SB-240RE-3	3 - 3	200	7E-07	6E-06	1E-05	2E-05	
	D-SB-240RE-4	4 - 4	130	5E-07	4E-06	7E-06	1E-05	
SB-060D	D-SB-60RED-3	3 - 3	200	7E-07	6E-06	1E-05	2E-05	
	D-SB-60RED-5	5 - 5	42	1E-07	1E-06	2E-06	3E-06	
SB-592B	D-SB-592B-4	4 - 4	190	6E-07	5E-06	1E-05	1E-05	
SB-062C	D-SB-62REC-3	3 - 3	170	6E-07	5E-06	9E-06	1E-05	
SB-328	SB-328-0203	2 - 3	170	6E-07	5E-06	9E-06	1E-05	
SB-771	D-SB-771-03	3 - 3	130	5E-07	4E-06	7E-06	1E-05	
SB-327	SB-327-0203	2 - 3	130	5E-07	4E-06	7E-06	1E-05	
SB-330	SB-330-0203	2 - 3	110	4E-07	3E-06	6E-06	8E-06	
SB-058D	F-SB-58RED-4	4 - 4	93	3E-07	3E-06	5E-06	7E-06	
SB-334	SB-334-0203	2 - 3	88	3E-07	2E-06	5E-06	7E-06	
SB-593	D-SB-593-3	3 - 3	87	3E-07	2E-06	4E-06	7E-06	
SB-243A	D-SB-243REA-4	4 - 4	86	3E-07	2E-06	4E-06	6E-06	
SB-594	D-SB-594-3	3 - 3	84	3E-07	2E-06	4E-06	6E-06	
SB-325	SB-325-0203	2 - 3	72	2E-07	2E-06	4E-06	5E-06	
SB-062	D-SB-62RE-3	3 - 3	44	2E-07	1E-06	2E-06	3E-06	
	D-SB-62RE-4	4 - 4	69	2E-07	2E-06	4E-06	5E-06	
SB-240C	D-SB-240REC-3-AVG	3 - 3	67	2E-07	2E-06	3E-06	5E-06	
SB-062B	D-SB-62REB-3	3 - 3	62	2E-07	2E-06	3E-06	5E-06	
SB-066D	D-SB-66RED-3	3 - 3	62	2E-07	2E-06	3E-06	5E-06	
SB-243	D-SB-243RE-3	3 - 3	62	2E-07	2E-06	3E-06	5E-06	
	D-SB-243RE-4	4 - 4	22	7E-08	6E-07	1E-06	2E-06	
SB-062A	D-SB-62REA-3	3 - 3	61	2E-07	2E-06	3E-06	5E-06	
SB-776	D-SB-776-03	3 - 3	59	2E-07	2E-06	3E-06	4E-06	
SB-592D	D-SB-592D-4	4 - 4	52	2E-07	1E-06	3E-06	4E-06	
SB-240D	D-SB-240RED-3	3 - 3	50	2E-07	1E-06	3E-06	4E-06	
SB-240A	D-SB-240REA-3	3 - 3	47	2E-07	1E-06	2E-06	4E-06	

Table B-2

Residual Risk Analysis Results - Block D - Excluding Panhandle Area - Subsurface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth[2] (feet)	BaPEq Concentration[3] (ug/kg)	Total Incremental Lifetime Cancer Risk[4]				Comments
				Industrial	Commercial	Recreational	Residential	
SB-063C	D-SB-63REC-4	4 - 4	46	2E-07	1E-06	2E-06	3E-06	
	D-SB-63REC-6	6 - 6	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-060D	D-SB-60RED-5	5 - 5	42	1E-07	1E-06	2E-06	3E-06	
SB-773	D-SB-773-03	3 - 3	38	1E-07	1E-06	2E-06	3E-06	
SB-332	SB-332-0203	2 - 3	38	1E-07	1E-06	2E-06	3E-06	
SB-240B	D-SB-240REB-3	3 - 3	38	1E-07	1E-06	2E-06	3E-06	
SB-060	D-SB-60RE-3	3 - 3	3.4	1E-08	9E-08	2E-07	3E-07	
	D-SB-60RE-4	4 - 4	27	9E-08	7E-07	1E-06	2E-06	
SB-329	SB-329-0203	2 - 3	27	9E-08	7E-07	1E-06	2E-06	
SB-239	D-SB-239RE-3	3 - 3	3.3	1E-08	9E-08	2E-07	2E-07	
	D-SB-239RE-4	4 - 4	26	9E-08	7E-07	1E-06	2E-06	
SB-326	SB-326-0203	2 - 3	25	9E-08	7E-07	1E-06	2E-06	
SB-243D	D-SB-243RED-4-AVG	4 - 4	22	7E-08	6E-07	1E-06	2E-06	
SB-331	SB-331-0203	2 - 3	20	7E-08	5E-07	1E-06	2E-06	
SB-335	SB-335-0203	2 - 3	20	7E-08	5E-07	1E-06	2E-06	
SB-595	D-SB-595-3	3 - 3	20	7E-08	5E-07	1E-06	1E-06	
SB-592A	D-SB-592A-4	4 - 4	15	5E-08	4E-07	8E-07	1E-06	
SB-319	SB-319-0203	2 - 3	15	5E-08	4E-07	8E-07	1E-06	
SB-322	SB-322-0203	2 - 3	13	5E-08	4E-07	7E-07	1E-06	
SB-063A	D-SB-63REA-4	4 - 4	11	4E-08	3E-07	6E-07	9E-07	
SB-066B	D-SB-66REB-4	4 - 4	3.3	1E-08	9E-08	2E-07	3E-07	
SB-061	D-SB-61RE-3	3 - 3	2.9	1E-08	8E-08	2E-07	2E-07	
	D-SB-61RE-4	4 - 4	3.2	1E-08	9E-08	2E-07	2E-07	
SB-243B	D-SB-243REB-4	4 - 4	2.6	9E-09	7E-08	1E-07	2E-07	
SB-333	SB-333-0203	2 - 3	410 U	7E-07	6E-06	1E-05	2E-05	
SB-769	D-SB-769-03	3 - 3	4 U	8E-09	5E-08	1E-07	2E-07	
SB-779	D-SB-779-03	3 - 3	4 U	7E-09	5E-08	1E-07	2E-07	
SB-781	D-SB-781-03	3 - 3	4 U	7E-09	5E-08	1E-07	2E-07	
SB-772	D-SB-772-03	3 - 3	3.9 U	7E-09	5E-08	1E-07	1E-07	
SB-775	D-SB-775-03	3 - 3	3.9 U	7E-09	5E-08	1E-07	1E-07	
SB-767	D-SB-767-03	3 - 3	3.8 U	7E-09	5E-08	1E-07	1E-07	
SB-768	D-SB-768-03	3 - 3	3.8 U	7E-09	5E-08	1E-07	1E-07	
SB-778	D-SB-778-03	3 - 3	3.8 U	7E-09	5E-08	1E-07	1E-07	
SB-780	D-SB-780-03	3 - 3	3.7 U	6E-09	5E-08	1E-07	1E-07	
SB-766	D-SB-766-03	3 - 3	3.6 U	6E-09	5E-08	9E-08	1E-07	
SB-243C	D-SB-243REC-4	4 - 4	1.7 U	3E-09	2E-08	4E-08	6E-08	
SB-057	F-SB-57RE-3	3 - 3	1.4 U	2E-09	2E-08	4E-08	5E-08	
	F-SB-57RE-4	4 - 4	1.6 U	3E-09	2E-08	4E-08	6E-08	
SB-058	F-SB-58RE-3	3 - 3	1.6 U	3E-09	2E-08	4E-08	6E-08	
	F-SB-58RE-4	4 - 4	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-060C	D-SB-60REC-3	3 - 3	1.6 U	3E-09	2E-08	4E-08	6E-08	

Table B-2

Residual Risk Analysis Results - Block D - Excluding Panhandle Area - Subsurface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth[2] (feet)	BaPEq Concentration[3] (ug/kg)	Total Incremental Lifetime Cancer Risk[4]				Comments
				Industrial	Commercial	Recreational	Residential	
SB-061D	D-SB-61RED-3	3 - 3	1.6 U	3E-09	2E-08	4E-08	6E-08	

Table B-2

Residual Risk Analysis Results - Block D - Excluding Panhandle Area - Subsurface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth[2] (feet)	BaPEq Concentration[3] (ug/kg)	Total Incremental Lifetime Cancer Risk[4]				Comments
				Industrial	Commercial	Recreational	Residential	
SB-063B	D-SB-63REB-4	4 - 4	1.6 U	3E-09	2E-08	4E-08	6E-08	
SB-063D	D-SB-63RED-4	4 - 4	1.6 U	3E-09	2E-08	4E-08	6E-08	
SB-061A	D-SB-61REA-3-AVG	3 - 3	1.55 U	3E-09	2E-08	4E-08	6E-08	
SB-060B	D-SB-60REB-3	3 - 3	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-061B	D-SB-61REB-3	3 - 3	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-061C	D-SB-61REC-3	3 - 3	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-066	D-SB-66RE-3	3 - 3	1.5 U	3E-09	2E-08	4E-08	6E-08	
	D-SB-66RE-4	4 - 4	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-066A	D-SB-66REA-4	4 - 4	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-066C	D-SB-66REC-4	4 - 4	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-318	SB-318-0203	2 - 3	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-320	SB-320-0203	2 - 3	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-323	SB-323-0203	2 - 3	1.5 U	3E-09	2E-08	4E-08	6E-08	
SB-324	SB-324-0203	2 - 3	1.5 U	3E-09	2E-08	4E-08	6E-08	

Notes:

1 - Sample locations are listed in order from highest to lowest benzo(a)pyrene (BaPEq) concentrations.
2 - Only samples collected from above the water table are included. Depth to groundwater is assumed to be 4 feet at Block D.
3 - One half the non-detected value was used for the calculation of the benzo(a)pyrene equivalents. If all concentrations were non-detect then the detection limit for benzo(a)pyrene was used as the benzo(a)pyrene equivalent concentration. Original and duplicate samples were averaged when calculating the benzo(a)pyrene equivalent concentration.
4 - Total incremental lifetime cancer risk from exposure to all chemicals of potential concern in soil.

Shading indicates cancer risk exceeds $1x10^{-4}$ and location is considered to be a "hot spot" according to Maryland Department of Environmental Protection guidance (MDE, 2008).

BaPEq - benzo(a)pyrene equivalent
µg/kg - microgram per kilogram
NA - not available, sample was not analyzed for polycyclic aromatic hydrocarbons (PAHs)
PRG - preliminary remedial goal
U - not detected
UCL - upper confidence level

Table B-3

Residual Risk Analysis Results - -Block D Panhandle- Surface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[(1)]	Sample ID	Depth (feet)	Concentration			Total Incremental Lifetime Cancer Risk[(3)]				Comments
			BaPEq (µg/kg)	Arsenic (mg/kg)	Cr^{+6} (mg/kg)	Industrial	Commercial	Recreational	Residential	
SB-874	D-SB-874-0-1	0 - 1	130	1.9	0.31 U	1E-06	6E-06	1E-05	2E-05	Samples that need to be removed to meet recreational preliminary remedial goal for BaPEq (200 µg/kg) and background levels of 1.0 mg/kg for Cr+6 and 12 mg/kg for arsenic. Site 95% upper confidence limits (UCLs) would be as follows: BaPEq (120 µg/kg), hexavalent chromium (0.39 mg/kg) and arsenic (5.9 mg/kg).
	D-SB-874-1-2	1 - 2	6,000	4.2	0.31 U	2E-05	2E-04	3E-04	5E-04	
SB-872	D-SB-872-0-1	0 - 1	130	2.1	0.28 U	1E-06	6E-06	1E-05	2E-05	
	D-SB-872-1-2	1 - 2	1,500	2.2	0.3 U	6E-06	4E-05	8E-05	1E-04	
SB-875	D-SB-875-0-1	0 - 1	34 U	1.8	0.28 U	8E-07	3E-06	5E-06	8E-06	
	D-SB-875-1-2	1 - 2	67	***24***	0.28 U	9E-06	3E-05	5E-05	7E-05	
SB-784	D-SS-784-01	0 - 1	40	2.8 J	***1.3***	2E-06	8E-06	1E-05	2E-05	
SB-794	D-SB-794-SS	0 - 1	710	4.3 J	0.31 U	4E-06	2E-05	5E-05	7E-05	
SB-786	D-SS-786-01	0 - 1	570	6	0.32 U	4E-06	2E-05	4E-05	6E-05	
SB-879	D-SB-879-0-1	0 - 1	51	3	0.3 U	1E-06	5E-06	1E-05	1E-05	
	D-SB-879-1-2	1 - 2	230	2.9	0.71 J	2E-06	1E-05	2E-05	3E-05	
SB-783	D-SS-783-01	0 - 1	220	2.4 J	0.3 U	2E-06	9E-06	2E-05	2E-05	
	D-SB-873-1-2	1 - 2	5.5	6.7 J	0.32 U	3E-06	7E-06	1E-05	2E-05	
SB-876	D-SB-876-0-1	0 - 1	18 U	3	0.3 U	1E-06	4E-06	7E-06	1E-05	
	D-SB-876-1-2	1 - 2	130	3.7	0.3 U	2E-06	8E-06	2E-05	2E-05	
SB-782	D-SS-782-01	0 - 1	130	2.2 J	0.28 U	1E-06	6E-06	1E-05	2E-05	
SB-881	D-SB-881-0-1	0 - 1	120	2.5	0.75 J	2E-06	8E-06	2E-05	2E-05	
	D-SB-881-1-2	1 - 2	70 U	2.3	0.29 U	1E-06	4E-06	7E-06	1E-05	
SB-788	D-SB-788-SS	0 - 1	110	0.95	0.53 J	1E-06	5E-06	1E-05	2E-05	
SB-796	D-SB-796-SS	0 - 1	79	4.9	0.36 J	2E-06	8E-06	2E-05	2E-05	
SB-787	D-SS-787-01	0 - 1	72	5.3	0.31 U	2E-06	8E-06	2E-05	2E-05	
SB-878	D-SB-878-0-1	0 - 1	68	3.8	0.36 U	2E-06	6E-06	1E-05	2E-05	
	D-SB-878-1-2	1 - 2	29	3.3	0.32 U	1E-06	4E-06	9E-06	1E-05	
SB-877	D-SB-877-0-1	0 - 1	17	3.9	0.31 J	2E-06	5E-06	1E-05	1E-05	
	D-SB-877-1-2	1 - 2	67	4.2	0.31 U	2E-06	6E-06	1E-05	2E-05	
SB-873	D-SB-873-0-1	0 - 1	61	3.5	0.32 U	2E-06	6E-06	1E-05	2E-05	
SB-795	D-SB-795-SS	0 - 1	39	2.6 J	0.31 U	1E-06	4E-06	8E-06	1E-05	
SB-880	D-SB-880-0-1	0 - 1	28	3	0.3 U	1E-06	4E-06	8E-06	1E-05	
	D-SB-880-1-2	1 - 2	15	2.7	0.29 U	1E-06	3E-06	7E-06	1E-05	
SB-789	D-SB-789-SS	0 - 1	22	1.7	0.57 J	1E-06	4E-06	8E-06	1E-05	
SB-790	D-SB-790-SS	0 - 1	19	0.71	0.8 J	8E-07	4E-06	7E-06	1E-05	
SB-065	D-SB-65RE-1	1 - 1	1.4 U			2E-09	2E-08	4E-08	5E-08	
	D-SB-65RE-2	2 - 2	19			6E-08	5E-07	1E-06	1E-06	
SB-793	D-SB-793-SS	0 - 1	17	4.5 L	0.62 J	2E-06	7E-06	1E-05	2E-05	
SB-792	D-SB-792-SS	0 - 1	4.2	2.3 L	0.32 J	1E-06	3E-06	7E-06	1E-05	
SB-033	SB-33A-SS	0 - 0	3600 U	1 L	0.355 K	7E-06	5E-05	1E-04	1E-04	
SB-785	D-SS-785-01	0 - 1	3.6 U	1.6	0.52 J	9E-07	3E-06	6E-06	9E-06	
SB-791	D-SB-791-SS	0 - 1	3.5 U	0.72 L	0.54 J	6E-07	2E-06	5E-06	7E-06	

Table B-3

Residual Risk Analysis Results - -Block D Panhandle- Surface Soil
Lockheed Martin, Middle River Complex
Middle River, Maryland

Notes:
1 - Sample locations are listed in order from highest to lowest benzo(a)pyrene (BaPEq) concentrations.
2 - One half the non-detected value was used for the calculation of the benzo(a)pyrene equivalents. If all concentrations were non-detect then the detection limit for benzo(a)pyrene was used as the benzo(a)pyrene equivalent concentration. Original and duplicate samples were averaged when calculating the benzo(a)pyrene equivalent concentration.
3 - Total incremental lifetime cancer risk from exposure to all chemicals of potential concern in soil.

Shading indicates cancer risk exceeds $1x10^{-4}$ and location is considered to be a "hot spot" according to Maryland Department of Environmental Protection guidance (MDE, 2008).
Bolded italics indicate concentration exceeds background levels.

BaPEq - benzo(a)pyrene equivalent
Cr^{+6} - hexavalent chromium
J - estimated concentration
K - sample biased high
L - sample biased low
µg/kg - microgram per kilogram
mg/kg - milligram per kilogram
U - not detected
UCL - upper confidence level

Table B-4
Residual Risk Analysis Results - Block D Panhandle- Subsurface Soil (0 - 4 ft)
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth (feet)	Concentration			Total Incremental Lifetime Cancer Risk[3]				Comments
			BaPEq[2] (µg/kg)	Arsenic (mg/kg)	Cr^{+6} (mg/kg)	Industrial	Commercial	Recreational	Residential	
SB-874	D-SB-874-2-4	2 - 4	1,700	3	0.32 U	8E-06	5E-05	9E-05	1E-04	Sample D-SB-874-2-4 is the only sample needing removal to meet recreational preliminary remedial goals (PRGs) for benzo(a)pyrene equivalents [BaPEq] (200 µg/kg) and hexavalent chromium [Cr+6] (1.0 mg/kg), and to meet the background level for arsenic [As] (12 mg/kg). The site 95% UCLs are 170 µg/kg (BaPEq) , 0.54 mg/kg (Cr+6) and 5.6 mg/kg (As), respectively.
SB-787	D-SB-787-03	3 - 3	770	4.6 L	0.31 U	4E-06	3E-05	5E-05	7E-05	
SB-872	D-SB-872-2-4	2 - 4	280	4	0.32 U	3E-06	1E-05	2E-05	3E-05	
SB-790	D-SB-790-03	3 - 3	220	4.5	0.31 U	3E-06	1E-05	2E-05	3E-05	
SB-786	D-SB-786-03	3 - 3	160	3.9	0.32 U	2E-06	9E-06	2E-05	3E-05	
SB-794	D-SB-794-03	3 - 3	140	5.5 J	0.32 U	3E-06	1E-05	2E-05	3E-05	
SB-340	SB-340-0203	2 - 3	110			4E-07	3E-06	6E-06	8E-06	
SB-342	SB-342-0203	2 - 3	78			3E-07	2E-06	4E-06	6E-06	
SB-796	D-SB-796-03	3 - 3	75	3.4	0.31 U	2E-06	6E-06	1E-05	2E-05	
SB-876	D-SB-876-2-4	2 - 4	67	9 J	0.33 U	4E-06	1E-05	2E-05	3E-05	
SB-791	D-SB-791-03	3 - 3	60	5.4 L	0.33 U	2E-06	7E-06	2E-05	2E-05	
SB-782	D-SB-782-03	3 - 3	60	2.1 J	0.36 J	1E-06	5E-06	9E-06	1E-05	
SB-788	D-SB-788-03	3 - 3	53	1.9	1.1	1E-06	7E-06	1E-05	2E-05	
SB-338	SB-338-0203	2 - 3	40			1E-07	1E-06	2E-06	3E-06	
SB-785	D-SB-785-03	3 - 3	39	4.6	0.91 J	2E-06	8E-06	2E-05	2E-05	
SB-875	D-SB-875-2-4	2 - 4	36	7.7	0.33 U	3E-06	9E-06	2E-05	3E-05	
SB-341	SB-341-0203	2 - 3	23			8E-08	6E-07	1E-06	2E-06	
SB-793	D-SB-793-03	3 - 3	23	5.6 L	0.42 J	2E-06	7E-06	1E-05	2E-05	
SB-795	D-SB-795-03	3 - 3	20	5.8 J	0.43 J	2E-06	7E-06	2E-05	2E-05	
SB-789	D-SB-789-03	3 - 3	17	3.1	0.3 U	1E-06	4E-06	8E-06	1E-05	
SB-065	D-SB-65RE-3	3 - 3	15			5E-08	4E-07	8E-07	1E-06	
SB-339	SB-339-0203	2 - 3	14			5E-08	4E-07	7E-07	1E-06	
SB-337	SB-337-0203	2 - 3	13			5E-08	4E-07	7E-07	1E-06	
SB-343	SB-343-0203	2 - 3	11			4E-08	3E-07	6E-07	8E-07	
SB-880	D-SB-880-2-4	2 - 4	6.0	3.4	0.31 U	1E-06	4E-06	8E-06	1E-05	
SB-881	D-SB-881-2-4	2 - 4	5.0	3.8	0.61 J	2E-06	6E-06	1E-05	2E-05	
SB-792	D-SB-792-03	3 - 3	5.0	5.4 L	0.32 U	2E-06	6E-06	1E-05	2E-05	
SB-873	D-SB-873-2-4	2 - 4	5.0	6.3	0.31 U	2E-06	7E-06	1E-05	2E-05	
SB-336	SB-336-0203	2 - 3	380 U			7E-07	5E-06	1E-05	1E-05	
SB-879	D-SB-879-2-4	2 - 4	3.9 U	3.8	0.32 U	1E-06	4E-06	9E-06	1E-05	
SB-784	D-SB-784-03	3 - 3	3.9 U	3 J	0.73 J	2E-06	5E-06	1E-05	1E-05	
SB-877	D-SB-877-2-4	2 - 4	3.8 U	4.2	0.31 U	2E-06	5E-06	1E-05	1E-05	
SB-878	D-SB-878-2-4	2 - 4	3.8 U	3.9	0.31 U	2E-06	4E-06	9E-06	1E-05	
SB-783	D-SB-783-03	3 - 3	3.7 U	5 J	0.86 J	2E-06	7E-06	2E-05	2E-05	
SB-344	SB-344-0203	2 - 3	1.6 U			3E-09	2E-08	4E-08	6E-08	

Notes:
1 - Sample locations are listed in order from highest to lowest benzo(a)pyrene (BaPEq) concentrations.
2 - One half the non-detected value was used for the calculation of benzo(a)pyrene equivalents. If all concentrations were non-detect then the detection limit for benzo(a)pyrene was used as the benzo(a)pyrene equivalent concentration. Original and duplicate samples were averaged when calculating the benzo(a)pyrene equivalent concentration.
3 - Total incremental lifetime cancer risk from exposure to all chemicals of potential concern in soil.

As - arsenic
BaPEq - benzo(a)pyrene equivalent
Cr^{+6} - hexavalent chromium
mg/kg - milligram per kilogram
PRG - preliminary remedial goal
U - not detected

Table B-4
Residual Risk Analysis Results - Block D Panhandle- Subsurface Soil (0 - 4 ft)
Lockheed Martin, Middle River Complex
Middle River, Maryland

Location[1]	Sample ID	Depth (feet)	Concentration			Total Incremental Lifetime Cancer Risk[3]	Comments
			BaPEq[2]	Arsenic	Cr^{+6}		

J - estimated concentration
µg/kg - micrograms per kilogram
UCL - upper confidence level

Attachment C

Final Cumulative Risk Estimates (Post Residual Risk Analysis)

Tax Block D – Excluding Pan Handle

TABLE 3.1.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Block D Excluding Pan Handle	Benzo(a)pyrene Equivalents	mg/kg	1.10	2.7 (NP)	11.4	2.7	mg/kg	97.5% KM (Chebyshev) UCL	ProUCL 4.1.01
	Antimony	mg/kg	1.56	(1)	3 J	3	mg/kg	Maximum Detected Concentration	(1)
	Arsenic	mg/kg	1.39	2.1 (G)	4.9	2.1	mg/kg	95% KM (BCA) UCL	ProUCL 4.1.01
	Nickel	mg/kg	10.4	12.5 (N)	16 K	12.5	mg/kg	95% Student's-t UCL	ProUCL 4.1.01
	Hexavalent Chromium	mg/kg	0.876	1.1 (N)	1.8 J	1.1	mg/kg	95% Student's-t UCL	ProUCL 4.1.01

G = Gamma
N = Normal
NP = Non-parametric

TABLE 3.2.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface Soil
Exposure Medium: Subsurface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Block D Excluding Pan Handle	Benzo(a)pyrene Equivalents	mg/kg	0.360	2.0 (L)	24.4	2	mg/kg	97.5% KM (Chebyshev) UCL	ProUCL 4.1.01
	Naphthalene	mg/kg	0.029	0.057 (G)	0.26	0.057	mg/kg	95% KM (t) UCL	ProUCL 4.1.01
	Mercury	mg/kg	0.097	0.16 (G)	0.38	0.16	mg/kg	95% KM (BCA) UCL	ProUCL 4.1.01

G = Gamma
N = Normal
NP = Non-parametric

TABLE 4.1.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Industrial Workers	Adult	Block D Excluding Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) =
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002b	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	CS x IRS x CF3 x FI x EF x ED
				FI	Fraction Ingested	1	unitless	USEPA, 2002b	BW x AT
				EF	Exposure Frequency	250	days/year	USEPA, 2002b	
				ED	Exposure Duration	25	years	USEPA, 2002b	
				BW	Body Weight	70	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	
Dermal	Industrial Workers	Adult	Block D Excluding Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) =
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	3300	cm2	USEPA, 2004	CS x CF3 x SA x SSAF x DABS x EV x EF x ED
				SSAF	Soil to Skin Adherence Factor	0.2	mg/cm2/event	USEPA, 2004	BW x AT
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	250	days/year	USEPA, 2002b	
				ED	Exposure Duration	25	years	USEPA, 1989	
				BW	Body Weight	70	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.

USEPA, 2002a:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 1.75E-07 Cancer Dermal Intake = 2.31E-06

Noncancer Ingestion Intake = 4.89E-07 Noncancer Dermal Intake = 6.46E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.2.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Industrial Workers	Adult	Block D Excluding Pan Handle	CA	Chemical concentration in air	Calculated	mg/m3	USEPA, 2002a	Exposure Concentration (mg/m^3) =
				CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002b	
				ET	Exposure Time	8	hours/day	(1)	$\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$
				EF	Exposure Frequency	250	days/year	USEPA, 2002a	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	CA = (1/PEF + 1/VF) x Cs
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	
				PEF	Particulate Emission Factor	3.23E+09	m3/kg	USEPA 2013	
				VF	Volatilization Factor	Chemical-specific	m3/kg	USEPA, 2002a	
				Q/C	Inverse of mean concentration at center of source	87.36898	g/m2-s per kg/m3	USEPA 2013	
				Ut	Equivalent threshold of wind velocity at 7m.	11.32	m/sec	USEPA 2013	
				Um	Mean annual wind speed	4.29	m/sec	USEPA 2013	
				V	Fraction of vegetative cover	0.5	unitless	USEPA 2013	
				F(x)	Function dependent of Um/Ut	0.0993	unitless	USEPA 2013	

Notes:

1 - Length of typical work day.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2013: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

Unit Intake Calculations

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Cancer Inhalation Intake = 8.15E-02 Noncancer Inhalation Intake = 2.28E-01

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 5.1
NON-CANCER TOXICITY DATA -- ORAL/DERMAL
BLOCK D - EXCLUDING PAN HANDLE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal[1]	Absorbed RfD for Dermal[2]		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD:Target Organ(s)	
		Value	Units		Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons										
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	Chronic	2.0E-02	mg/kg/day	1	2.0E-02	mg/kg/day	Body Weight	3000/1	IRIS	6/20/2013
Metals										
Antimony	Chronic	4.0E-04	mg/kg/day	0.15	6.0E-05	mg/kg/day	Blood	1000/1	IRIS	6/20/2013
Arsenic	Chronic	3.0E-04	mg/kg/day	1	3.0E-04	mg/kg/day	Skin, CVS	3/1	IRIS	6/20/2013
Mercury[3]	Chronic	3.0E-04	mg/kg/day	0.07	2.1E-05	mg/kg/day	Autoimmune	1000/1	IRIS	6/20/2013
Nickel	Chronic	2.0E-02	mg/kg/day	0.04	8.0E-04	mg/kg/day	Body Weight	300/1	IRIS	6/20/2013
Miscellaneous Parameters										
Hexavalent Chromium	Chronic	3.0E-03	mg/kg/day	0.025	7.5E-05	mg/kg/day	None Reported	300/3	IRIS	6/20/2013

Notes:
1 - U.S. EPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted dermal RfD = Oral RfD x Oral Absorption Efficiency for Dermal.
3 - Values are for mercuric chloride.

Definitions:
CVS = Cardiovascular system.
IRIS = Integrated Risk Information System.
NA = Not available.
PPRTV = Provisional Peer Reviewed Toxicity Value.

TABLE 5.2
NON-CANCER TOXICITY DATA -- INHALATION
BLOCK D - EXCLUDING PAN HANDLE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC		Extrapolated RfD[1]		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfC : Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons									
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	Chronic	3.0E-03	mg/m^3	8.6E-04	(mg/kg/day)	Respiratory	3000/1	IRIS	6/20/2013
Metals									
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury[2]	Chronic	3.0E-05	mg/m^3	8.6E-06	(mg/kg/day)	Autoimmune	NA	Cal EPA	11/2010
Miscellaneous Parameters									
Hexavalent Chromium	Chronic	1.0E-04	mg/m^3	2.9E-05	(mg/kg/day)	Lungs	300/1	IRIS	6/20/2013

Notes:
1 - Extrapolated RfD = RfC *$20m^3$/day / 70 kg
2 - Value is for mercuric chloride.
Definitions:
Cal EPA = California Environmental Protection Agency.
IRIS = Integrated Risk Information System.
NA = Not available.

TABLE 6.1
CANCER TOXICITY DATA -- ORAL/DERMAL
BLOCK D - EXCLUDING PAN HANDLE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal[1]	Absorbed Cancer Slope Factor for Dermal[2]		Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units		Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons								
Benzo(a)pyrene[3]	7.3E+00	$(mg/kg/day)^{-1}$	1	7.3E+00	$(mg/kg/day)^{-1}$	B2 / Probable human carcinogen	IRIS	6/20/2013
Naphthalene	NA	NA	NA	NA	NA	C / Possible human carcinogen	IRIS	6/20/2013
Metals								
Antimony	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	1.5E+00	$(mg/kg/day)^{-1}$	1	1.5E+00	$(mg/kg/day)^{-1}$	A / Known human carcinogen	IRIS	6/20/2013
Mercury	NA	NA	NA	NA	NA	C / Possible human carcinogen	IRIS	6/20/2013
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters								
Hexavalent Chromium[3]	5.0E-01	$(mg/kg/day)^{-1}$	0.025	2.0E+01	$(mg/kg/day)^{-1}$	A / Known human carcinogen	NJ	4/8/2009

Notes:
1 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted cancer slope factor for dermal = Oral cancer slope factor / Oral Absorption Efficiency for Dermal.
3 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
IRIS = Integrated Risk Information System.
NA = Not available.
NJ = New Jersey.
PPRTV = Provisional Peer Reviwed Toxicity Value.

TABLE 6.2
CANCER TOXICITY DATA -- INHALATION
BLOCK D - EXCLUDING PAN HANDLE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor[1]		Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons							
Benzo(a)pyrene[2]	1.1E-03	$(ug/m^3)^{-1}$	3.9E+00	$(mg/kg/day)^{-1}$	NA	Cal EPA	9/2009
Naphthalene	3.4E-05	$(ug/m3)^{-1}$	1.2E-01	$(mg/kg/day)^{-1}$	C / Possible Human Carcinogen	Cal EPA	8/2004
Metals							
Antimony	NA	NA	NA	NA	NA	NA	NA
Arsenic	4.3E-03	$(ug/m^3)^{-1}$	1.5E+01	$(mg/kg/day)^{-1}$	A / Known human carcinogen	IRIS	6/20/2013
Mercury	NA	NA	NA	NA	C / Possible human carcinogen	IRIS	6/20/2013
Nickel	2.6E-04	$(ug/m^3)^{-1}$	9.1E-01	$(mg/kg/day)^{-1}$	NA	Cal EPA	9/2009
Miscellaneous Parameters							
Hexavalent Chromium[2]	8.4E-02	$(ug/m^3)^{-1}$	2.9E+02	$(mg/kg/day)^{-1}$	A / Known human carcinogen	IRIS	6/20/2013

Notes:

1 - Inhalation CSF = Unit Risk * 70 kg / $20m^3$/day.

2 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

Definitions:

Cal EPA = California Environmental Protection Agency.

IRIS = Integrated Risk Information System.

NA = Not available.

TABLE 7.1.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current
Receptor Population: Industrial Workers
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Surface Soil	Surface Soil	Block D	Ingestion	Benzo(a)pyrene Equivalents	2.70	mg/kg	4.7E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	3.4E-06	1.3E-06	(mg/kg/day)	NA	(mg/kg/day)	--
				Antimony	3.00	mg/kg	5.2E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.5E-06	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.004
				Arsenic	2.10	mg/kg	3.7E-07	(mg/kg/day)	1.5E+00	$(mg/kg/day)^{-1}$	5.5E-07	1.0E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003
				Nickel	12.5	mg/kg	2.2E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	6.1E-06	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.0003
				Hexavalent Chromium	1.10	mg/kg	1.9E-07	(mg/kg/day)	5.0E-01	$(mg/kg/day)^{-1}$	9.6E-08	5.4E-07	(mg/kg/day)	3.0E-03	(mg/kg/day)	0.0002
			Exp. Route Total								4.1E-06					0.008
			Dermal	Benzo(a)pyrene Equivalents	2.70	mg/kg	8.1E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	5.9E-06	2.3E-06	(mg/kg/day)	NA	(mg/kg/day)	--
				Antimony	3.00	mg/kg	6.9E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.9E-07	(mg/kg/day)	6.0E-05	(mg/kg/day)	0.003
				Arsenic	2.10	mg/kg	1.5E-07	(mg/kg/day)	1.5E+00	$(mg/kg/day)^{-1}$	2.2E-07	4.1E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001
				Nickel	12.5	mg/kg	2.9E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	8.1E-07	(mg/kg/day)	8.0E-04	(mg/kg/day)	0.001
				Hexavalent Chromium	1.10	mg/kg	2.5E-08	(mg/kg/day)	2.0E+01	$(mg/kg/day)^{-1}$	5.1E-07	7.1E-08	(mg/kg/day)	7.5E-05	(mg/kg/day)	0.0009
			Exp. Route Total								6.6E-06					0.007
		Exposure Point Total									1.1E-05					0.01
	Exposure Medium Total										1.1E-05					0.01
	Air	Block D	Inhalation	Benzo(a)pyrene Equivalents	8.2E-10	mg/m^3	6.7E-11	(mg/m^3)	1.1E-03	$(ug/m^3)^{-1}$	7.4E-11	1.9E-10	(mg/m^3)	NA	(mg/m^3)	--
				Antimony	9.1E-10	mg/m^3	7.4E-11	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	2.1E-10	(mg/m^3)	NA	(mg/m^3)	--
				Arsenic	6.4E-10	mg/m^3	5.2E-11	(mg/m^3)	4.3E-03	$(ug/m^3)^{-1}$	2.2E-10	1.5E-10	(mg/m^3)	1.5E-05	(mg/m^3)	0.000010
				Nickel	3.8E-9	mg/m^3	3.1E-10	(mg/m^3)	2.6E-04	$(ug/m^3)^{-1}$	8.1E-11	8.7E-10	(mg/m^3)	9.0E-05	(mg/m^3)	0.000010
				Hexavalent Chromium	3.3E-10	mg/m^3	2.7E-11	(mg/m^3)	8.4E-02	$(ug/m^3)^{-1}$	2.3E-09	7.6E-11	(mg/m^3)	1.0E-04	(mg/m^3)	7.6E-7
			Exp. Route Total								2.7E-09					0.00002
		Exposure Point Total									2.7E-09					0.00002
	Exposure Medium Total										2.7E-09					0.00002
Medium Total											1.1E-05					0.01
Subsurface Soil	Subsurface Soil	Block D	Ingestion	Benzo(a)pyrene Equivalents	2.000	mg/kg	3.5E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	2.6E-06	9.8E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Naphthalene	0.057	mg/kg	1.0E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.8E-08	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.000001
				Mercury	0.160	mg/kg	2.8E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	7.8E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0003
			Exp. Route Total								2.6E-06					0.0003
			Dermal	Benzo(a)pyrene Equivalents	2.000	mg/kg	6.0E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	4.4E-06	1.7E-06	(mg/kg/day)	NA	(mg/kg/day)	--
				Naphthalene	0.057	mg/kg	1.7E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.8E-08	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.000002
				Mercury	0.160	mg/kg	3.7E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.0E-08	(mg/kg/day)	2.1E-05	(mg/kg/day)	0.0005
			Exp. Route Total								4.4E-06					0.0005
		Exposure Point Total									6.9E-06					0.0008
	Exposure Medium Total										6.9E-06					0.0008
	Air	Block D	Inhalation	Benzo(a)pyrene Equivalents	6.1E-10	mg/m^3	5.0E-11	(mg/m^3)	1.1E-03	$(ug/m^3)^{-1}$	5.5E-11	1.4E-10	(mg/m^3)	NA	(mg/m^3)	--
				Naphthalene	1.1E-6	mg/m^3	8.6E-08	(mg/m^3)	3.4E-05	$(ug/m^3)^{-1}$	2.9E-09	2.4E-07	(mg/m^3)	3.0E-03	(mg/m^3)	0.00008
				Mercury	4.9E-11	mg/m^3	4.0E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.1E-11	(mg/m^3)	3.0E-04	(mg/m^3)	3.7E-8
			Exp. Route Total								3.0E-09					0.00008
		Exposure Point Total									3.0E-09					0.00008
	Exposure Medium Total										3.0E-09					0.00008
Medium Total											6.9E-06					0.0008

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 9.1.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current
Receptor Population: Industrial Workers
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Block D	Benzo(a)pyrene Equivalents	3E-06	--	6E-06	--	9E-06	NA	--	--	--	--
			Antimony	- -	--	- -	--	- -	Blood	0.004	--	0.003	0.007
			Arsenic	6E-07	--	2E-07	--	8E-07	Skin, CVS	0.003	--	0.001	0.005
			Nickel	- -	--	- -	--	- -	Body Weight	0.0003	--	0.001	0.001
			Hexavalent Chromium	1E-07	--	5E-07	--	6E-07	None Specified	0.0002	--	0.0009	0.001
			Chemical Total	4E-06	--	7E-06	--	1E-05		0.008	--	0.007	0.01
		Exposure Point Total						1E-05					0.01
	Exposure Medium Total							1E-05					0.01
	Air	Block D	Benzo(a)pyrene Equivalents	--	7E-11	--	--	7E-11	NA	--	--	--	--
			Antimony	--	- -	--	--	- -	NA	--	--	--	--
			Arsenic	--	2E-10	--	--	2E-10	NA	--	0.000010	--	0.000010
			Nickel	--	8E-11	--	--	8E-11	Respiratory	--	0.000010	--	0.000010
			Hexavalent Chromium	--	2E-09	--	--	2E-09	Respiratory	--	0.0000008	--	0.0000008
			Chemical Total	--	3E-09	--	--	3E-09		- -	0.00002	- -	0.00002
		Exposure Point Total						3E-09					0.00002
	Exposure Medium Total							3E-09					0.00002
Medium Total								1E-05					0.01
Subsurface Soil	Subsurface Soil	Block D	Benzo(a)pyrene Equivalents	3E-06	--	4E-06	--	7E-06	NA	--	--	--	--
			Naphthalene	- -	--	- -	--	- -	Body Weight	0.000001	--	0.000002	0.000004
			Mercury	- -	--	- -	--	- -	CNS	0.0003	--	0.0005	0.0008
			Chemical Total	3E-06	--	4E-06	--	7E-06		0.0003	--	0.0005	0.0008
		Exposure Point Total						7E-06					0.0008
	Exposure Medium Total							7E-06					0.0008
	Air	Block D	Benzo(a)pyrene Equivalents	--	5E-11	--	--	5E-11	NA	--	--	--	--
			Naphthalene	--	3E-09	--	--	3E-09	Respiratory	--	0.00008	--	0.00008
			Mercury	--	- -	--	--	- -	CNS	--	4E-8	--	4E-8
			Chemical Total	--	3E-09	--	--	3E-09		- -	0.00008	- -	0.00008
		Exposure Point Total						3E-09					0.00008
	Exposure Medium Total							3E-09					0.00008
Medium Total								7E-06					0.0008
Receptor Total							Receptor Risk Total	2E-05				Receptor HI Total	0.01

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

Tax Block D – Pan Handle

TABLE 3.1.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Block D Panhandle	Benzo(a)pyrene Equivalents	mg/kg	0.170	0.12 (G)	0.7	0.12	mg/kg	95% KM (BCA) UCL	ProUCL 4.1
	Aroclor-1260	mg/kg	0.025	(1)	0.02 J	0.02	mg/kg	Maximum Detected Concentration	(1)
	Antimony	mg/kg	0.249	0.23 (G)	1.3 J	0.230	mg/kg	95% KM (t) UCL	ProUCL 4.1
	Cadmium	mg/kg	0.184	0.16 (N)	0.4 L	0.16	mg/kg	95% KM (t) UCL	ProUCL 4.1
	Cobalt	mg/kg	6.04	7.8 (G)	27.5	7.8	mg/kg	95% Approximate Gamma UCL	ProUCL 4.1
	Iron	mg/kg	11700	16300 (G)	25400 J	16300	mg/kg	95% Approximate Gamma UCL	ProUCL 4.1
	Manganese	mg/kg	56.3	90 (G)	183 J	90	mg/kg	95% Approximate Gamma UCL	ProUCL 4.1
	Mercury	mg/kg	0.135	0.44 (L)	1.7	0.44	mg/kg	97.5% KM (Chebyshev) UCL	ProUCL 4.1
	Molybdenum	mg/kg	0.401	0.46 (G)	1.2 J	0.46	mg/kg	95% KM (Percentile Bootstrap) UCL	ProUCL 4.1
	Nickel	mg/kg	12.3	16 (G)	40.6 J	16	mg/kg	95% Approximate Gamma UCL	ProUCL 4.1
	Vanadium	mg/kg	26.9	31 (G)	71 J	31	mg/kg	95% Approximate Gamma UCL	ProUCL 4.1
	Hexavalent Chromium	mg/kg	0.298	0.37 (N)	1	0.37	mg/kg	95% KM (t) UCL	ProUCL 4.1

G = Gamma
L = Lognormal
N = Normal
NP = Non-parametric

1 - USEPA Guidance recommends using the average concentration for the exposure point concentration for lead.

TABLE 3.2.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface Soil
Exposure Medium: Subsurface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Block D Panhandle	Benzo(a)pyrene Equivalents	mg/kg	0.073	0.172 (G)	0.771	0.172	mg/kg	95% KM (Chebyshev) UCL	ProUCL 4.1.01
	Naphthalene	mg/kg	0.3	2.35 (NP)	4	2.35	mg/kg	99% KM (Chebyshev) UCL	ProUCL 4.1.01
	Cobalt	mg/kg	15.2	19 (G)	44	19	mg/kg	95% Approximate Gamma UCL	ProUCL 4.1.01
	Iron	mg/kg	20890	25400 (N)	39700	25400	mg/kg	95% Student's-t UCL	ProUCL 4.1.01
	Manganese	mg/kg	87.1	123 (G)	326	123	mg/kg	95% Approximate Gamma UCL	ProUCL 4.1.01
	Mercury	mg/kg	0.242	0.32 (G)	1.3	0.32	mg/kg	95% KM (Percentile Bootstrap) UCL	ProUCL 4.1.01
	Vanadium	mg/kg	43.6	100 (NP)	360	100	mg/kg	95% Chebyshev (Mean, Sd) UCL	ProUCL 4.1.01
	Hexavalent Chromium	mg/kg	0.358	0.57 (N)	1.1	0.57	mg/kg	95% KM (t) UCL	ProUCL 4.1.01

G = Gamma
N = Normal
NP = Non-parametric

1 - USEPA Guidance recommends using the average concentration for the exposure point concentration for lead.

TABLE 4.1.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Industrial Workers	Adult	Block D Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) =
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002b	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	CS x IRS x CF3 x FI x EF x ED
				FI	Fraction Ingested	1	unitless	USEPA, 2002b	BW x AT
				EF	Exposure Frequency	250	days/year	USEPA, 2002b	
				ED	Exposure Duration	25	years	USEPA, 2002b	
				BW	Body Weight	70	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	
Dermal	Industrial Workers	Adult	Block D Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) =
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	3300	cm2	USEPA, 2004	CS x CF3 x SA x SSAF x DABS x EV x EF x ED
				SSAF	Soil to Skin Adherence Factor	0.2	mg/cm2/event	USEPA, 2004	BW x AT
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	250	days/year	USEPA, 2002b	
				ED	Exposure Duration	25	years	USEPA, 1989	
				BW	Body Weight	70	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.

USEPA, 2002a:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 1.75E-07 Cancer Dermal Intake = 2.31E-06

Noncancer Ingestion Intake = 4.89E-07 Noncancer Dermal Intake = 6.46E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.2.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Industrial Workers	Adult	Block D Pan Handle	CA	Chemical concentration in air	Calculated	mg/m3	USEPA, 2002a	Exposure Concentration (mg/m^3) =
				CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002b	
				ET	Exposure Time	8	hours/day	(1)	$\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$
				EF	Exposure Frequency	250	days/year	USEPA, 2002a	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	CA = (1/PEF + 1/VF) x Cs
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	
				PEF	Particulate Emission Factor	3.23E+09	m3/kg	USEPA 2013	
				VF	Volatilization Factor	Chemical-specific	m3/kg	USEPA, 2002a	
				Q/C	Inverse of mean concentration at center of source	87.36898	g/m2-s per kg/m3	USEPA 2013	
				Ut	Equivalent threshold of wind velocity at 7m.	11.32	m/sec	USEPA 2013	
				Um	Mean annual wind speed	4.29	m/sec	USEPA 2013	
				V	Fraction of vegetative cover	0.5	unitless	USEPA 2013	
				F(x)	Function dependent of Um/Ut	0.0993	unitless	USEPA 2013	

Notes:

1 - Length of typical work day.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2013: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

Unit Intake Calculations

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Cancer Inhalation Intake = 8.15E-02 Noncancer Inhalation Intake = 2.28E-01

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.3.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CHILD RECREATIONAL USERS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Recreational User	Child	Block D Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) =
				IR-S	Ingestion Rate	200	mg/day	USEPA, 1991	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	CS x IRS x CF3 x FI x EF x ED
				FI	Fraction Ingested	1	unitless	(1)	BW x AT
				EF	Exposure Frequency	250	days/year	MDE, 2008	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2190	days	USEPA, 1989	
Dermal	Recreational User	Child	Block D Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) =
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	2,800	cm2	USEPA, 2004	CS x CF3 x SA x SSAF x DABS x EV x EF x ED
				SSAF	Soil to Skin Adherence Factor	0.2	mg/cm2/event	USEPA, 2004	BW x AT
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	250	days/year	MDE, 2008	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2190	days	USEPA, 1989	

Notes:

1 - Same as child resident.

2 - Children will be evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, children recreational users will be evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1991: Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 6) = 7.83E-07 Cancer Dermal Intake (Age 0 - 6) = 2.19E-06

Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 2) = 2.61E-07 Cancer Dermal Intake (Age 0 - 2) = 7.31E-07

Cancer Ingestion Intake (Age 2 - 6) = 5.22E-07 Cancer Dermal Intake (Age 2 - 6) = 1.46E-06

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 9.13E-06 Noncancer Dermal Intake = 2.56E-05

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.4.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CHILD RECREATIONAL USERS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Recreational User	Child	Block D Pan Handle	CA	Chemical concentration in air	Calculated	mg/m3	USEPA, 2002a	Exposure Concentration (mg/m^3) =
				CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002b	
				ET	Exposure Time	8	hours/day	(1)	CA x ET x EF x ED / AT x 24 hours/day
				EF	Exposure Frequency	250	days/year	(1)	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(2), USEPA, 1989, 2005	CA = (1/PEF + 1/VF) x Cs
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989	
				PEF	Particulate Emission Factor	3.23E+09	m3/kg	USEPA 2013	
				VF	Volatilization Factor	Chemical-specific	m3/kg	USEPA, 2002a	
				Q/C	Inverse of mean concentration at center of source	87.36898	g/m2-s per kg/m3	USEPA 2013	
				Ut	Equivalent threshold of wind velocity at 7m.	11.32	m/sec	USEPA 2013	
				Um	Mean annual wind speed	4.29	m/sec	USEPA 2013	
				V	Fraction of vegetative cover	0.5	unitless	USEPA 2013	
				F(x)	Function dependent of Um/Ut	0.0993	unitless	USEPA 2013	

Notes:

1 - Assume on site for 8 hours per day 250 days per year.

2 - Children will be evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, children recreational users will be evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2013: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

Unit Intake Calculations

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 0 - 6) = 1.96E-02 Noncancer Inhalation Intake = 2.28E-01

Mutagenic Chemicals

Cancer Inhalation Intake (Age 0 - 2) = 6.52E-03

Cancer Inhalation Intake (Age 2 - 6) = 1.30E-02

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.5.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADOLESCENT RECREATIONAL USERS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Recreational User	Adolescent	Block D Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) =
				IR-S	Ingestion Rate	100	mg/day	USEPA, 1991	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	CS x IRS x CF3 x FI x EF x ED
				FI	Fraction Ingested	1	unitless	(1)	BW x AT
				EF	Exposure Frequency	250	days/year	MDE, 2008	
				ED	Exposure Duration (Age 6 - 16)	10	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 18)	2	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	40	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4380	days	USEPA, 1989	
Dermal	Recreational User	Adolescent	Block D Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) =
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	4,320	cm2	USEPA, 2004	CS x CF3 x SA x SSAF x DABS x EV x EF x ED
				SSAF	Soil to Skin Adherence Factor	0.07	mg/cm2/event	USEPA, 2004	BW x AT
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	250	days/year	MDE, 2008	
				ED	Exposure Duration (Age 6 - 16)	10	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 18)	2	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	40	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4380	days	USEPA, 1989	

Notes:

1 - Same as adolescent resident.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1991: Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 18) = 2.94E-07 Cancer Dermal Intake (Age 6 - 18) = 8.88E-07

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 2.45E-07 Cancer Dermal Intake (Age 6 - 16) = 7.40E-07

Cancer Ingestion Intake (Age 16 - 18) = 4.89E-08 Cancer Dermal Intake (Age 16 - 18) = 1.48E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.71E-06 Noncancer Dermal Intake = 5.18E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.6.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADOLESCENT RECREATIONAL USERS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Recreational User	Adolescent	Block D Pan Handle	CA	Chemical concentration in air	Calculated	mg/m3	USEPA, 2002a	Exposure Concentration (mg/m^3) =
				CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002b	
				ET	Exposure Time	8	hours/day	(1)	CA x ET x EF x ED
				EF	Exposure Frequency	250	days/year	(1)	AT x 24 hours/day
				ED	Exposure Duration (Age 6 - 16)	10	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 18)	2	years	(2), USEPA, 1989, 2005	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	CA = (1/PEF + 1/VF) x Cs
				AT-N	Averaging Time (Non-Cancer)	4,380	days	USEPA, 1989	
				PEF	Particulate Emission Factor	3.23E+09	m3/kg	USEPA 2013	
				VF	Volatilization Factor	Chemical-specific	m3/kg	USEPA, 2002a	
				Q/C	Inverse of mean concentration at center of source	87.36898	g/m2-s per kg/m3	USEPA 2013	
				Ut	Equivalent threshold of wind velocity at 7m.	11.32	m/sec	USEPA 2013	
				Um	Mean annual wind speed	4.29	m/sec	USEPA 2013	
				V	Fraction of vegetative cover	0.5	unitless	USEPA 2013	
				F(x)	Function dependent of Um/Ut	0.0993	unitless	USEPA 2013	

Notes:

1 - Assume on site for 8 hours per day 250 days per year.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2013: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

Unit Intake Calculations

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 6 - 18) = 3.91E-02 Noncancer Inhalation Intake = 2.28E-01

Mutagenic Chemicals

Cancer Inhalation Intake (Age 6 - 16) = 3.26E-02

Cancer Inhalation Intake (Age 16 - 18) = 6.52E-03

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.7.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADULT RECREATIONAL USERS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Recreational User	Adult	Block D Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) =
				IR-S	Ingestion Rate	100	mg/day	USEPA, 1991	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	CS x IRS x CF3 x FI x EF x ED
				FI	Fraction Ingested	1	unitless	(1)	BW x AT
				EF	Exposure Frequency	250	days/year	MDE, 2008	
				ED	Exposure Duration (Age 18 - 30)	12	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4,380	days	USEPA, 1989	
Dermal	Recreational User	Adult	Block D Pan Handle	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) =
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	5,700	cm2	USEPA, 2004	CS x CF3 x SA x SSAF x DABS x EV x EF x ED
				SSAF	Soil to Skin Adherence Factor	0.07	mg/cm2/event	USEPA, 2004	BW x AT
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	250	days/year	MDE, 2008	
				ED	Exposure Duration (Age 18 - 30)	12	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 1989	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4,380	days	USEPA, 1989	

Notes:

1 - Same as adult resident.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 18 - 30) = 1.68E-07 Cancer Dermal Intake (Age 18 - 30) = 6.69E-07

Mutagenic Chemicals

Cancer Ingestion Intake (Age 18 - 30) = 1.68E-07 Cancer Dermal Intake (Age 18 - 30) = 6.69E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 9.78E-07 Noncancer Dermal Intake = 3.90E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.8.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADULT RECREATIONAL USERS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Recreational User	Adult	Block D Pan Handle	CA	Chemical concentration in air	Calculated	mg/m3	USEPA, 2002a	Exposure Concentration (mg/m^3) =
				CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002b	
				ET	Exposure Time	8	hours/day	(1)	CA x ET x EF x ED
				EF	Exposure Frequency	250	days/year	(1)	AT x 24 hours/day
				ED	Exposure Duration (Age 18 - 30)	12	years	(2), USEPA, 1989, 2005	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	CA = (1/PEF + 1/VF) x Cs
				AT-N	Averaging Time (Non-Cancer)	4380	days	USEPA, 1989	
				PEF	Particulate Emission Factor	3.23E+09	m3/kg	USEPA 2013	
				VF	Volatilization Factor	Chemical-specific	m3/kg	USEPA, 2002a	
				Q/C	Inverse of mean concentration at center of source	87.36898	g/m2-s per kg/m3	USEPA 2013	
				Ut	Equivalent threshold of wind velocity at 7m.	11.32	m/sec	USEPA 2013	
				Um	Mean annual wind speed	4.29	m/sec	USEPA 2013	
				V	Fraction of vegetative cover	0.5	unitless	USEPA 2013	
				F(x)	Function dependent of Um/Ut	0.0993	unitless	USEPA 2013	

Notes:

1 - Professional judgment. Assume on site 8 hours per day 250 days per year.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2013: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

Unit Intake Calculations

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 18 - 30) = 3.91E-02

Noncarcinogenic Chemicals

Noncancer Inhalation Intake = 2.28E-01

Mutagenic Chemicals

Cancer Inhalation Intake (Age 18 - 30) = 3.91E-02

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 5.1
NON-CANCER TOXICITY DATA -- ORAL/DERMAL
BLOCK D - PAN HANDLE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal[1]	Absorbed RfD for Dermal[2]		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD:Target Organ(s)	
		Value	Units		Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons										
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	Chronic	2.0E-02	mg/kg/day	1	2.0E-02	mg/kg/day	Body Weight	3000/1	IRIS	04/30/2013
Polychlorinated Biphenyls										
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals										
Antimony	Chronic	4.0E-04	mg/kg/day	0.15	6.0E-05	mg/kg/day	Blood	1000/1	IRIS	04/30/2013
Cadmium[3]	Chronic	1.0E-03	mg/kg/day	0.03	2.5E-05	mg/kg/day	Kidney	10/1	IRIS	04/30/2013
Cobalt	Chronic	3.0E-04	mg/kg/day	1	3.0E-04	mg/kg/day	Blood	NA	PPRTV	8/25/2008
Iron	Chronic	7.0E-01	mg/kg/day	1	7.0E-01	mg/kg/day	GS	1.5	PPRTV	9/11/2006
Manganese[4]	Chronic	1.4E-01	mg/kg/day	1.00	1.4E-01	mg/kg/day	CNS	1	IRIS	04/30/2013
Mercury[5]	Chronic	3.0E-04	mg/kg/day	0.07	2.1E-05	mg/kg/day	Autoimmune	1000/1	IRIS	04/30/2013
Molybdenum	Chronic	5.0E-03	mg/kg/day	1	5.0E-03	mg/kg/day	Gout	30/1	IRIS	04/30/2013
Nickel	Chronic	2.0E-02	mg/kg/day	0.04	8.0E-04	mg/kg/day	Body Weight	300/1	IRIS	04/30/2013
Vanadium	Chronic	5.0E-03	mg/kg/day	1	5.0E-03	mg/kg/day	Kidney	300	RSL	5/2013
Miscellaneous Parameters										
Hexavalent Chromium	Chronic	3.0E-03	mg/kg/day	0.025	7.5E-05	mg/kg/day	None Reported	300/3	IRIS	04/30/2013

Notes:
1 - U.S. EPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted dermal RfD = Oral RfD x Oral Absorption Efficiency for Dermal.
3 - Values are for cadmium - diet.
4 - Values are for manganese - diet.
5 - Values are for mercuric chloride.

Definitions:
GS = Gastrointestinal.
IRIS = Integrated Risk Information System.
NA = Not available.
RSL = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, May 2013.
PPRTV = Provisional Peer Reviewed Toxicity Value.

TABLE 5.2
NON-CANCER TOXICITY DATA -- INHALATION
BLOCK D - PAN HANDLE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC		Extrapolated RfD[1]		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfC : Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons									
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	Chronic	3.0E-03	mg/m^3	8.6E-04	(mg/kg/day)	Respiratory	3000/1	IRIS	04/30/2013
Polychlorinated Biphenyls									
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals									
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	Chronic	1.0E-05	mg/m3	2.9E-06	(mg/kg/day)	Kidney	NA	ATSDR	9/2008
Cobalt	Chronic	6.0E-06	mg/m^3	1.7E-06	(mg/kg/day)	Lungs	NA	PPRTV	8/25/2008
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	Chronic	5.0E-05	mg/m^3	1.4E-05	(mg/kg/day)	CNS	1000/1	IRIS	04/30/2013
Mercury[2]	Chronic	3.0E-05	mg/m^3	8.6E-06	(mg/kg/day)	Autoimmune	NA	Cal EPA	11/2010
Molybdenum	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	Chronic	9.0E-05	mg/m^3	2.6E-05	(mg/kg/day)	Body Weight	NA	ASTDR	9/2005
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters									
Hexavalent Chromium	Chronic	1.0E-04	mg/m^3	2.9E-05	(mg/kg/day)	Lungs	300/1	IRIS	04/30/2013

Notes:
1 - Extrapolated RfD = RfC *$20m^3$/day / 70 kg
2 - Value is for mercuric chloride.
Definitions:
ATSDR = Agency for Toxic Substances and Disease Registry.
Cal EPA = California Environmental Protection Agency.
CNS = Central Nervous System.
IRIS = Integrated Risk Information System.
NA = Not available.
PPRTV = Provisional Peer Reviewed Toxicity Value.

TABLE 6.1
CANCER TOXICITY DATA -- ORAL/DERMAL
BLOCK D - PAN HANDLE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal[1]	Absorbed Cancer Slope Factor for Dermal[2]		Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units		Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons								
Benzo(a)pyrene[3]	7.3E+00	$(mg/kg/day)^{-1}$	1	7.3E+00	$(mg/kg/day)^{-1}$	B2 / Probable human carcinogen	IRIS	04/30/2013
Naphthalene	NA	NA	NA	NA	NA	C / Possible human carcinogen	IRIS	04/30/2013
Polychlorinated Biphenyls								
Aroclor-1260	2.0E+00	$(mg/kg/day)^{-1}$	1	2.0E+00	$(mg/kg/day)^{-1}$	B2 / Probable human carcinogen	USEPA(1)	9/1996
Metals								
Antimony	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	B1 / Probable human carcinogen	IRIS	04/30/2013
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	04/30/2013
Mercury	NA	NA	NA	NA	NA	C / Possible human carcinogen	IRIS	04/30/2013
Molybdenum	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters								
Hexavalent Chromium[3]	5.0E-01	$(mg/kg/day)^{-1}$	0.025	2.0E+01	$(mg/kg/day)^{-1}$	A / Known human carcinogen	NJ	4/8/2009

Notes:
1 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted cancer slope factor for dermal = Oral cancer slope factor / Oral Absorption Efficiency for Dermal.
3 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
Cal EPA = California Environmental Protection Agency.
IRIS = Integrated Risk Information System.
NA = Not available.
NJ = New Jersey.
PPRTV = Provisional Peer Reviwed Toxicity Value.
USEPA(1) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

TABLE 6.2
CANCER TOXICITY DATA -- INHALATION
BLOCK D - PAN HANDLE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor[1]		Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons							
Benzo(a)pyrene[2]	1.1E-03	$(ug/m^3)^{-1}$	3.9E+00	$(mg/kg/day)^{-1}$	NA	Cal EPA	9/2009
Naphthalene	3.4E-05	$(ug/m3)^{-1}$	1.2E-01	$(mg/kg/day)^{-1}$	C / Possible Human Carcinogen	Cal EPA	8/2004
Polychlorinated Biphenyls							
Aroclor-1260	5.7E-04	$(ug/m^3)^{-1}$	2.0E+00	$(mg/kg/day)^{-1}$	B2 / Probable human carcinogen	USEPA(1)	9/1996
Metals							
Antimony	NA	NA	NA	NA	NA	NA	NA
Cadmium	1.8E-03	$(ug/m^3)^{-1}$	6.3E+00	$(mg/kg/day)^{-1}$	B1 / Probable human carcinogen	IRIS	04/30/2013
Cobalt	9.0E-03	$(ug/m^3)^{-1}$	3.2E+01	$(mg/kg/day)^{-1}$	NA	PPRTV	8/25/2008
Iron	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	04/30/2013
Mercury	NA	NA	NA	NA	C / Possible human carcinogen	IRIS	04/30/2013
Molybdenum	NA	NA	NA	NA	NA	NA	NA
Nickel	2.6E-04	$(ug/m^3)^{-1}$	9.1E-01	$(mg/kg/day)^{-1}$	NA	Cal EPA	9/2009
Vanadium	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters							
Hexavalent Chromium[2]	8.4E-02	$(ug/m^3)^{-1}$	2.9E+02	$(mg/kg/day)^{-1}$	A / Known human carcinogen	IRIS	04/30/2013

Notes:

1 - Inhalation CSF = Unit Risk * 70 kg / $20m^3$/day.

2 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

Definitions:

Cal EPA = California Environmental Protection Agency.

IRIS = Integrated Risk Information System.

NA = Not available.

PPRTV = Provisional Peer Reviewed Toxicity Value.

USEPA(1) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

TABLE 7.1.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Surface Soil	Surface Soil	Block D - Panhandle	Ingestion	Benzo(a)pyrene Equivalents	0.120	mg/kg	5.0E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	3.7E-06	1.1E-06	(mg/kg/day)	NA	(mg/kg/day)	--
				Aroclor-1260	0.020	mg/kg	1.6E-08	(mg/kg/day)	2.0E+00	$(mg/kg/day)^{-1}$	3.1E-08	1.8E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Antimony	0.230	mg/kg	1.8E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.1E-06	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.005
				Cadmium	0.160	mg/kg	1.3E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.5E-06	(mg/kg/day)	1.0E-03	(mg/kg/day)	0.001
				Cobalt	7.80	mg/kg	6.1E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	7.1E-05	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.2
				Iron	16,300	mg/kg	1.3E-02	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.5E-01	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.2
				Manganese	90.0	mg/kg	7.0E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	8.2E-04	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.03
				Mercury	0.440	mg/kg	3.4E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.0E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.01
				Molybdenum	0.460	mg/kg	3.6E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.2E-06	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.0008
				Nickel	16.0	mg/kg	1.3E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.5E-04	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.007
				Vanadium	31.0	mg/kg	2.4E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.8E-04	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.06
				Hexavalent Chromium	0.370	mg/kg	1.5E-06	(mg/kg/day)	5.0E-01	$(mg/kg/day)^{-1}$	7.7E-07	3.4E-06	(mg/kg/day)	3.0E-03	(mg/kg/day)	0.001
			Exp. Route Total								4.5E-06					0.6
			Dermal	Benzo(a)pyrene Equivalents	0.120	mg/kg	1.8E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	1.3E-06	4.0E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Aroclor-1260	0.020	mg/kg	6.1E-09	(mg/kg/day)	2.0E+00	$(mg/kg/day)^{-1}$	1.2E-08	7.2E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Antimony	0.230	mg/kg	5.0E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	5.9E-08	(mg/kg/day)	6.0E-05	(mg/kg/day)	0.0010
				Cadmium	0.160	mg/kg	3.5E-10	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.1E-09	(mg/kg/day)	2.5E-05	(mg/kg/day)	0.0002
				Cobalt	7.80	mg/kg	1.7E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.0E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.007
				Iron	16,300	mg/kg	3.6E-04	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.2E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.006
				Manganese	90.0	mg/kg	2.0E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.3E-05	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.02
				Mercury	0.440	mg/kg	9.6E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.1E-07	(mg/kg/day)	2.1E-05	(mg/kg/day)	0.005
				Molybdenum	0.460	mg/kg	1.0E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.2E-07	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.00002
				Nickel	16.0	mg/kg	3.5E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.1E-06	(mg/kg/day)	8.0E-04	(mg/kg/day)	0.005
				Vanadium	31.0	mg/kg	6.8E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	7.9E-06	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.002
				Hexavalent Chromium	0.370	mg/kg	4.3E-08	(mg/kg/day)	2.0E+01	$(mg/kg/day)^{-1}$	8.7E-07	9.5E-08	(mg/kg/day)	7.5E-05	(mg/kg/day)	0.001
			Exp. Route Total								2.2E-06					0.05
		Exposure Point Total									6.7E-06					0.6
	Exposure Medium Total										6.7E-06					0.6
	Air	Block D - Panhandle	Inhalation	Benzo(a)pyrene Equivalents	3.7E-11	mg/m^3	3.9E-12	(mg/m^3)	1.1E-03	$(ug/m^3)^{-1}$	4.3E-12	8.5E-12	(mg/m^3)	NA	(mg/m^3)	--
				Aroclor-1260	6.2E-12	mg/m^3	1.2E-13	(mg/m^3)	5.7E-04	$(ug/m^3)^{-1}$	6.9E-14	1.4E-12	(mg/m^3)	NA	(mg/m^3)	--
				Antimony	7.1E-11	mg/m^3	1.4E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.6E-11	(mg/m^3)	NA	(mg/m^3)	--
				Cadmium	5.0E-11	mg/m^3	9.7E-13	(mg/m^3)	1.8E-03	$(ug/m^3)^{-1}$	1.7E-12	1.1E-11	(mg/m^3)	2.0E-05	(mg/m^3)	5.7E-7
				Cobalt	2.4E-9	mg/m^3	4.7E-11	(mg/m^3)	9.0E-03	$(ug/m^3)^{-1}$	4.3E-10	5.5E-10	(mg/m^3)	6.0E-06	(mg/m^3)	0.00009
				Iron	5.0E-6	mg/m^3	9.9E-08	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.2E-06	(mg/m^3)	NA	(mg/m^3)	--
				Manganese	2.8E-8	mg/m^3	5.5E-10	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	6.4E-09	(mg/m^3)	5.0E-05	(mg/m^3)	0.0001
				Mercury	1.4E-10	mg/m^3	2.7E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	3.1E-11	(mg/m^3)	3.0E-04	(mg/m^3)	1.0E-7
				Molybdenum	1.4E-10	mg/m^3	2.8E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	3.3E-11	(mg/m^3)	NA	(mg/m^3)	--
				Nickel	5.0E-9	mg/m^3	9.7E-11	(mg/m^3)	2.6E-04	$(ug/m^3)^{-1}$	2.5E-11	1.1E-09	(mg/m^3)	9.0E-05	(mg/m^3)	0.00001
				Vanadium	9.6E-9	mg/m^3	1.9E-10	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	2.2E-09	(mg/m^3)	NA	(mg/m^3)	--
				Hexavalent Chromium	1.1E-10	mg/m^3	1.2E-11	(mg/m^3)	8.4E-02	$(ug/m^3)^{-1}$	1.0E-09	2.6E-11	(mg/m^3)	1.0E-04	(mg/m^3)	2.6E-7
			Exp. Route Total								1.5E-09					0.0002
		Exposure Point Total									1.5E-09					0.0002
	Exposure Medium Total										1.5E-09					0.0002
Medium Total											6.7E-06					0.6

TABLE 7.1.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Subsurface Soil	Subsurface Soil	Block D - Panhandle	Ingestion	Benzo(a)pyrene Equivalents	0.172	mg/kg	7.2E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	5.2E-06	1.6E-06	(mg/kg/day)	NA	(mg/kg/day)	--
				Naphthalene	2.4	mg/kg	1.8E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.1E-05	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.001
				Cobalt	19.0	mg/kg	1.5E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.7E-04	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.6
				Iron	25,400	mg/kg	2.0E-02	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.3E-01	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.3
				Manganese	123.0	mg/kg	9.6E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.1E-03	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.05
				Mercury	0.320	mg/kg	2.5E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.9E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.010
				Vanadium	100.0	mg/kg	7.8E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	9.1E-04	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.2
				Hexavalent Chromium	0.570	mg/kg	2.4E-06	(mg/kg/day)	5.0E-01	$(mg/kg/day)^{-1}$	1.2E-06	5.2E-06	(mg/kg/day)	3.0E-03	(mg/kg/day)	0.002
			Exp. Route Total								6.4E-06					1.2
			Dermal	Benzo(a)pyrene Equivalents	0.172	mg/kg	2.6E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	1.9E-06	5.7E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Naphthalene	2.4	mg/kg	6.7E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	7.8E-06	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.0004
				Cobalt	19.0	mg/kg	4.2E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.9E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.02
				Iron	25,400	mg/kg	5.6E-04	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	6.5E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.009
				Manganese	123.0	mg/kg	2.7E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	3.1E-05	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.03
				Mercury	0.320	mg/kg	7.0E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	8.2E-08	(mg/kg/day)	2.1E-05	(mg/kg/day)	0.004
				Vanadium	100.0	mg/kg	2.2E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.6E-05	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.005
				Hexavalent Chromium	0.570	mg/kg	6.7E-08	(mg/kg/day)	2.0E+01	$(mg/kg/day)^{-1}$	1.3E-06	1.5E-07	(mg/kg/day)	7.5E-05	(mg/kg/day)	0.002
			Exp. Route Total								3.2E-06					0.07
		Exposure Point Total									9.7E-06					1.2
	Exposure Medium Total										9.7E-06					1.2
	Air	Block D - Panhandle	Inhalation	Benzo(a)pyrene Equivalents	5.3E-11	mg/m^3	5.6E-12	(mg/m^3)	1.1E-03	$(ug/m^3)^{-1}$	6.1E-12	1.2E-11	(mg/m^3)	NA	(mg/m^3)	--
				Naphthalene	3.7E-5	mg/m^3	7.2E-07	(mg/m^3)	3.4E-05	$(ug/m^3)^{-1}$	2.5E-08	8.4E-06	(mg/m^3)	3.0E-03	(mg/m^3)	0.003
				Cobalt	5.9E-9	mg/m^3	1.2E-10	(mg/m^3)	9.0E-03	$(ug/m^3)^{-1}$	1.0E-09	1.3E-09	(mg/m^3)	6.0E-06	(mg/m^3)	0.0002
				Iron	7.9E-6	mg/m^3	1.5E-07	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.8E-06	(mg/m^3)	NA	(mg/m^3)	--
				Manganese	3.8E-8	mg/m^3	7.5E-10	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	8.7E-09	(mg/m^3)	5.0E-05	(mg/m^3)	0.0002
				Mercury	9.9E-11	mg/m^3	1.9E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	2.3E-11	(mg/m^3)	3.0E-04	(mg/m^3)	7.5E-8
				Vanadium	3.1E-8	mg/m^3	6.1E-10	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	7.1E-09	(mg/m^3)	NA	(mg/m^3)	--
				Hexavalent Chromium	1.8E-10	mg/m^3	1.8E-11	(mg/m^3)	8.4E-02	$(ug/m^3)^{-1}$	1.5E-09	4.0E-11	(mg/m^3)	1.0E-04	(mg/m^3)	4.0E-7
			Exp. Route Total								2.7E-08					0.003
		Exposure Point Total									2.7E-08					0.003
	Exposure Medium Total										2.7E-08					0.003
Medium Total											9.7E-06					1.2

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 7.2.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Surface Soil	Surface Soil	Block D - Panhandle	Ingestion	Benzo(a)pyrene Equivalents	0.120	mg/kg	1.1E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	7.7E-07	2.1E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Aroclor-1260	0.020	mg/kg	5.9E-09	(mg/kg/day)	2.0E+00	$(mg/kg/day)^{-1}$	1.2E-08	3.4E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Antimony	0.230	mg/kg	6.8E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	3.9E-07	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.0010
				Cadmium	0.160	mg/kg	4.7E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.7E-07	(mg/kg/day)	1.0E-03	(mg/kg/day)	0.0003
				Cobalt	7.80	mg/kg	2.3E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.3E-05	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.04
				Iron	16,300	mg/kg	4.8E-03	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.8E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.04
				Manganese	90.0	mg/kg	2.6E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.5E-04	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.006
				Mercury	0.440	mg/kg	1.3E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	7.5E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003
				Molybdenum	0.460	mg/kg	1.4E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	7.9E-07	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.0002
				Nickel	16.0	mg/kg	4.7E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.7E-05	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.001
				Vanadium	31.0	mg/kg	9.1E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	5.3E-05	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.01
				Hexavalent Chromium	0.370	mg/kg	3.3E-07	(mg/kg/day)	5.0E-01	$(mg/kg/day)^{-1}$	1.6E-07	6.3E-07	(mg/kg/day)	3.0E-03	(mg/kg/day)	0.0002
			Exp. Route Total								9.5E-07					0.1
			Dermal	Benzo(a)pyrene Equivalents	0.120	mg/kg	4.2E-08	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	3.0E-07	8.1E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Aroclor-1260	0.020	mg/kg	2.5E-09	(mg/kg/day)	2.0E+00	$(mg/kg/day)^{-1}$	5.0E-09	1.4E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Antimony	0.230	mg/kg	2.0E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.2E-08	(mg/kg/day)	6.0E-05	(mg/kg/day)	0.0002
				Cadmium	0.160	mg/kg	1.4E-10	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	8.3E-10	(mg/kg/day)	2.5E-05	(mg/kg/day)	0.00003
				Cobalt	7.80	mg/kg	6.9E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.0E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001
				Iron	16,300	mg/kg	1.4E-04	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	8.4E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.001
				Manganese	90.0	mg/kg	8.0E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.7E-06	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.005
				Mercury	0.440	mg/kg	3.9E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.3E-08	(mg/kg/day)	2.1E-05	(mg/kg/day)	0.001
				Molybdenum	0.460	mg/kg	4.1E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.4E-08	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.000005
				Nickel	16.0	mg/kg	1.4E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	8.3E-07	(mg/kg/day)	8.0E-04	(mg/kg/day)	0.001
				Vanadium	31.0	mg/kg	2.8E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.6E-06	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.0003
				Hexavalent Chromium	0.370	mg/kg	9.9E-09	(mg/kg/day)	2.0E+01	$(mg/kg/day)^{-1}$	2.0E-07	1.9E-08	(mg/kg/day)	7.5E-05	(mg/kg/day)	0.0003
			Exp. Route Total								5.1E-07					0.01
		Exposure Point Total									1.5E-06					0.1
	Exposure Medium Total										1.5E-06					0.1
	Air	Block D - Panhandle	Inhalation	Benzo(a)pyrene Equivalents	3.7E-11	mg/m^3	4.4E-12	(mg/m^3)	1.1E-03	$(ug/m^3)^{-1}$	4.8E-12	8.5E-12	(mg/m^3)	NA	(mg/m^3)	--
				Aroclor-1260	6.2E-12	mg/m^3	2.4E-13	(mg/m^3)	5.7E-04	$(ug/m^3)^{-1}$	1.4E-13	1.4E-12	(mg/m^3)	NA	(mg/m^3)	--
				Antimony	7.1E-11	mg/m^3	2.8E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.6E-11	(mg/m^3)	NA	(mg/m^3)	--
				Cadmium	5.0E-11	mg/m^3	1.9E-12	(mg/m^3)	1.8E-03	$(ug/m^3)^{-1}$	3.5E-12	1.1E-11	(mg/m^3)	2.0E-05	(mg/m^3)	5.7E-7
				Cobalt	2.4E-9	mg/m^3	9.5E-11	(mg/m^3)	9.0E-03	$(ug/m^3)^{-1}$	8.5E-10	5.5E-10	(mg/m^3)	6.0E-06	(mg/m^3)	0.00009
				Iron	5.0E-6	mg/m^3	2.0E-07	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.2E-06	(mg/m^3)	NA	(mg/m^3)	--
				Manganese	2.8E-8	mg/m^3	1.1E-09	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	6.4E-09	(mg/m^3)	5.0E-05	(mg/m^3)	0.0001
				Mercury	1.4E-10	mg/m^3	5.3E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	3.1E-11	(mg/m^3)	3.0E-04	(mg/m^3)	1.0E-7
				Molybdenum	1.4E-10	mg/m^3	5.6E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	3.3E-11	(mg/m^3)	NA	(mg/m^3)	--
				Nickel	5.0E-9	mg/m^3	1.9E-10	(mg/m^3)	2.6E-04	$(ug/m^3)^{-1}$	5.0E-11	1.1E-09	(mg/m^3)	9.0E-05	(mg/m^3)	0.00001
				Vanadium	9.6E-9	mg/m^3	3.8E-10	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	2.2E-09	(mg/m^3)	NA	(mg/m^3)	--
				Hexavalent Chromium	1.1E-10	mg/m^3	1.3E-11	(mg/m^3)	8.4E-02	$(ug/m^3)^{-1}$	1.1E-09	2.6E-11	(mg/m^3)	1.0E-04	(mg/m^3)	2.6E-7
			Exp. Route Total								2.0E-09					0.0002
		Exposure Point Total									2.0E-09					0.0002
	Exposure Medium Total										2.0E-09					0.0002
Medium Total											1.5E-06					0.1

TABLE 7.2.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Subsurface Soil	Subsurface Soil	Block D - Panhandle	Ingestion	Benzo(a)pyrene Equivalents	0.172	mg/kg	1.5E-07	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	1.1E-06	2.9E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Naphthalene	2.4	mg/kg	6.9E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.0E-06	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.0002
				Cobalt	19.0	mg/kg	5.6E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	3.3E-05	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.1
				Iron	25,400	mg/kg	7.5E-03	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.3E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.06
				Manganese	123.0	mg/kg	3.6E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.1E-04	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.009
				Mercury	0.320	mg/kg	9.4E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	5.5E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002
				Vanadium	100.0	mg/kg	2.9E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.7E-04	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.03
				Hexavalent Chromium	0.570	mg/kg	5.0E-07	(mg/kg/day)	5.0E-01	$(mg/kg/day)^{-1}$	2.5E-07	9.8E-07	(mg/kg/day)	3.0E-03	(mg/kg/day)	0.0003
			Exp. Route Total								1.4E-06					0.2
			Dermal	Benzo(a)pyrene Equivalents	0.172	mg/kg	6.0E-08	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	4.3E-07	1.2E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Naphthalene	2.4	mg/kg	2.7E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.6E-06	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.00008
				Cobalt	19.0	mg/kg	1.7E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	9.8E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003
				Iron	25,400	mg/kg	2.3E-04	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.3E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.002
				Manganese	123.0	mg/kg	1.1E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	6.4E-06	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.007
				Mercury	0.320	mg/kg	2.8E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.7E-08	(mg/kg/day)	2.1E-05	(mg/kg/day)	0.0008
				Vanadium	100.0	mg/kg	8.9E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	5.2E-06	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.001
				Hexavalent Chromium	0.570	mg/kg	1.5E-08	(mg/kg/day)	2.0E+01	$(mg/kg/day)^{-1}$	3.0E-07	3.0E-08	(mg/kg/day)	7.5E-05	(mg/kg/day)	0.0004
			Exp. Route Total								7.4E-07					0.01
		Exposure Point Total									2.1E-06					0.2
	Exposure Medium Total										2.1E-06					0.2
	Air	Block D - Panhandle	Inhalation	Benzo(a)pyrene Equivalents	5.3E-11	mg/m^3	6.3E-12	(mg/m^3)	1.1E-03	$(ug/m^3)^{-1}$	6.9E-12	1.2E-11	(mg/m^3)	NA	(mg/m^3)	--
				Naphthalene	3.7E-5	mg/m^3	1.4E-06	(mg/m^3)	3.4E-05	$(ug/m^3)^{-1}$	4.9E-08	8.4E-06	(mg/m^3)	3.0E-03	(mg/m^3)	0.003
				Cobalt	5.9E-9	mg/m^3	2.3E-10	(mg/m^3)	9.0E-03	$(ug/m^3)^{-1}$	2.1E-09	1.3E-09	(mg/m^3)	6.0E-06	(mg/m^3)	0.0002
				Iron	7.9E-6	mg/m^3	3.1E-07	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.8E-06	(mg/m^3)	NA	(mg/m^3)	--
				Manganese	3.8E-8	mg/m^3	1.5E-09	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	8.7E-09	(mg/m^3)	5.0E-05	(mg/m^3)	0.0002
				Mercury	9.9E-11	mg/m^3	3.9E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	2.3E-11	(mg/m^3)	3.0E-04	(mg/m^3)	7.5E-8
				Vanadium	3.1E-8	mg/m^3	1.2E-09	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	7.1E-09	(mg/m^3)	NA	(mg/m^3)	--
				Hexavalent Chromium	1.8E-10	mg/m^3	2.1E-11	(mg/m^3)	8.4E-02	$(ug/m^3)^{-1}$	1.7E-09	4.0E-11	(mg/m^3)	1.0E-04	(mg/m^3)	4.0E-7
			Exp. Route Total								5.3E-08					0.003
		Exposure Point Total									5.3E-08					0.003
	Exposure Medium Total										5.3E-08					0.003
Medium Total											2.1E-06					0.2

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 7.3.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Surface Soil	Surface Soil	Block D - Panhandle	Ingestion	Benzo(a)pyrene Equivalents	0.120	mg/kg	2.0E-08	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	1.5E-07	1.2E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Aroclor-1260	0.020	mg/kg	3.4E-09	(mg/kg/day)	2.0E+00	$(mg/kg/day)^{-1}$	6.7E-09	2.0E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Antimony	0.230	mg/kg	3.9E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.3E-07	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.0006
				Cadmium	0.160	mg/kg	2.7E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.6E-07	(mg/kg/day)	1.0E-03	(mg/kg/day)	0.0002
				Cobalt	7.80	mg/kg	1.3E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	7.6E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.03
				Iron	16,300	mg/kg	2.7E-03	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.6E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.02
				Manganese	90.0	mg/kg	1.5E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	8.8E-05	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.004
				Mercury	0.440	mg/kg	7.4E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.3E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001
				Molybdenum	0.460	mg/kg	7.7E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.5E-07	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.00009
				Nickel	16.0	mg/kg	2.7E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.6E-05	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.0008
				Vanadium	31.0	mg/kg	5.2E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	3.0E-05	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.006
				Hexavalent Chromium	0.370	mg/kg	6.2E-08	(mg/kg/day)	5.0E-01	$(mg/kg/day)^{-1}$	3.1E-08	3.6E-07	(mg/kg/day)	3.0E-03	(mg/kg/day)	0.0001
			Exp. Route Total								1.8E-07					0.06
			Dermal	Benzo(a)pyrene Equivalents	0.120	mg/kg	1.0E-08	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	7.6E-08	6.1E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Aroclor-1260	0.020	mg/kg	1.9E-09	(mg/kg/day)	2.0E+00	$(mg/kg/day)^{-1}$	3.7E-09	1.1E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Antimony	0.230	mg/kg	1.5E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	9.0E-09	(mg/kg/day)	6.0E-05	(mg/kg/day)	0.0001
				Cadmium	0.160	mg/kg	1.1E-10	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	6.2E-10	(mg/kg/day)	2.5E-05	(mg/kg/day)	0.00002
				Cobalt	7.80	mg/kg	5.2E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	3.0E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001
				Iron	16,300	mg/kg	1.1E-04	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	6.4E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0009
				Manganese	90.0	mg/kg	6.0E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	3.5E-06	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.004
				Mercury	0.440	mg/kg	2.9E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.7E-08	(mg/kg/day)	2.1E-05	(mg/kg/day)	0.0008
				Molybdenum	0.460	mg/kg	3.1E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.8E-08	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.000004
				Nickel	16.0	mg/kg	1.1E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	6.2E-07	(mg/kg/day)	8.0E-04	(mg/kg/day)	0.0008
				Vanadium	31.0	mg/kg	2.1E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.2E-06	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.0002
				Hexavalent Chromium	0.370	mg/kg	2.5E-09	(mg/kg/day)	2.0E+01	$(mg/kg/day)^{-1}$	5.0E-08	1.4E-08	(mg/kg/day)	7.5E-05	(mg/kg/day)	0.0002
			Exp. Route Total								1.3E-07					0.008
		Exposure Point Total									3.1E-07					0.07
	Exposure Medium Total										3.1E-07					0.07
	Air	Block D - Panhandle	Inhalation	Benzo(a)pyrene Equivalents	3.7E-11	mg/m^3	1.5E-12	(mg/m^3)	1.1E-03	$(ug/m^3)^{-1}$	1.6E-12	8.5E-12	(mg/m^3)	NA	(mg/m^3)	--
				Aroclor-1260	6.2E-12	mg/m^3	2.4E-13	(mg/m^3)	5.7E-04	$(ug/m^3)^{-1}$	1.4E-13	1.4E-12	(mg/m^3)	NA	(mg/m^3)	--
				Antimony	7.1E-11	mg/m^3	2.8E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.6E-11	(mg/m^3)	NA	(mg/m^3)	--
				Cadmium	5.0E-11	mg/m^3	1.9E-12	(mg/m^3)	1.8E-03	$(ug/m^3)^{-1}$	3.5E-12	1.1E-11	(mg/m^3)	2.0E-05	(mg/m^3)	5.7E-7
				Cobalt	2.4E-9	mg/m^3	9.5E-11	(mg/m^3)	9.0E-03	$(ug/m^3)^{-1}$	8.5E-10	5.5E-10	(mg/m^3)	6.0E-06	(mg/m^3)	0.00009
				Iron	5.0E-6	mg/m^3	2.0E-07	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.2E-06	(mg/m^3)	NA	(mg/m^3)	--
				Manganese	2.8E-8	mg/m^3	1.1E-09	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	6.4E-09	(mg/m^3)	5.0E-05	(mg/m^3)	0.0001
				Mercury	1.4E-10	mg/m^3	5.3E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	3.1E-11	(mg/m^3)	3.0E-04	(mg/m^3)	1.0E-7
				Molybdenum	1.4E-10	mg/m^3	5.6E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	3.3E-11	(mg/m^3)	NA	(mg/m^3)	--
				Nickel	5.0E-9	mg/m^3	1.9E-10	(mg/m^3)	2.6E-04	$(ug/m^3)^{-1}$	5.0E-11	1.1E-09	(mg/m^3)	9.0E-05	(mg/m^3)	0.00001
				Vanadium	9.6E-9	mg/m^3	3.8E-10	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	2.2E-09	(mg/m^3)	NA	(mg/m^3)	--
				Hexavalent Chromium	1.1E-10	mg/m^3	4.5E-12	(mg/m^3)	8.4E-02	$(ug/m^3)^{-1}$	3.8E-10	2.6E-11	(mg/m^3)	1.0E-04	(mg/m^3)	2.6E-7
			Exp. Route Total								1.3E-09					0.0002
		Exposure Point Total									1.3E-09					0.0002
	Exposure Medium Total										1.3E-09					0.0002
Medium Total											3.2E-07					0.07

TABLE 7.3.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Subsurface Soil	Subsurface Soil	Block D - Panhandle	Ingestion	Benzo(a)pyrene Equivalents	0.172	mg/kg	2.9E-08	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	2.1E-07	1.7E-07	(mg/kg/day)	NA	(mg/kg/day)	--
				Naphthalene	2.4	mg/kg	3.9E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.3E-06	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.0001
				Cobalt	19.0	mg/kg	3.2E-06	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.9E-05	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.06
				Iron	25,400	mg/kg	4.3E-03	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	2.5E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.04
				Manganese	123.0	mg/kg	2.1E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.2E-04	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.005
				Mercury	0.320	mg/kg	5.4E-08	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	3.1E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001
				Vanadium	100.0	mg/kg	1.7E-05	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	9.8E-05	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.02
				Hexavalent Chromium	0.570	mg/kg	9.6E-08	(mg/kg/day)	5.0E-01	$(mg/kg/day)^{-1}$	4.8E-08	5.6E-07	(mg/kg/day)	3.0E-03	(mg/kg/day)	0.0002
			Exp. Route Total								2.6E-07					0.1
			Dermal	Benzo(a)pyrene Equivalents	0.172	mg/kg	1.5E-08	(mg/kg/day)	7.3E+00	$(mg/kg/day)^{-1}$	1.1E-07	8.7E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Naphthalene	2.4	mg/kg	2.0E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.2E-06	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.00006
				Cobalt	19.0	mg/kg	1.3E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	7.4E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002
				Iron	25,400	mg/kg	1.7E-04	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	9.9E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.001
				Manganese	123.0	mg/kg	8.2E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	4.8E-06	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.005
				Mercury	0.320	mg/kg	2.1E-09	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	1.2E-08	(mg/kg/day)	2.1E-05	(mg/kg/day)	0.0006
				Vanadium	100.0	mg/kg	6.7E-07	(mg/kg/day)	NA	$(mg/kg/day)^{-1}$	- -	3.9E-06	(mg/kg/day)	5.0E-03	(mg/kg/day)	0.0008
				Hexavalent Chromium	0.570	mg/kg	3.8E-09	(mg/kg/day)	2.0E+01	$(mg/kg/day)^{-1}$	7.6E-08	2.2E-08	(mg/kg/day)	7.5E-05	(mg/kg/day)	0.0003
			Exp. Route Total								1.9E-07					0.01
		Exposure Point Total									4.4E-07					0.1
	Exposure Medium Total										4.4E-07					0.1
	Air	Block D - Panhandle	Inhalation	Benzo(a)pyrene Equivalents	5.3E-11	mg/m^3	2.1E-12	(mg/m^3)	1.1E-03	$(ug/m^3)^{-1}$	2.3E-12	1.2E-11	(mg/m^3)	NA	(mg/m^3)	--
				Naphthalene	3.7E-5	mg/m^3	1.4E-06	(mg/m^3)	3.4E-05	$(ug/m^3)^{-1}$	4.9E-08	8.4E-06	(mg/m^3)	3.0E-03	(mg/m^3)	0.003
				Cobalt	5.9E-9	mg/m^3	2.3E-10	(mg/m^3)	9.0E-03	$(ug/m^3)^{-1}$	2.1E-09	1.3E-09	(mg/m^3)	6.0E-06	(mg/m^3)	0.0002
				Iron	7.9E-6	mg/m^3	3.1E-07	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	1.8E-06	(mg/m^3)	NA	(mg/m^3)	--
				Manganese	3.8E-8	mg/m^3	1.5E-09	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	8.7E-09	(mg/m^3)	5.0E-05	(mg/m^3)	0.0002
				Mercury	9.9E-11	mg/m^3	3.9E-12	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	2.3E-11	(mg/m^3)	3.0E-04	(mg/m^3)	7.5E-8
				Vanadium	3.1E-8	mg/m^3	1.2E-09	(mg/m^3)	NA	$(ug/m^3)^{-1}$	- -	7.1E-09	(mg/m^3)	NA	(mg/m^3)	--
				Hexavalent Chromium	1.8E-10	mg/m^3	6.9E-12	(mg/m^3)	8.4E-02	$(ug/m^3)^{-1}$	5.8E-10	4.0E-11	(mg/m^3)	1.0E-04	(mg/m^3)	4.0E-7
			Exp. Route Total								5.2E-08					0.003
		Exposure Point Total									5.2E-08					0.003
	Exposure Medium Total										5.2E-08					0.003
Medium Total											5.0E-07					0.1

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 9.1.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Block D - Panhandle	Benzo(a)pyrene Equivalents	4E-06	--	1E-06	--	5E-06	NA	--	--	--	--
			Aroclor-1260	3E-08	--	1E-08	--	4E-08	NA	--	--	--	--
			Antimony	- -	--	- -	--	- -	Blood	0.005	--	0.0010	0.006
			Cadmium	- -	--	- -	--	- -	Kidney	0.001	--	0.0002	0.002
			Cobalt	- -	--	- -	--	- -	Thyroid	0.2	--	0.007	0.2
			Iron	- -	--	- -	--	- -	GS	0.2	--	0.006	0.2
			Manganese	- -	--	- -	--	- -	CNS	0.03	--	0.02	0.06
			Mercury	- -	--	- -	--	- -	CNS	0.01	--	0.005	0.02
			Molybdenum	- -	--	- -	--	- -	Gout	0.0008	--	0.00002	0.0009
			Nickel	- -	--	- -	--	- -	Body Weight	0.007	--	0.005	0.01
			Vanadium	- -	--	- -	--	- -	Kidney	0.06	--	0.002	0.06
			Hexavalent Chromium	8E-07	--	9E-07	--	2E-06	None Specified	0.001	--	0.001	0.002
			Chemical Total	4E-06	--	2E-06	--	7E-06		0.6	--	0.05	0.6
		Exposure Point Total						7E-06					0.6
	Exposure Medium Total							7E-06					0.6
	Air	Block D - Panhandle	Benzo(a)pyrene Equivalents	--	4E-12	--	--	4E-12	NA	--	--	--	--
			Aroclor-1260	--	7E-14	--	--	7E-14	NA	--	--	--	--
			Antimony	--	- -	--	--	- -	NA	--	--	--	--
			Cadmium	--	2E-12	--	--	2E-12	Kidney, Respiratory	--	0.0000006	--	0.0000006
			Cobalt	--	4E-10	--	--	4E-10	Respiratory	--	0.00009	--	0.00009
			Iron	--	- -	--	--	- -	NA	--	--	--	--
			Manganese	--	- -	--	--	- -	CNS	--	0.0001	--	0.0001
			Mercury	--	- -	--	--	- -	CNS	--	0.0000001	--	0.0000001
			Molybdenum	--	- -	--	--	- -	NA	--	--	--	--
			Nickel	--	3E-11	--	--	3E-11	Respiratory	--	0.00001	--	0.00001
			Vanadium	--	- -	--	--	- -	NA	--	--	--	--
			Hexavalent Chromium	--	1E-09	--	--	1E-09	Respiratory	--	0.0000003	--	0.0000003
			Chemical Total	--	1E-09	--	--	1E-09		- -	0.0002	- -	0.0002
		Exposure Point Total						1E-09					0.0002
	Exposure Medium Total							1E-09					0.0002
Medium Total								7E-06					0.6
Subsurface Soil	Subsurface Soil	Block D - Panhandle	Benzo(a)pyrene Equivalents	5E-06	--	2E-06	--	7E-06	NA	--	--	--	--
			Naphthalene	- -	--	- -	--	- -	Body Weight	0.001	--	0.0004	0.001
			Cobalt	- -	--	- -	--	- -	Thyroid	0.6	--	0.02	0.6
			Iron	- -	--	- -	--	- -	GS	0.3	--	0.009	0.3
			Manganese	- -	--	- -	--	- -	CNS	0.05	--	0.03	0.08
			Mercury	- -	--	- -	--	- -	CNS	0.010	--	0.004	0.01
			Vanadium	- -	--	- -	--	- -	Kidney	0.2	--	0.005	0.2
			Hexavalent Chromium	1E-06	--	1E-06	--	3E-06	None Specified	0.002	--	0.002	0.004
			Chemical Total	6E-06	--	3E-06	--	1E-05		1	--	0.07	1
		Exposure Point Total						1E-05					1
	Exposure Medium Total							1E-05					1
	Air	Block D - Panhandle	Benzo(a)pyrene Equivalents	--	6E-12	--	--	6E-12	NA	--	--	--	--
			Naphthalene	--	2E-08	--	--	2E-08	Respiratory	--	0.003	--	0.003
			Cobalt	--	1E-09	--	--	1E-09	Respiratory	--	0.0002	--	0.0002
			Iron	--	- -	--	--	- -	NA	--	--	--	--
			Manganese	--	- -	--	--	- -	CNS	--	0.0002	--	0.0002
			Mercury	--	- -	--	--	- -	CNS	--	8E-8	--	8E-8
			Vanadium	--	- -	--	--	- -	NA	--	--	--	--
			Hexavalent Chromium	--	2E-09	--	--	2E-09	Respiratory	--	0.0000004	--	0.0000004
			Chemical Total	--	3E-08	--	--	3E-08		- -	0.003	- -	0.003
		Exposure Point Total						3E-08					0.003
	Exposure Medium Total							3E-08					0.003
Medium Total								1E-05					1

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 9.2.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Block D - Panhandle	Benzo(a)pyrene Equivalents	8E-07	--	3E-07	--	1E-06	NA	--	--	--	--
			Aroclor-1260	1E-08	--	5E-09	--	2E-08	NA	--	--	--	--
			Antimony	- -	--	- -	--	- -	Blood	0.0010	--	0.0002	0.001
			Cadmium	- -	--	- -	--	- -	Kidney	0.0003	--	0.00003	0.0003
			Cobalt	- -	--	- -	--	- -	Thyroid	0.04	--	0.001	0.05
			Iron	- -	--	- -	--	- -	GS	0.04	--	0.001	0.04
			Manganese	- -	--	- -	--	- -	CNS	0.006	--	0.005	0.01
			Mercury	- -	--	- -	--	- -	CNS	0.003	--	0.001	0.004
			Molybdenum	- -	--	- -	--	- -	Gout	0.0002	--	0.000005	0.0002
			Nickel	- -	--	- -	--	- -	Body Weight	0.001	--	0.001	0.002
			Vanadium	- -	--	- -	--	- -	Kidney	0.01	--	0.0003	0.01
			Hexavalent Chromium	2E-07	--	2E-07	--	4E-07	None Specified	0.0002	--	0.0003	0.0005
			Chemical Total	9E-07	--	5E-07	--	1E-06		0.1	--	0.01	0.1
		Exposure Point Total						1E-06					0.1
	Exposure Medium Total							1E-06					0.1
	Air	Block D - Panhandle	Benzo(a)pyrene Equivalents	--	5E-12	--	--	5E-12	NA	--	--	--	--
			Aroclor-1260	--	1E-13	--	--	1E-13	NA	--	--	--	--
			Antimony	--	- -	--	--	- -	NA	--	--	--	--
			Cadmium	--	3E-12	--	--	3E-12	Kidney, Respiratory	--	0.0000006	--	0.0000006
			Cobalt	--	9E-10	--	--	9E-10	Respiratory	--	0.00009	--	0.00009
			Iron	--	- -	--	--	- -	NA	--	--	--	--
			Manganese	--	- -	--	--	- -	CNS	--	0.0001	--	0.0001
			Mercury	--	- -	--	--	- -	CNS	--	0.0000001	--	0.0000001
			Molybdenum	--	- -	--	--	- -	NA	--	--	--	--
			Nickel	--	5E-11	--	--	5E-11	Respiratory	--	0.00001	--	0.00001
			Vanadium	--	- -	--	--	- -	NA	--	--	--	--
			Hexavalent Chromium	--	1E-09	--	--	1E-09	Respiratory	--	0.0000003	--	0.0000003
			Chemical Total	--	2E-09	--	--	2E-09		- -	0.0002	- -	0.0002
		Exposure Point Total						2E-09					0.0002
	Exposure Medium Total							2E-09					0.0002
Medium Total								1E-06					0.1
Subsurface Soil	Subsurface Soil	Block D - Panhandle	Benzo(a)pyrene Equivalents	1E-06	--	4E-07	--	2E-06	NA	--	--	--	--
			Naphthalene	- -	--	- -	--	- -	Body Weight	0.0002	--	0.00008	0.0003
			Cobalt	- -	--	- -	--	- -	Thyroid	0.1	--	0.003	0.1
			Iron	- -	--	- -	--	- -	GS	0.06	--	0.002	0.06
			Manganese	- -	--	- -	--	- -	CNS	0.009	--	0.007	0.02
			Mercury	- -	--	- -	--	- -	CNS	0.002	--	0.0008	0.003
			Vanadium	- -	--	- -	--	- -	Kidney	0.03	--	0.001	0.04
			Hexavalent Chromium	3E-07	--	3E-07	--	6E-07	None Specified	0.0003	--	0.0004	0.0007
			Chemical Total	1E-06	--	7E-07	--	2E-06		0.2	--	0.01	0.2
		Exposure Point Total						2E-06					0.2
	Exposure Medium Total							2E-06					0.2
	Air	Block D - Panhandle	Benzo(a)pyrene Equivalents	--	7E-12	--	--	7E-12	NA	--	--	--	--
			Naphthalene	--	5E-08	--	--	5E-08	Respiratory	--	0.003	--	0.003
			Cobalt	--	2E-09	--	--	2E-09	Respiratory	--	0.0002	--	0.0002
			Iron	--	- -	--	--	- -	NA	--	--	--	--
			Manganese	--	- -	--	--	- -	CNS	--	0.0002	--	0.0002
			Mercury	--	- -	--	--	- -	CNS	--	8E-8	--	8E-8
			Vanadium	--	- -	--	--	- -	NA	--	--	--	--
			Hexavalent Chromium	--	2E-09	--	--	2E-09	Respiratory	--	0.0000004	--	0.0000004
			Chemical Total	--	5E-08	--	--	5E-08		- -	0.003	- -	0.003
		Exposure Point Total						5E-08					0.003
	Exposure Medium Total							5E-08					0.003
Medium Total								2E-06					0.2

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 9.3.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Block D - Panhandle	Benzo(a)pyrene Equivalents	1E-07	--	8E-08	--	2E-07	NA	--	--	--	--
			Aroclor-1260	7E-09	--	4E-09	--	1E-08	NA	--	--	--	--
			Antimony	- -	--	- -	--	- -	Blood	0.0006	--	0.0001	0.0007
			Cadmium	- -	--	- -	--	- -	Kidney	0.0002	--	0.00002	0.0002
			Cobalt	- -	--	- -	--	- -	Thyroid	0.03	--	0.001	0.03
			Iron	- -	--	- -	--	- -	GS	0.02	--	0.0009	0.02
			Manganese	- -	--	- -	--	- -	CNS	0.004	--	0.004	0.007
			Mercury	- -	--	- -	--	- -	CNS	0.001	--	0.0008	0.002
			Molybdenum	- -	--	- -	--	- -	Gout	0.00009	--	0.000004	0.00009
			Nickel	- -	--	- -	--	- -	Body Weight	0.0008	--	0.0008	0.002
			Vanadium	- -	--	- -	--	- -	Kidney	0.006	--	0.0002	0.006
			Hexavalent Chromium	3E-08	--	5E-08	--	8E-08	None Specified	0.0001	--	0.0002	0.0003
			Chemical Total	2E-07	--	1E-07	--	3E-07		0.06	--	0.008	0.07
		Exposure Point Total						3E-07					0.07
	Exposure Medium Total							3E-07					0.07
	Air	Block D - Panhandle	Benzo(a)pyrene Equivalents	--	2E-12	--	--	2E-12	NA	--	--	--	--
			Aroclor-1260	--	1E-13	--	--	1E-13	NA	--	--	--	--
			Antimony	--	- -	--	--	- -	NA	--	--	--	--
			Cadmium	--	3E-12	--	--	3E-12	Kidney, Respiratory	--	0.0000006	--	0.0000006
			Cobalt	--	9E-10	--	--	9E-10	Respiratory	--	0.00009	--	0.00009
			Iron	--	- -	--	--	- -	NA	--	--	--	--
			Manganese	--	- -	--	--	- -	CNS	--	0.0001	--	0.0001
			Mercury	--	- -	--	--	- -	CNS	--	0.0000001	--	0.0000001
			Molybdenum	--	- -	--	--	- -	NA	--	--	--	--
			Nickel	--	5E-11	--	--	5E-11	Respiratory	--	0.00001	--	0.00001
			Vanadium	--	- -	--	--	- -	NA	--	--	--	--
			Hexavalent Chromium	--	4E-10	--	--	4E-10	Respiratory	--	0.0000003	--	0.0000003
			Chemical Total	--	1E-09	--	--	1E-09		- -	0.0002	- -	0.0002
		Exposure Point Total						1E-09					0.0002
	Exposure Medium Total							1E-09					0.0002
Medium Total								3E-07					0.07
Subsurface Soil	Subsurface Soil	Block D - Panhandle	Benzo(a)pyrene Equivalents	2E-07	--	1E-07	--	3E-07	NA	--	--	--	--
			Naphthalene	- -	--	- -	--	- -	Body Weight	0.0001	--	0.00006	0.0002
			Cobalt	- -	--	- -	--	- -	Thyroid	0.06	--	0.002	0.06
			Iron	- -	--	- -	--	- -	GS	0.04	--	0.001	0.04
			Manganese	- -	--	- -	--	- -	CNS	0.005	--	0.005	0.01
			Mercury	- -	--	- -	--	- -	CNS	0.001	--	0.0006	0.002
			Vanadium	- -	--	- -	--	- -	Kidney	0.02	--	0.0008	0.02
			Hexavalent Chromium	5E-08	--	8E-08	--	1E-07	None Specified	0.0002	--	0.0003	0.0005
			Chemical Total	3E-07	--	2E-07	--	4E-07		0.1	--	0.01	0.1
		Exposure Point Total						4E-07					0.1
	Exposure Medium Total							4E-07					0.1
	Air	Block D - Panhandle	Benzo(a)pyrene Equivalents	--	2E-12	--	--	2E-12	NA	--	--	--	--
			Naphthalene	--	5E-08	--	--	5E-08	Respiratory	--	0.003	--	0.003
			Cobalt	--	2E-09	--	--	2E-09	Respiratory	--	0.0002	--	0.0002
			Iron	--	- -	--	--	- -	NA	--	--	--	--
			Manganese	--	- -	--	--	- -	CNS	--	0.0002	--	0.0002
			Mercury	--	- -	--	--	- -	CNS	--	8E-8	--	8E-8
			Vanadium	--	- -	--	--	- -	NA	--	--	--	--
			Hexavalent Chromium	--	6E-10	--	--	6E-10	Respiratory	--	0.0000004	--	0.0000004
			Chemical Total	--	5E-08	--	--	5E-08		- -	0.003	- -	0.003
		Exposure Point Total						5E-08					0.003
	Exposure Medium Total							5E-08					0.003
Medium Total								5E-07					0.1
Receptor Total							Receptor Risk Total	8E-07				Receptor HI Total	0.2

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 9.4.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Receptor Population: Recreational User
Receptor Age: Lifelong (Child and Adult)

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Block D - Panhandle	Benzo(a)pyrene Equivalents	5E-06	--	2E-06	--	6E-06					
			Aroclor-1260	5E-08	--	2E-08	--	7E-08					
			Antimony	- -	--	- -	--	- -					
			Cadmium	- -	--	- -	--	- -					
			Cobalt	- -	--	- -	--	- -					
			Iron	- -	--	- -	--	- -					
			Manganese	- -	--	- -	--	- -					
			Mercury	- -	--	- -	--	- -					
			Molybdenum	- -	--	- -	--	- -					
			Nickel	- -	--	- -	--	- -					
			Vanadium	- -	--	- -	--	- -					
			Hexavalent Chromium	1E-06	--	1E-06	--	2E-06					
			Chemical Total	6E-06	--	3E-06	--	8E-06					
		Exposure Point Total						8E-06					
	Exposure Medium Total							8E-06					
	Air	Block D - Panhandle	Benzo(a)pyrene Equivalents	--	1E-11	--	--	1E-11					
			Aroclor-1260	--	3E-13	--	--	3E-13					
			Antimony	--	- -	--	--	- -					
			Cadmium	--	9E-12	--	--	9E-12					
			Cobalt	--	2E-09	--	--	2E-09					
			Iron	--	- -	--	--	- -					
			Manganese	--	- -	--	--	- -					
			Mercury	--	- -	--	--	- -					
			Molybdenum	--	- -	--	--	- -					
			Nickel	--	1E-10	--	--	1E-10					
			Vanadium	--	- -	--	--	- -					
			Hexavalent Chromium	--	3E-09	--	--	3E-09					
			Chemical Total	--	5E-09	--	--	5E-09					
		Exposure Point Total						5E-09					
	Exposure Medium Total							5E-09					
Medium Total								8E-06					
Subsurface Soil	Subsurface Soil	Block D - Panhandle	Benzo(a)pyrene Equivalents	7E-06	--	2E-06	--	9E-06					
			Naphthalene	- -	--	- -	--	- -					
			Cobalt	- -	--	- -	--	- -					
			Iron	- -	--	- -	--	- -					
			Manganese	- -	--	- -	--	- -					
			Mercury	- -	--	- -	--	- -					
			Vanadium	- -	--	- -	--	- -					
			Hexavalent Chromium	1E-06	--	2E-06	--	3E-06					
			Chemical Total	8E-06	--	4E-06	--	1E-05					
		Exposure Point Total						1E-05					
	Exposure Medium Total							1E-05					
	Air	Block D - Panhandle	Benzo(a)pyrene Equivalents	--	2E-11	--	--	2E-11					
			Naphthalene	--	1E-07	--	--	1E-07					
			Cobalt	--	5E-09	--	--	5E-09					
			Iron	--	- -	--	--	- -					
			Manganese	--	- -	--	--	- -					
			Mercury	--	- -	--	--	- -					
			Vanadium	--	- -	--	--	- -					
			Hexavalent Chromium	--	4E-09	--	--	4E-09					
			Chemical Total	--	1E-07	--	--	1E-07					
		Exposure Point Total						1E-07					
	Exposure Medium Total							1E-07					
Medium Total								1E-05					

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

APPENDIX E—BaPEq CALCULATION

Appendix E
Calculation of Benzo(a)Pyrene Equivalent Concentrations
Block D Panhandle Remedial Action Plan
Lockheed Martin Middle River Complex
Middle River, Maryland

Polycyclic aromatic hydrocarbons (PAHs) are typically found in the environment as mixtures. These PAHs include benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene. The individual PAH vary widely in terms of carcinogenic potency, but have a common toxicity mechanism. Using a toxicity equivalency approach, the total PAH concentrations for a group or subset of similar PAHs can be expressed in terms of their toxicity relative to benzo(a)pyrene, with concentrations expressed as *benzo(a)pyrene equivalents (BaPEq).*

For sites contaminated with PAHs, using a standard subset of seven PAHs, the BaPEq is calculated as the sum of each individual PAH concentration times its toxicity equivalency factor (TEF). These TEFs for the seven standard PAHs are presented in Table E-1. For example, the TEF for benzo(a)anthracene is 0.1; this means that benzo(a)pyrene is ten times more toxic than benzo(a)anthracene. If the benzo(a)anthracene concentration in a soil sample is 10 micrograms per kilogram (µg/kg), this is equivalent to 1 µg/kg of benzo(a)pyrene [10 µg/kg (benzo(a)anthracene) x 0.1 (TEF) = 1 µg/kg (BaPEq)].

Table E-1
Toxicity Equivalency Factors (TEF) for Polycyclic Aromatic Hydrocarbons (PAHs)

PAH	TEF
Benzo(a)pyrene	1.0
Benzo(a)anthracene	0.1
Benzo(b)fluoranthene	0.1
Benzo(k)fluoranthene	0.01
Chrysene	0.001
Dibenz(a,h)anthracene	1.0
Indeno(1,2,3-c,d)pyrene	0.1

The application of benzo(a)pyrene TEFs to PAH concentrations and the subsequent calculation of BaPEq can provide a more accurate evaluation of environmental risk exposure to PAHs.

- A conservative approach to calculating BaPEq for environmental samples is performed using the product of the respective TEF's for each of the seven PAHs and a representative concentration using ***both*** positive results and ½ of the reported detection limit for non-detected values. This approach, given its conservative means of incorporating toxicity of all seven PAHs even if some are present below laboratory detection limits, has been used in the Block F risk-assessment estimations and related calculations of risk-based remedial goals. The

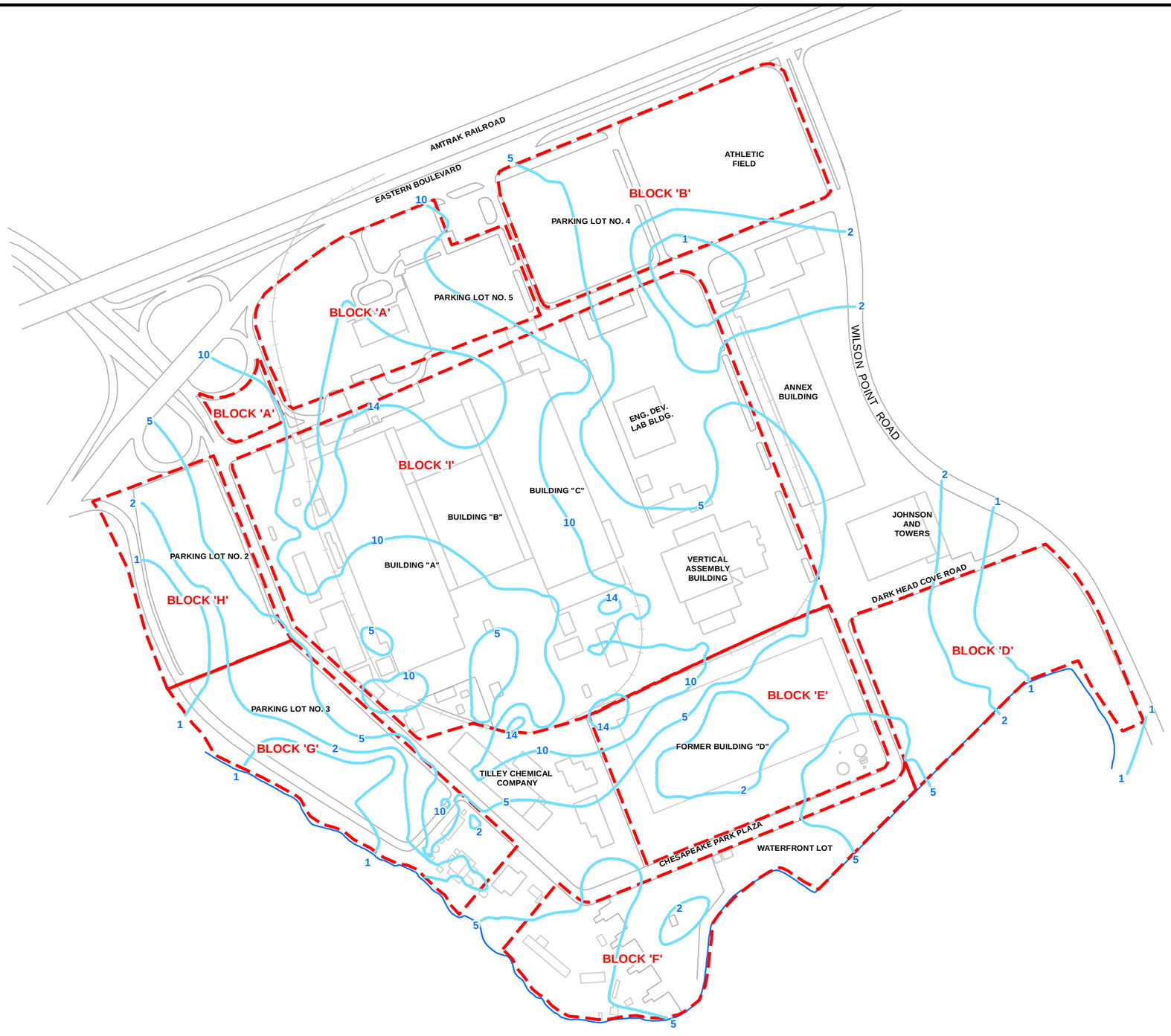
resulting BaPEq values estimated using this method are referred to as "BaPEq-Half ND" when used in risk calculations or reported in data tables and figures.

- Alternatively, sample calculations for BaPEq may be performed using ***only*** positive results as the product of the reported analyte concentrations and the respective TEF's for each of the seven reported PAHs. Non detected results within a given sample are entirely ignored and only positively reported concentrations are considered for use in summation when this latter calculation method is employed. This calculated value, referred to as "BaPEq-POS", has typically been used in reporting data from Block F for the purposes of presenting and screening data.

The reported concentration of the benzo(a)pyrene detection limit is used as the default representative value of the BaPEq in cases where ***all*** of the seven PAHs are reported as non-detected results.

Currently, there are only seven PAHs which are included in the calculation of the BaPEq. It is expected the United States Environmental Protection Agency will be adding additional PAHs to the calculation process likely beginning sometime in 2013.

APPENDIX F—BLOCK D PANHANDLE DEPTH-TO-WATER CONTOURS



APPENDIX F

GROUNDWATER DEPTH CONTOUR MAP
MIDDLE RIVER COMPLEX

LEGEND

- GROUNDWATER DEPTH CONTOUR - FEET BELOW GRADE; CONTOURS ARE FOR 1, 2, 5, 10 AND 14 FEET BELOW GRADE
- MIDDLE RIVER COMPLEX TAX BLOCK BOUNDARY
- STRUCTURE
- RAILROAD TRACKS

Depths are based on average depths for two rounds of water levels obtained from monitoring wells in 2011. Actual depths may vary based on site specific conditions, recent precipitation, or drought conditions. Groundwater may be shallower if perched water is present and is not monitored by nearby well screens. First encountered groundwater may be deeper in areas where a confining clay layer is present.

Lockheed Martin, Middle River Complex
Middle River, Maryland

0 150 300 600 Feet

N

DATE MODIFIED: 3/13/12

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\Middle River Groundwater Contour Average Depth_2011.mxd) 3/13/2012 -- 11:39:08 AM

APPENDIX G—*SITEWISE*™ INFORMATION

APPENDIX G

Environmental Footprint Evaluation
Feasibility Study
Block D Panhandle
Middle River, Maryland
July 2013

OBJECTIVE

This Environmental Footprint Evaluation of remedial alternatives is provided as an Appendix to the Remedial Action Plan (RAP) for Block D Panhandle, located at Middle River Complex in Middle River, MD. The purpose of the footprint evaluation is to assess the environmental impacts of the four remedial alternatives using the metrics of greenhouse gas (GHG) and criteria pollutant emissions, energy use, water consumption, and worker safety. The results of this footprint evaluation are intended to provide additional information for consideration during remedy selection, design, and to enhance the understanding of the environmental impacts throughout the remedy life-cycle for each of the proposed alternatives.

POLICY BACKGROUND

The environmental footprint evaluation was performed in accordance with the Lockheed Martin Corporation (Lockheed Martin) Remedy Selection Process Manual.

Applying optimization concepts with an environmental footprint evaluation within the remedy selection and design phases allows for the following benefits:

- Determining factors in each remedial alternative with the greatest environmental impacts and gathering insight into how to reduce these impacts;
- Evaluating remedial alternatives with optimized or reduced environmental footprints in conjunction with other selection criteria;
- Designing and implementing a more robust remedy while balancing the impact to the environment; and
- Ensuring efficient, cost-effective and sustainable site closeout.

EVALUATION TOOLS

This evaluation was performed using a hybrid model of the Navy's SiteWise™ tool supplemented with Tetra Tech developed model as appropriate for some site-specific items.

SiteWise™ is a life-cycle footprint assessment tool developed jointly by the U.S. Navy, U.S. Army Corps of Engineers (USACE), and Battelle. SiteWise™ assesses the environmental footprint of a remedial alternative/technology using a consistent set of metrics. The assessment is conducted using a building block approach, where each remedial alternative is first broken down into modules that follow the phases

for most remedial actions, including remedial investigation (RI), remedial action construction (RA-C), remedial action operation (RA-O), and long-term monitoring (LTM). Once broken down by remedial phase, the footprint of each phase is calculated. The phase-specific footprints are then combined to estimate the overall footprint of the remedial alternative. This building block approach reduces redundancy in the footprint assessment and facilitates the identification of specific impact drivers that contribute to the environmental footprint. The inputs that need to be considered include (1) production of material required by the activity; (2) transportation of the required materials to the site, transportation of personnel; (3) all site activities to be performed; and (4) management of the waste produced by the activity.

GSRx builds off of SiteWise™ and allows for a flexible, detailed analysis, particularly for materials and equipment use. GSRx was used to account for materials and activities not readily input into SiteWise™ and where equipment usage assumptions built into SiteWise™ were not consistent with site-specific requirements.

ENVIRONMENTAL FOOTPRINT EVALUATION FRAMEWORK AND LIMITATIONS

The environmental footprint evaluation performed for the Dump Road Area FS considered life-cycle quantitative metrics for global warming potential (through greenhouse gas emissions), criteria air pollutant emissions (through nitrogen oxides [NO_x], sulfur oxides [SO_x] and particulate matter [PM_{10}] emissions), energy consumption, water usage, and worker safety.

Life cycle impacts were calculated for energy consumption, emissions of GHG (carbon dioxide [CO_2], methane [CH_4], and nitrous oxide [N_2O]) and criteria pollutants (NO_X, SO_X and PM_{10}), water usage, and energy consumption, and worker safety.

Life cycle inventory inputs in SiteWise™ were divided into four categories – 1) materials production; 2) transportation of personnel, materials and equipment; 3) equipment use and miscellaneous; and 4) residual handling and disposal. Cost estimates from the RAP and design calculations were used as a basis for inventory quantities and related assumptions. Emission factors, energy consumption, and water usage data were correlated to material quantities, equipment, transportation distances, and installation time frames in order to calculate life-cycle emissions, energy consumption, water usage, and worker safety. Default SiteWise™ emission, energy usage, water consumption, and worker fatality and accident risk factors were utilized.

Although GSRx was used to minimize limitations resulting within SiteWise™, elimination of all limitations was not possible while using a hybrid model of SiteWise™ and GSRx. For example, several materials and construction equipment inventoried were input into GSRx and these impacts were incorporated into SiteWise™ within the “Equipment Use and Miscellaneous” sector. This sector in SiteWise™ does not

differentiate into the specific equipment usage or material consumption items that are input in GSRx, but rather are considered miscellaneous items. However, impact drivers for items input in GSRx can be identified and evaluated directly within the respective GSRx evaluation and output summary sheets. In addition, worker safety results in general do not include worker safety related to equipment usage that was input within GSRx because GSRx was not developed to evaluate worker safety.

EVALUATION RESULTS:

The following are the alternatives that were analyzed with SiteWise™ and GSRx for the Block D Panhandle RAP:

- Alternative 3: Excavation and off-site disposal of impacted soils to a depth of two feet and institutional controls
- Alternative 4: Excavation and off-site disposal of impacted soils to the groundwater table and institutional controls
- Alternative 5: Asphalt removal and soil cover over impacted areas and institutional controls
- Alternative 6: Enhanced bioremediation of impacted surface soils and institutional controls
- Alternative 7: In situ stabilization of impacted soils to the groundwater table and institutional controls

The following sections summarize the relative environmental impacts and primary impact drivers for the four alternatives and their respective metrics. In addition, the attachment includes the inventory and output sheets that were used for the SiteWise™/GSRx hybrid model. An evaluation of SiteWise™ and GSRx output summary sheets and related figures included in the footprint evaluation attachments (Appendix G-2 and G-3), provides detailed information on the contribution to each metric from each phase of the remedial process (RI, RAC, RAO, and LTM) and for each respective input category (materials production, transportation, equipment usage, etc.). Further inspection of related inventory sheets provide information on the specific contribution to a metric from each item of material, transportation, equipment, etc. This level of detail also helps clarify results that could be misinterpreted based on SiteWise™ data entry limitations mentioned previously. The environmental impacts of the alternatives analyzed are summarized quantitatively in Table G-1.

Greenhouse Gas Emissions

Emissions of CO_2, CH_4, and N_2O were normalized to CO_2 equivalents (CO_2e), which is a cumulative method of weighing GHG emissions relative to global warming potential. Figure G1 shows the overall GHG emissions of each of the alternatives analyzed; the x-axis represents the four alternatives evaluated and the y-axis represents the GHG emissions in metric ton of CO_2e.

The total amount of GHG emissions released to the atmosphere resulting from the activities during Alternative 3 is 50.72 metric tons of CO_2e.

The total amount of GHG emissions released to the atmosphere resulting from the activities during Alternative 4 is 57.60 metric tons of CO_2e.

The total amount of GHG emissions released to the atmosphere resulting from the activities during Alternative 5 is 135.03 metric tons of CO_2e.

The total amount of GHG emissions released to the atmosphere resulting from the activities during Alternative 6 is 29.96 metric tons of CO_2e.

The total amount of GHG emissions released to the atmosphere resulting from the activities during Alternative 7 is 118.19 metric tons of CO_2e.

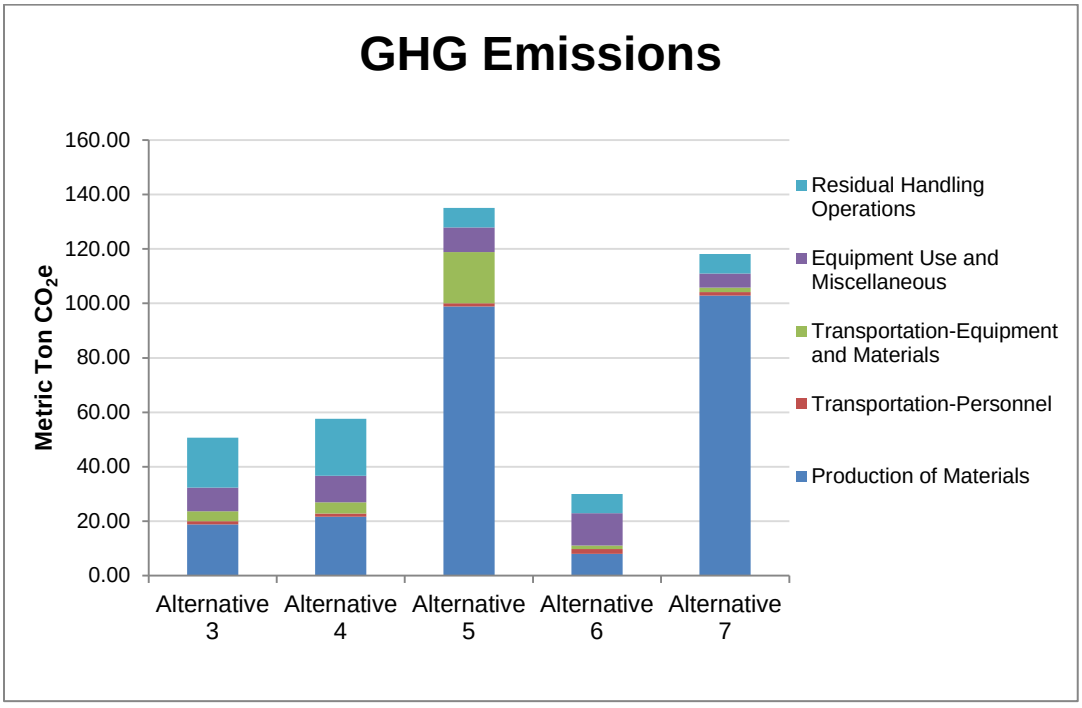


Figure G1: GHG Emissions for Alternatives at Block D Panhandle, Middle River Complex

Figure G2 shows the breakdown of the percent that each of main activities of each alternative (x-axis) contributes to the GHG emissions (y-axis).

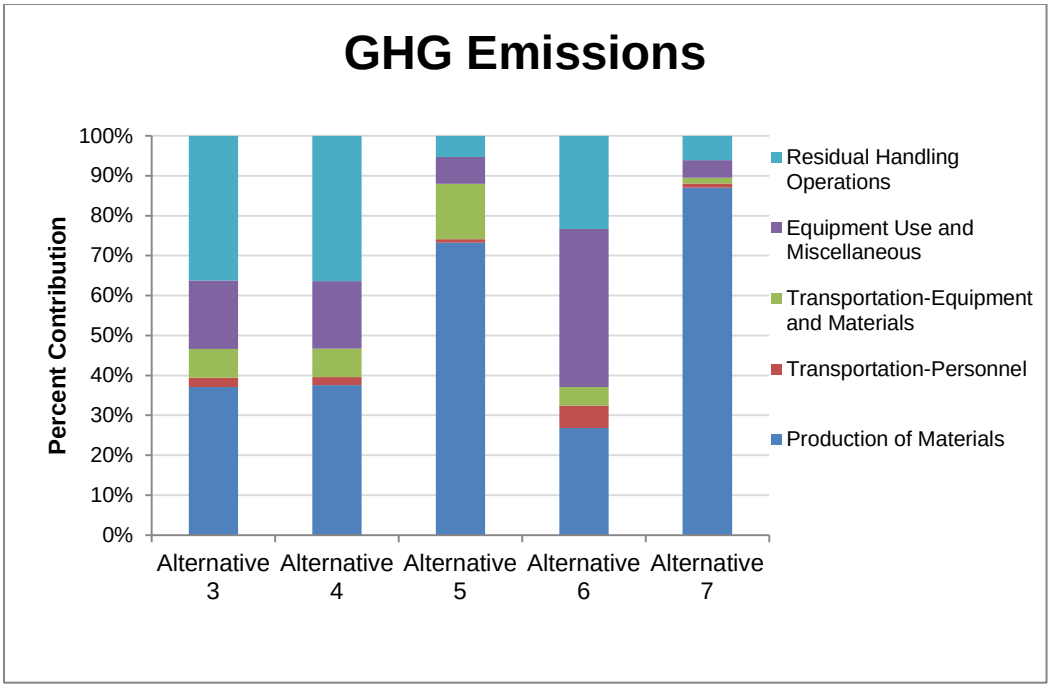


Figure G2: GHG Emissions percentage breakdown for Alternatives at Block D Panhandle, Middle River Complex

Criteria Pollutant Emissions

NO_X

Figure G3 shows the breakdown of the NO_X emissions for the four alternatives evaluated. The x–axis of this figure represents the eight alternatives evaluated; the y-axis represents the NO_X emissions in metric ton.

The total amount of NO_X released to the atmosphere resulting from the activities during Alternative 3 is 0.063 metric ton of NO_X.

The total amount of NO_X released to the atmosphere resulting from the activities during Alternative 4 is 0.071 metric ton of NO_X.

The total amount of NO_X released to the atmosphere resulting from the activities during Alternative 5 is 0.066 metric ton of NO_X.

The total amount of NO_X released to the atmosphere resulting from the activities during Alternative 6 is 0.085 metric ton of NO_X.

The total amount of NO_X released to the atmosphere resulting from the activities during Alternative 7 is 0.035 metric ton of NO_X.

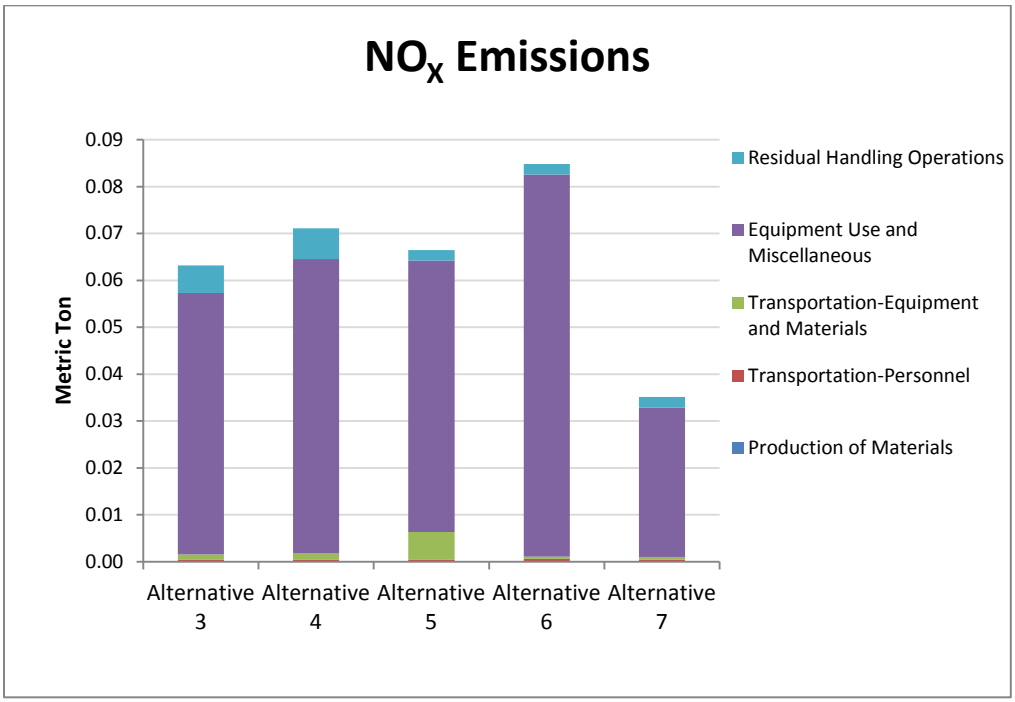


Figure G3 NO_X Emissions for Proposed Alternatives at Block D Panhandle, Middle River Complex

Figure G4 shows the percentage contribution from each of the main activity sectors.

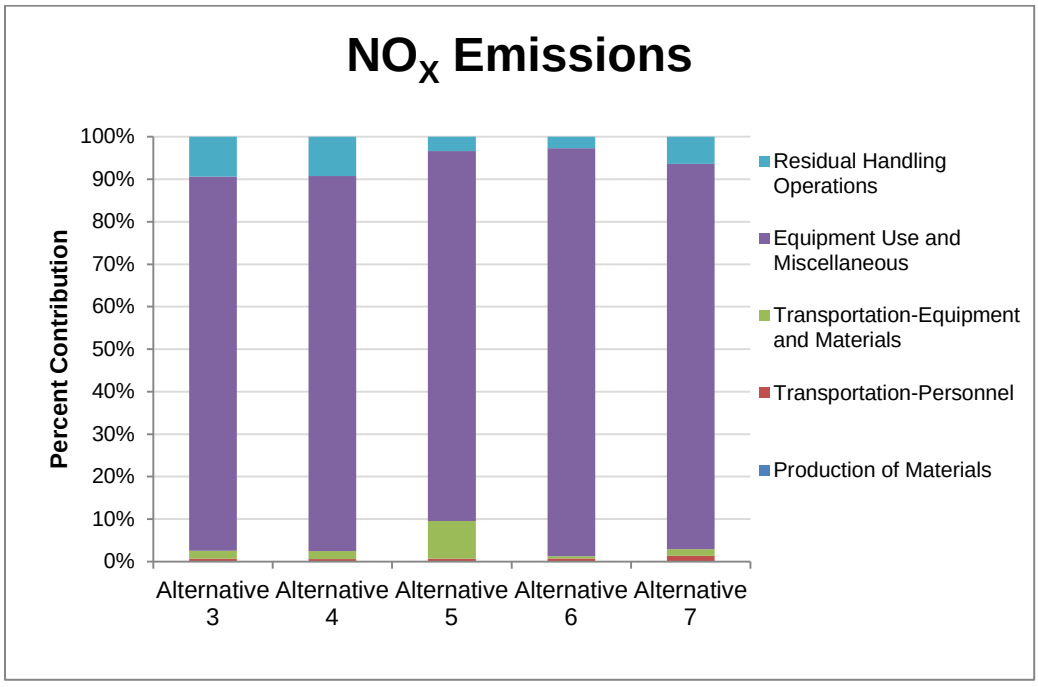


Figure G4: NO_X Emissions percentage breakdown for Alternatives at Block D Panhandle, Middle River Complex

SO_X

Figure G5 contains the distribution of the SO_X emissions resulting from the activities related to all proposed Alternatives. The x-axis of this graph represents the four Alternatives evaluated; the y-axis represents the SO_X emissions in metric ton.

The total amount of SO_X released to the atmosphere resulting from the activities during Alternative 3 is 0.017 metric ton of SO_X.

The total amount of SO_X released to the atmosphere resulting from the activities during Alternative 4 is 0.020 metric ton of SO_X.

The total amount of SO_X released to the atmosphere resulting from the activities during Alternative 5 is 0.018 metric ton of SO_X.

The total amount of SO_X released to the atmosphere resulting from the activities during Alternative 6 is 0.014 metric ton of SO_X.

The total amount of SO_X released to the atmosphere resulting from the activities during Alternative 7 is 0.013 metric ton of SO_X.

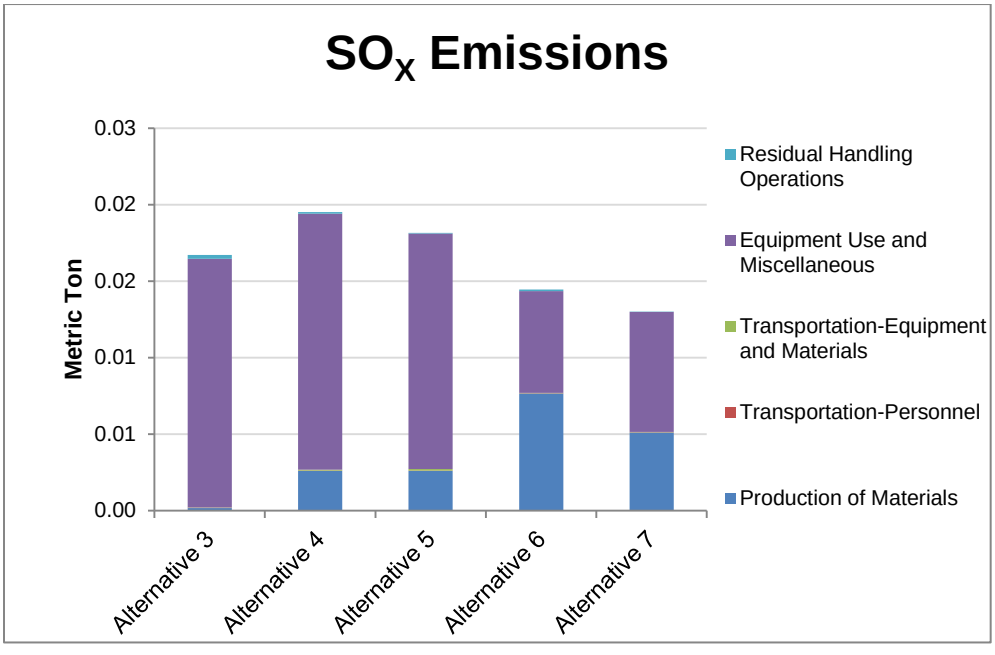


Figure G5: SO_X Emissions for Alternatives at Block D Panhandle, Middle River Complex

Figure G6 shows the percentage breakdown of the activities contributing to SO_X emissions.

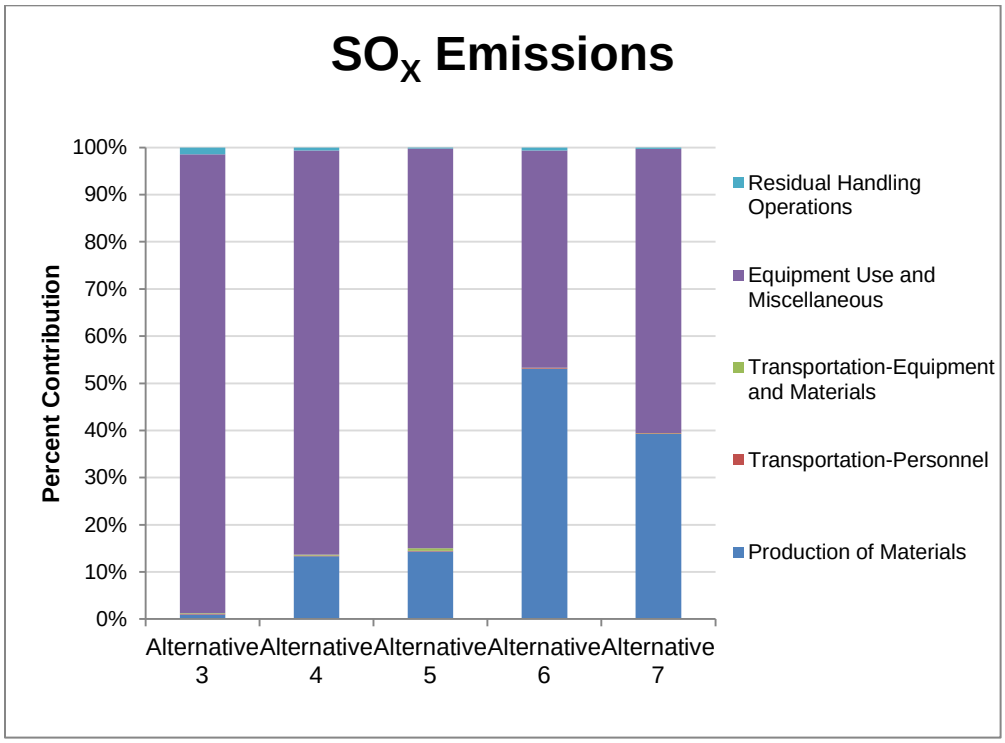


Figure G6: SO_X Emissions percentage breakdown for Alternatives at Block D Panhandle, Middle River Complex

PM_{10}

The breakdown of the distribution of the PM_{10} emissions resulting from the activities involved in the Alternatives is shown in Figure G7. The x-axis of this figure represents the four Alternatives evaluated, while the y-axis represents the PM_{10} emissions in metric ton.

The total amount of PM_{10} released to the atmosphere resulting from the activities during Alternative 3 is 0.008 metric ton of PM_{10}.

The total amount of PM_{10} released to the atmosphere resulting from the activities during Alternative 4 is 0.010 metric ton of PM_{10}.

The total amount of PM_{10} released to the atmosphere resulting from the activities during Alternative 5 is 0.009 metric ton of PM_{10}.

The total amount of PM_{10} released to the atmosphere resulting from the activities during Alternative 6 is 0.009 metric ton of PM_{10}.

The total amount of PM_{10} released to the atmosphere resulting from the activities during Alternative 7 is 0.008 metric ton of PM_{10}.

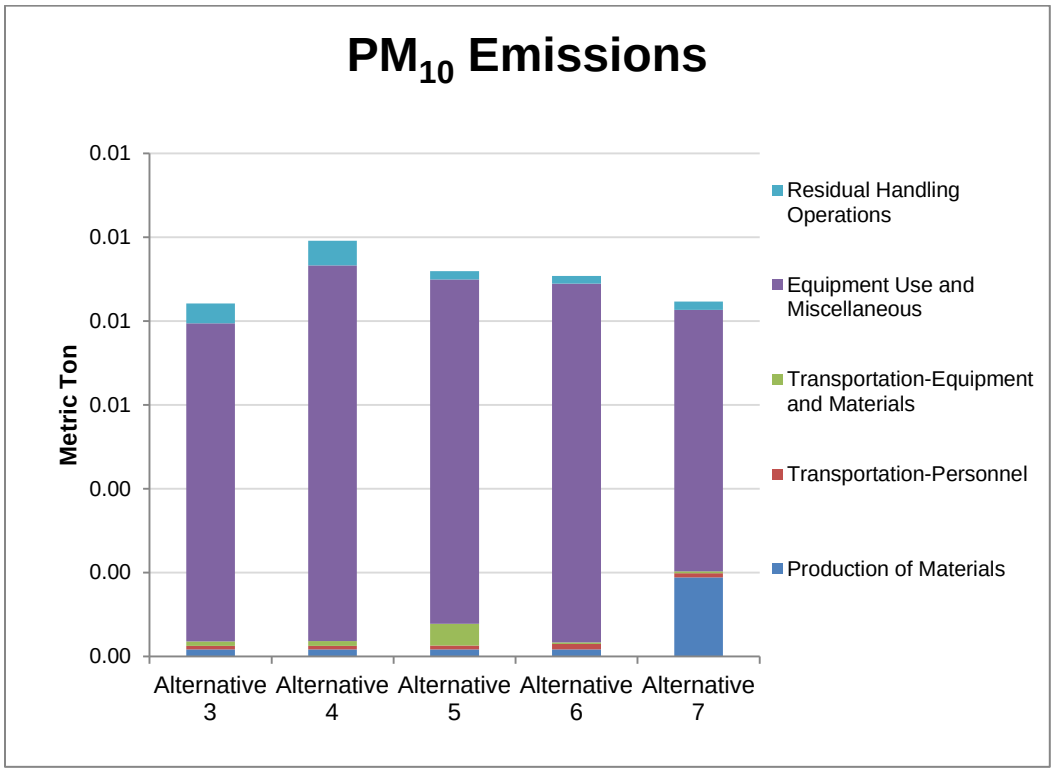


Figure G7: PM_{10} Emissions for Alternatives at Block D Panhandle, Middle River Complex

Figure G8 shows the percentage of PM_{10} emissions contributed by each of the activity sectors per alternative.

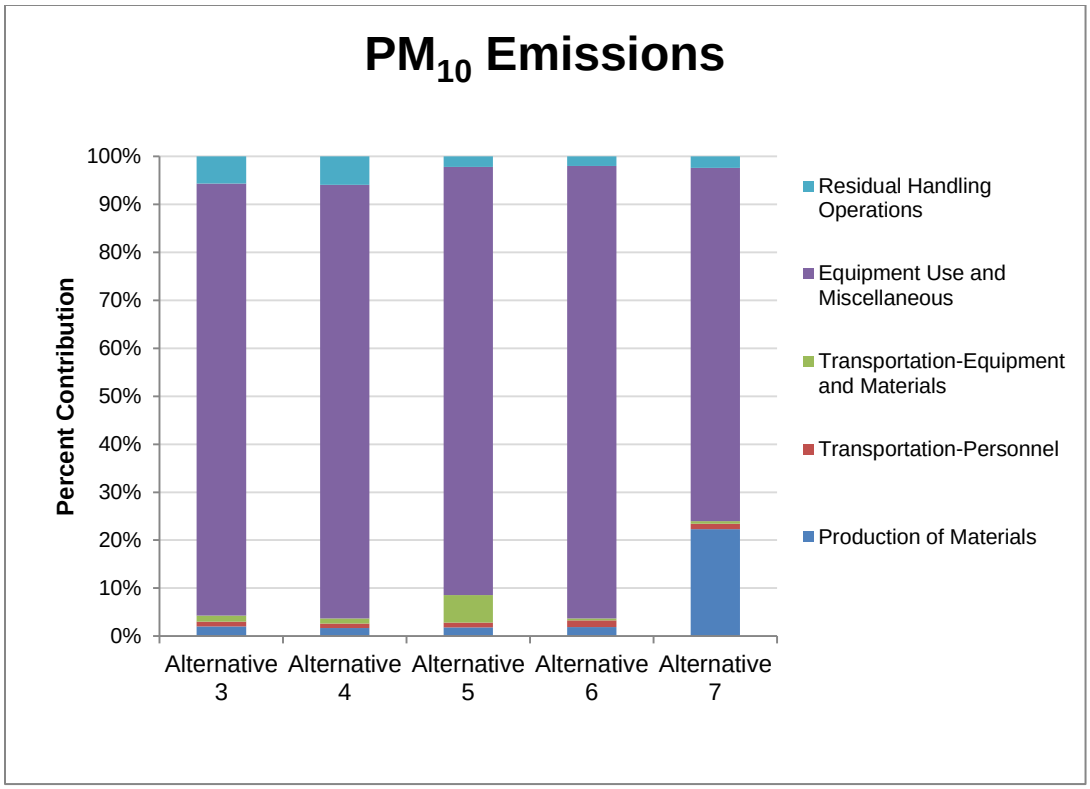


Figure G8: PM_{10} Emissions percentage breakdown for Alternatives at Block D Panhandle, Middle River Complex

Energy Consumption

The energy consumption for each of the alternatives evaluated is shown in Figure G9. The x-axis shows the four alternatives evaluated, and the y-axis shows the amount of energy consumed in units of million British Thermal Units (MMBTU).

The total amount of energy used resulting from the activities during Alternative 3 is 2,014 MMBTU.

The total amount of energy used resulting from the activities during Alternative 4 is 2,295 MMBTU.

The total amount of energy used resulting from the activities during Alternative 5 is 9,270 MMBTU.

The total amount of energy used resulting from the activities during Alternative 6 is 1,046 MMBTU.

The total amount of energy used resulting from the activities during Alternative 7 is 2,968 MMBTU.

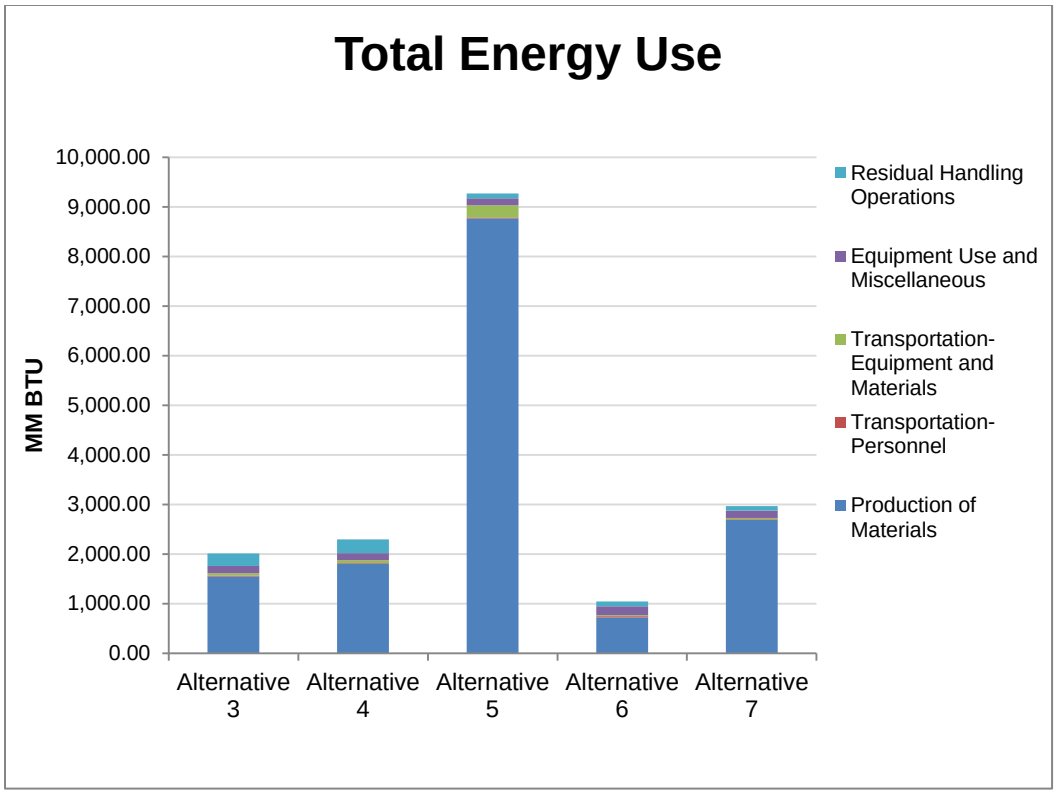


Figure G9: Energy Consumption for Alternatives at Block D Panhandle, Middle River Complex

Figure G10 shows the percentage breakdown contribution of energy consumption from the different activity groups.

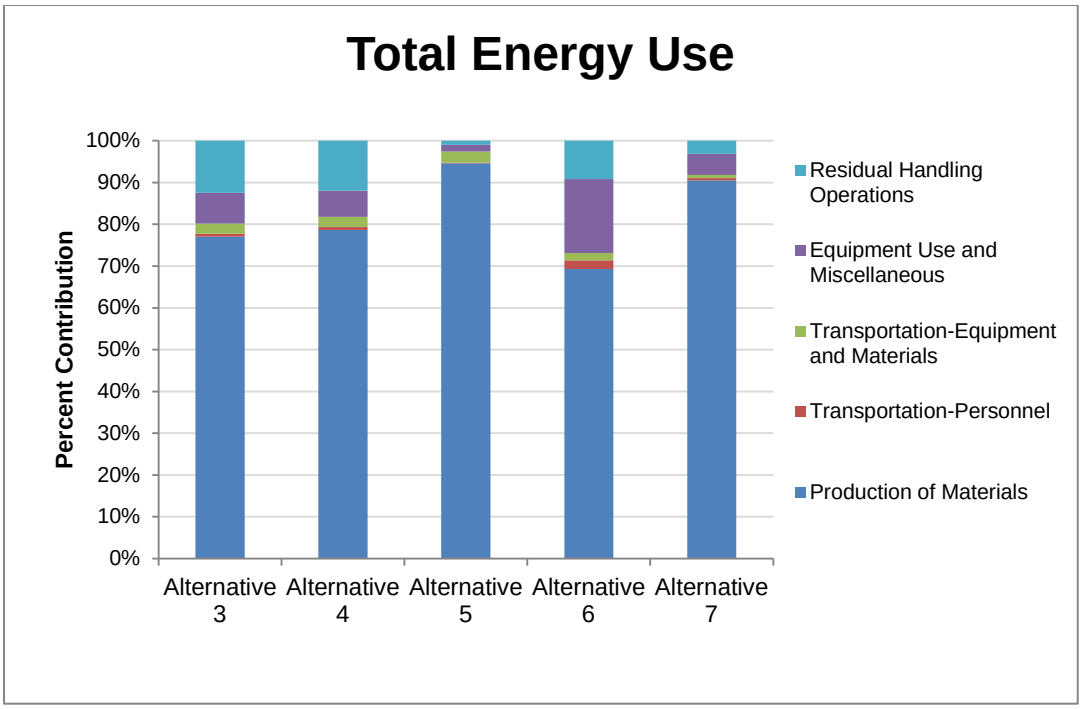


Figure G10: Energy Consumption percentage breakdown for Alternatives at Block D Panhandle, Middle River Complex

Water Usage

The water consumption of the evaluated alternatives is shown in Figure G11. The x-axis shows the five evaluated alternatives, and the y-axis show the amount of water consumed in thousands of gallons.

The total amount of water resulting from the activities during Alternative 3 is 374 gallons of water. The activity that has the highest water consumption during Alternative 3 is the production of the fertilizer for the site restoration.

The total amount of water resulting from the activities during Alternative 4 is 374 gallons of water. The activity that has the highest water consumption during Alternative 4 is the production of the fertilizer for the site restoration.

The total amount of water resulting from the activities during Alternative 5 is 374 gallons of water. The activity that has the highest water consumption during Alternative 5 is the production of the fertilizer for the site restoration.

The total amount of water resulting from the activities during Alternative 6 is 69,082 gallons of water. The activity that has the highest water consumption during Alternative 6 is the production of vegetable oil, to be used as amendment during treatment stage.

The total amount of water use resulting from the activities during Alternative 7 is 23,354 gallons of water. The activity that has the highest water consumption during Alternative 7 is water added to the stabilization agent.

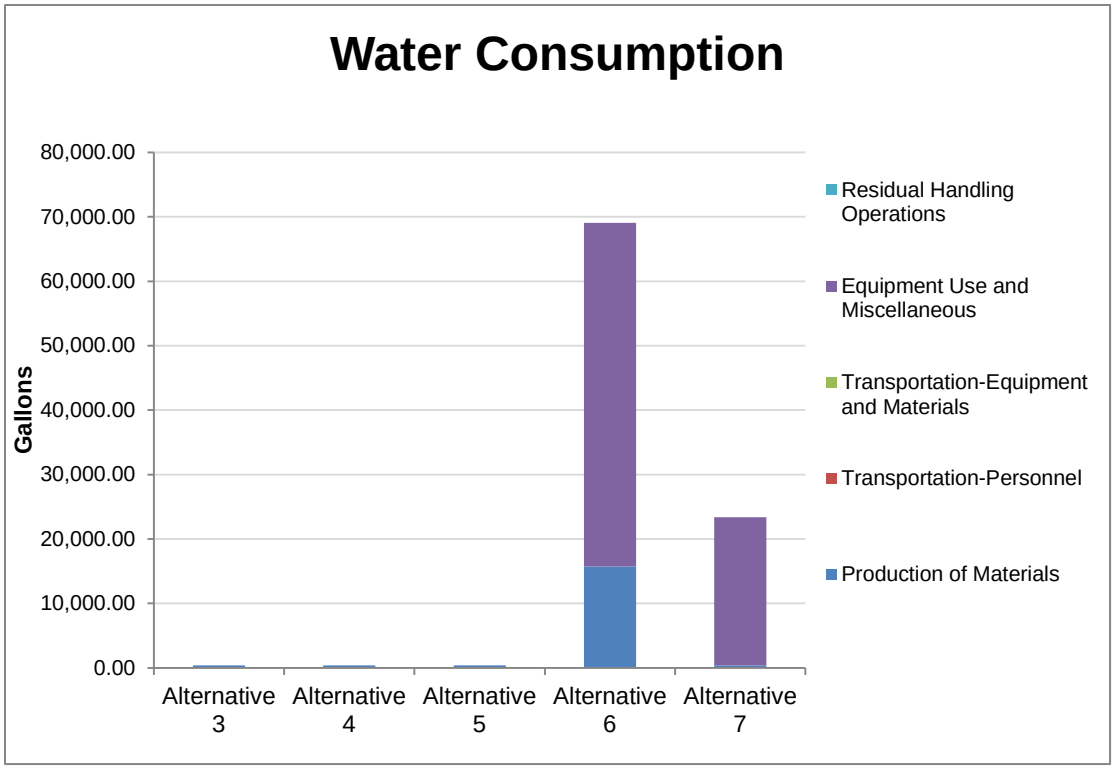


Figure G11: Water Consumption for Alternatives at Block D Panhandle, Middle River Complex

Figure G12 has a representation of the percentage breakdown of the contribution of the different sectors of the water use through the lifetime of the alternatives.

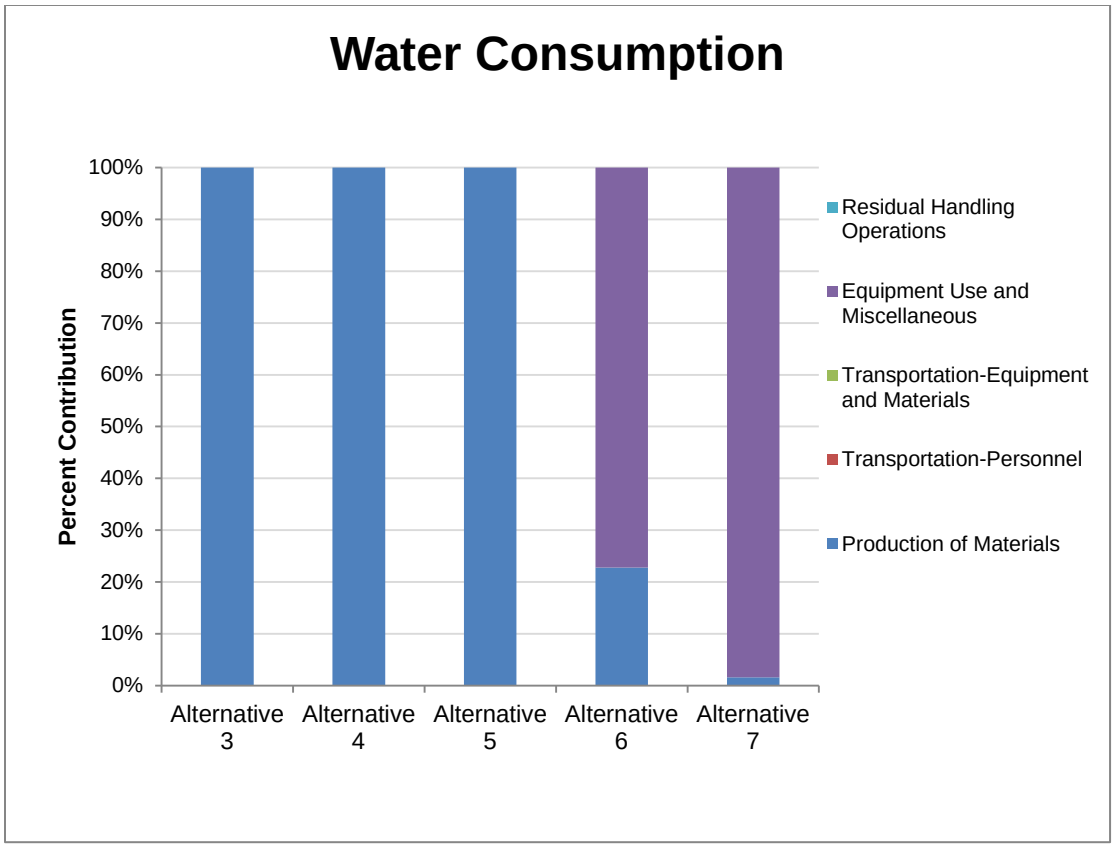


Figure G12: Water Consumption percentage breakdown for Alternatives at Block D Panhandle, Middle River Complex

Accident Risk

Accident Risk Fatality

Figure G13 shows the risk of fatality between the evaluated alternatives. The x-axis represents the four alternatives evaluated, and the y-axis represents the risk of fatality.

For Alternative 3, the activity with the highest risk of fatality is the transportation of personnel, followed by equipment use.

For Alternative 4, the activity with the highest risk of fatality is transportation of equipment, followed by transportation of personnel.

For Alternative 5, the activity with the highest risk of fatality is the equipment use, followed by transportation of personnel.

For Alternative 6, the activity with the highest risk of fatality is the equipment use, followed by residual handling.

For Alternative 7, the activity with the highest risk of fatality is the equipment use, followed by transportation of personnel.

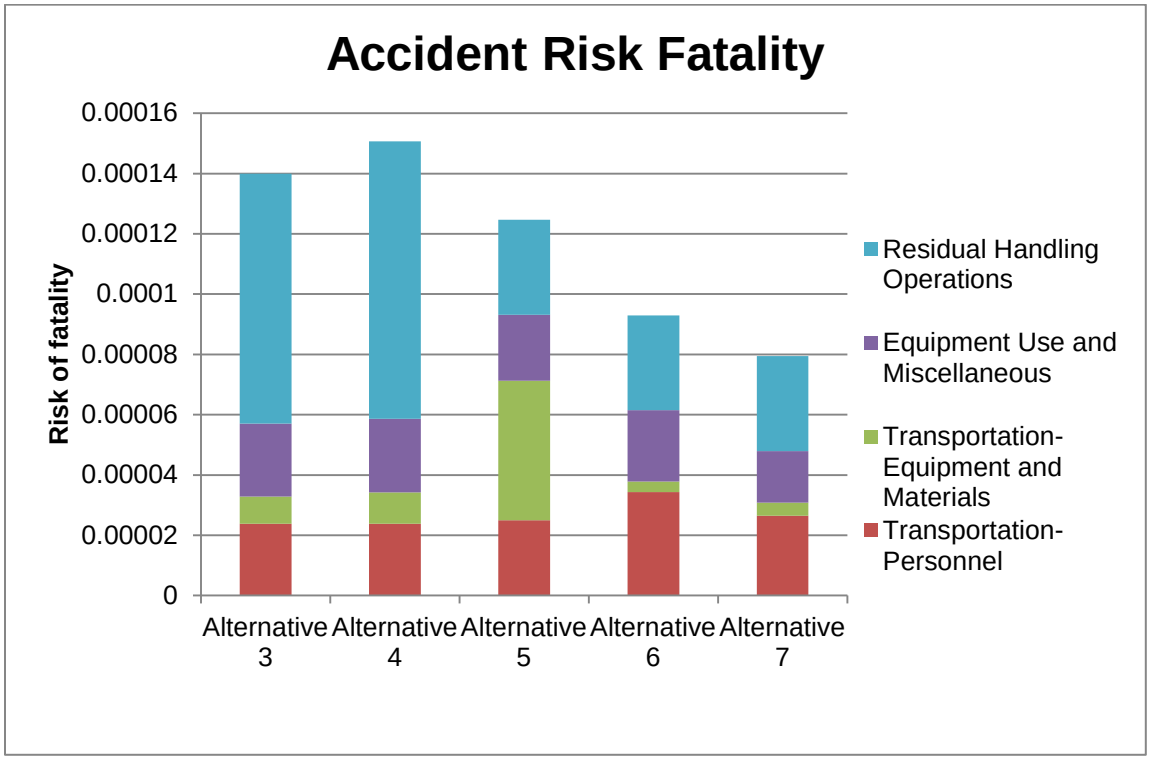


Figure G13 Risk of Fatality for Alternatives at Block D Panhandle, Middle River Complex

Accident Risk Injury

Figure G14 shows the risk of injury between the evaluated alternatives. The x-axis represents the four alternatives evaluated, and the y-axis represents the risk of injury.

For Alternative 3, the activity with the highest risk of injury is the transportation of personnel, followed by the equipment use.

For Alternative 4, the activity with the highest risk of injury is the transportation of personnel followed by equipment use.

For Alternative 5, the activity with the highest risk of injury is the transportation of personnel, followed by the transportation of equipment.

For Alternative 6, the activity with the highest risk of injury is the transportation of personnel, followed by the transportation of equipment.

For Alternative 7, the activity with the highest risk of injury is the transportation of personnel, followed by the residual handing operations.

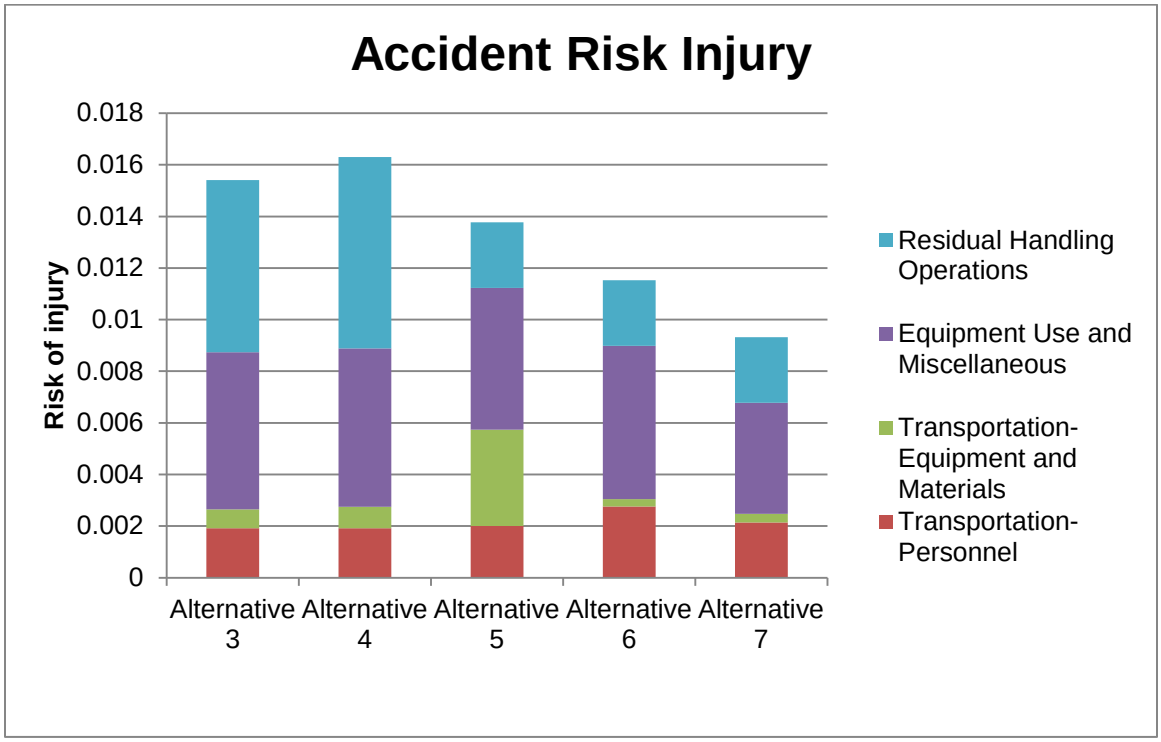


Figure G14 Risk of Injury for Alternatives at Block D Panhandle, Middle River Complex

CONCLUSIONS AND RECOMMENDATIONS

During selection and design of the remedy, a sensitivity analysis considering elements of the remedy that have the greatest impact on remedy effectiveness, life-cycle cost, and environmental footprint metrics may provide additional insight into appropriate optimization. To aid in the sensitivity analysis, an impact analysis summary was created to qualitatively highlight the relative impact of respective metrics for the alternatives (see Table G-2).

Figures G2, G4, G6, G8, G10 and G12 show the percentage breakdown of each of the sectors that take place during the remedial alternatives. In these graphs, it is easy to identify the sector whose contribution is largest from all other sectors to that impact category. An advantage to identifying where the large contributions are the optimization process for lowering the environmental impacts is faster and could be more efficient.

Measures identified in the evaluation that may reduce the environmental footprint of the alternatives are listed below for consideration.

- All Alternatives: Consider the use of alternative transportation of wastes (if possible) to transport such material to the disposal facilities.
- Alternatives 3, 4, and 5: Consider optimization of the amount of soil that needs to be used as backfill. The amount of soil used during these Alternatives is one of the main drivers of the environmental metrics.
- All Alternatives: Consider a more efficient mode of transportation of materials such as rail. Consider an optimization schedule in order to take advantage to transport materials to the site the best way possible.
- All Alternatives: Some reduction of the environmental footprint, particularly air emissions, could be obtained for all alternatives through the possible use of emission control measures such as alternate fuel sources (e.g. biodiesel), equipment exhaust controls (e.g. diesel), and equipment idle reduction.
- Alternative 6: Consider the optimization of the amount of amendments used during the treatment stage.
- Alternative 7: Consider optimization of the amount of stabilizing chemicals during the treatment stage.
- All Alternatives: Consider optimizing of the use of equipment, particularly the use of the excavators, and even the type of equipment used during operations. An optimized operation schedule might be able to reduce the environmental impacts, specially the NO_X emissions.
- All Alternatives: Optimize the number of samples analyzed for disposal and quality purpose.
- All Alternatives: Consider ways to reduce vehicle mileage to reduce worker risk as well as energy use and emissions. Encourage site workers to carpool daily to the site to reduce total vehicle mileage.

Table G1
Environmental Footprint Evaluation Results
Block D Panhandle, Middle River Complex
Middle River, MD

Alternative	Activities	GHG Emissions	Total Energy Used	Water Impacts	NO_X Emissions	SO_X Emissions	PM_{10} Emissions	Accident Risk Fatality	Accident Risk Injury
		metric ton CO_2e	MMBTU	gallons	metric ton	metric ton	metric ton		
Alternative 3	Materials Production	18.821	1552.024	373.778	3.89E-07	1.70E-04	1.70E-04	NA	NA
	Transportation-Personnel	1.162	14.621	NA	4.30E-04	1.51E-05	8.72E-05	2.38E-05	1.91E-03
	Transportation-Equipment	3.665	47.836	NA	1.15E-03	2.04E-05	1.02E-04	9.07E-06	7.30E-04
	Equpiment Use and Misc	8.688	148.144	0.000	5.57E-02	1.63E-02	7.59E-03	2.42E-05	6.09E-03
	Residual Handling	18.381	251.820	NA	5.92E-03	2.41E-04	4.80E-04	8.29E-05	6.67E-03
	Total	50.718	2014.446	373.778	0.063	0.017	0.008	0.000	0.015
Alternative 4	Materials Production	21.638	1805.961	373.778	3.89E-07	2.61E-03	1.70E-04	NA	NA
	Transportation-Personnel	1.162	14.621	NA	4.30E-04	1.51E-05	8.72E-05	2.38E-05	1.91E-03
	Transportation-Equipment	4.107	55.833	NA	1.32E-03	4.89E-05	1.08E-04	1.04E-05	8.36E-04
	Equpiment Use and Misc	9.731	145.106	0.000	6.28E-02	1.67E-02	8.97E-03	2.44E-05	6.14E-03
	Residual Handling	20.962	273.609	NA	6.59E-03	1.17E-04	5.86E-04	9.21E-05	7.41E-03
	Total	57.600	2295.130	373.778	0.071	0.020	0.010	0.000	0.016
Alternative 5	Materials Production	98.873	8769.951	373.778	3.89E-07	2.61E-03	1.70E-04	NA	NA
	Transportation-Personnel	1.220	15.340	NA	4.51E-04	1.59E-05	9.15E-05	2.50E-05	2.01E-03
	Transportation-Equipment	18.705	244.131	NA	5.88E-03	1.04E-04	5.23E-04	4.63E-05	3.73E-03
	Equpiment Use and Misc	9.068	147.228	0.000	5.79E-02	1.54E-02	8.21E-03	2.19E-05	5.50E-03
	Residual Handling	7.168	93.561	NA	2.25E-03	3.99E-05	2.00E-04	3.15E-05	2.54E-03
	Total	135.034	9270.210	373.778	0.066	0.018	0.009	0.000	0.014
Alternative 6	Materials Production	8.045	725.527	15732.172	3.89E-07	7.67E-03	1.72E-04	NA	NA
	Transportation-Personnel	1.677	21.092	NA	6.20E-04	2.19E-05	1.26E-04	3.43E-05	2.76E-03
	Transportation-Equipment	1.391	18.759	NA	4.45E-04	1.48E-05	3.72E-05	3.50E-06	2.82E-04
	Equpiment Use and Misc	11.861	185.473	53350.000	8.15E-02	6.65E-03	8.56E-03	2.36E-05	5.94E-03
	Residual Handling	6.989	95.743	NA	2.25E-03	9.18E-05	1.82E-04	3.15E-05	2.54E-03
	Total	29.962	1046.594	69082.172	0.085	0.014	0.009	0.000	0.012
Alternative 7	Materials Production	102.817	2687.886	373.778	6.81E-07	5.11E-03	1.89E-03	NA	NA
	Transportation-Personnel	1.296	16.298	NA	4.79E-04	1.69E-05	9.72E-05	2.65E-05	2.13E-03
	Transportation-Equipment	1.701	22.776	NA	5.42E-04	1.62E-05	4.59E-05	4.27E-06	3.44E-04
	Equpiment Use and Misc	5.206	148.200	22980.000	3.19E-02	7.84E-03	6.24E-03	1.71E-05	4.30E-03
	Residual Handling	7.168	93.561	NA	2.25E-03	3.99E-05	2.00E-04	3.15E-05	2.54E-03
	Total	118.189	2968.720	23353.778	0.035	0.013	0.008	0.000	0.009

Table G2
Environmental Impact Drivers
Block D Panhandle, Middle River Complex
Middle River, MD

Alternatives	GHG Emsissions	Energy Use	Water Consumption	NO_X Emissions	SO_X Emissions	PM_{10} Emissions	Risk of injury	Risk of fatality
Alternative 3	Low to moderate	Low to moderate	Low	Moderate to high	High	High	High	High
Alternative 4	Moderate	Low to moderate	Low	High	High	High	High	High
Alternative 5	High	High	Low	Moderate to high	High	High	High	High
Alternative 6	Low to moderate	Low	High	High	Moderate to high	High	Moderate to high	Moderate to high
Alternative 7	High	Low to moderate	Low to moderate	Moderate	Moderate to high	High	Moderate	Moderate

APPENDIX H—TOTAL COST ANALYSIS

Alternative 2. Institutional Controls DATE: _____April 2013_____

LEVEL OF ESTIMATE: Screening ☐ or Detailed □ **DISCOUNT RATE:** 7% **ESCALATION RATE**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1										Cost in Current Dollars (Add costs that have been distributed over 45 years)			Cost in NPV Dollars (NPV costs that have been distributed over 45 years)				Years[1]								
2	Element	Description (Explain Element as necessary)			Qty	Units (Select as appropriate)	$/Unit	Cost Extension $ (F x H)		Implementation	OM&M	Closure	TOTAL (O+P+Q)	Implementation	OM&M	Closure	1	2	3	4	5	6	7	8	9
3	**Remedial Design**																Note: Make sure there are no blanks in these cells. All should be filled with equations								
4	Bench/Pilot Testing	n/a				LS or V		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Field Investigation				0	LS or UC and LOE		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
6	Modeling	n/a			0	LS		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
7	Reporting/Deliverables				0	LS		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
8	Total Remedial Design Effort (Alternative to above sub-topics)				15%	%	Of Remedy Implementation (Excluding NRDs)			$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
9	**Subtotal**							**$0.000**		**$0.000**			**$0**	**$0**			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
10	**Remedy Implementation**																Note: Make sure there are no blanks in these cells. All should be filled with equations								
11	Mobilization				1	LS or %		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
12	Implementation					V or UC		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
13	Deed restrictions and legal/administrative costs				1	LS	$105,440	$105,440		$105,440			$105,440	$105,440			$105,440								
14	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			1	LS or LOE		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Sale Tax	Maryland sales tax (6%) applied to Remedy Implementation			1	LS or LOE		$0		$0			$0	$0			$0								
16	Third Party Payments					UC		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
17	Bonds	2%			1	%		$0		$0			$0	$0			$0								
18	Insurance	0.50%			1	%		$0		$0			$0	$0			$0								
19	NRDs					LS		$0		$0			$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0
20	**Subtotal**							**$105,440**		**$105,440**			**$105,440**	**$105,440**			**$105,440**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
21	**OM&M**					**Annual**											Note: Make sure there are no blanks in these cells. All should be filled with $ 0's, nun								
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			1	LS	$125,000	$125,000			$125,000		$36,917		$36,917		$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Laboratory					UC		$0			$0		$0		$0		$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Field Activities					UC and LOE		$0			$0		$0		$0		$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Materials, Fuels and Treatment Media					UC or V		$0			$0		$0		$0		$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Reporting/Deliverables					LS or LOE		$0			$0		$0		$0		$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Modeling					LOE		$0			$0		$0		$0		$0	$0	$0	$0	$0	$0	$0	$0	$0
28	Total OM&M Costs (Alternative to above sub-topics)	LOE Attached Work Sheet									$0		$0		$0		$0	$0	$0	$0	$0	$0	$0	$0	$0
29	**Subtotal**							**$125,000**			**$125,000**		**$36,917**		**$36,917**		**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
30	**Project Closure**																Note: Make sure there are no blanks in these cells. All should be filled with $ 0's, nun								
31	Assessments	Assume 5% of Design+Implementation			1	V or UC and LOE						$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	Decommissioning	Assume 5% of Design+Implementation			1	LS, % or V						$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
33	**Subtotal**							**$0**				**$0**	**$0**			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
34	**Project Management[3]**																								
35	During Implementation	Assumed			8%	%	Of Remedial Design & Remedy Implementation	$8,435		$8,435			$8,435	$8,435			$8,435	$0	$0	$0	$0	$0	$0	$0	$0
36	During OM&M	Assumed			8%	%	Of OM&M	$10,000.00			$10,000		$2,953		$2,953		$200	$200	$200	$200	$200	$200	$200	$200	$200
37	During Closure	Assumed			8%	%	Of Closure	$0.00				$0	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
38	**Subtotal**							**$18,435**		**$8,435**	**$10,000**	**$0**	**$11,389**	**$8,435**	**$2,953**	**$0**	**$8,635**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
39	**SUBTOTAL COST OF ELEMENT ESTIMATES**									**$113,875**	**$135,000**	**$0**	**$153,746**	**$113,875**	**$39,870**	**$0**	**$116,575**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
40	**Contingencies**	**Implementation**	**OM&M**	**Closure**																					
41	Scope (10 to 25%)	12.2%	15%	25%						$13,893	$20,250	$0	$19,873	$13,893	$5,981	$0									
42	Bid (10 to 20%)	10%	10%	20%						$11,388	$13,500	$0	$15,375	$11,388	$3,987	$0									
43	**Subtotal**									**$25,280**	**$33,750**	**$0**	**$35,248**	**$25,280**	**$9,968**	**$0**									
44	**GRAND TOTAL COST**									**$139,155**	**$168,750**	**$0**		**$139,155**	**$49,838**	**$0**									
45											**$307,905**		**$188,993**												
46																									
47	**ESCALATED CASH FLOW COSTS (45 YEARS)**												**$167,875**				**$116,575**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor																100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.

Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by equation.

Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level estimates.

Subtotal or Grand Total lines

LOE	Level Of Effort
LS	Lump Sum
NPV	Net Present Value
NRDs	Natural Resource Damages
OM&M	Operational, Maintenance & Monitoring
UC	Unit Cost
V	Vendor
%	Percent

For use in the CDP analysis

$0	**Capital Cost =**	**$139,155**	**NPV**
$0	**OM&M Cost =**	**$49,838**	**NPV**

NOTES:

1 Fill in costs in years that they will occur, costs not required for all 50 years if remedy is completed

2 Reference to worksheets, etc. that provide any detailed backup.

3 Formulas are set up to calculate project management costs during implementation and OM&M as a

AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
s linking to, and distributing the appropriate total costs in column I, or with zeros.																																								
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
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nbers or equations.																																							
$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
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$2,500	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
nbers or equations.																																							
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$200	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
$2,700	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
$2,700	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

TEMPLATE 6.3

SITE: MRC Block D Panhandle

ALTERNATIVE : 3. Excavation & Disposal of Impacted Surface Soils in the top two feet + ICs

DATE: August, 2012

COST ES[illegible]OR REMEDY SELECTION

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

DISCOUNT RATE: 7%

ESCALATION RATE

BACKUP REFERENCE[2]:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
4	Element	Description (Explain Element as necessary)			Qty	Units (Select as appropriate)	$/Unit	Cost Extension $ (F x H)		Cost in Current Dollars (Add costs that have been distributed over 50 years)			Cost in NPV Dollars (NPV costs that have been distributed over 50 years)				Years[1]			
5										Implementation	OM&M	Closure	TOTAL (O+P+Q)	Implementation	OM&M	Closure	1	2	3	4
6	**Remedial Design**																**Note: Make sure there are no blanks in these cells. All s**			
7	Bench/Pilot Testing	n/a				LS or V		$0		$0			$0	$0			$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF			4	Sample	$2,000	$8,275		$8,275			$8,275	$8,275			$8,275			
1	Modeling	n/a			o	LS		$0		$0			$0	$0			$0	$0	$0	$0
2	Reporting/Deliverables				o	LS		$0		$0			$0	$0			$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				12%	%	Of Remedy Implementation (Excluding NRDs)	$74,407		$74,407			$74,407	$74,407			$74,407	$0	$0	$0
12	**Subtotal**							**$82,682.063**		**$82,682.063**			**$82,682**	**$82,682**			**$82,682**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																**Note: Make sure there are no blanks in these cells. All s**			
14	Mobilization				1	LS or %	$53,164	$53,164		$53,164			$53,164	$53,164			$53,164	$0	$0	$0
15	Implementation					V or UC		$0		$0			$0	$0			$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control				1	LS	$50,000	$50,000		$50,000			$50,000	$50,000			$50,000			
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance			1	LS	$30,000	$30,000		$30,000			$30,000	$30,000			$30,000			
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft			41375	SF	$4	$165,500		$165,500			$165,500	$165,500			$165,500			
	Disposal of Concrete/Asphalt Slab	6-inch thick			766	CY	$150	$114,931		$114,931			$114,931	$114,931			$114,931			
	Excavation of soils	based on RRA			507	CY	$20	$10,130		$10,130			$10,130	$10,130			$10,130			
	Disposal of soils	based on RRA			760	Ton	$100	$75,975		$75,975			$75,975	$75,975			$75,975			
	Post excavation sampling per MDE requirements	VOCs + SVOCs + Metals ; 1 sample per 50 CY			11	Sample	$1,000	$11,000		$11,000			$11,000	$11,000			$11,000			
	Disposal Sampling - per waste facility requirements	VOCs + SVOCs + Metals ; 1 sample per 500 CY			2	Sample	$2,000	$4,000		$4,000			$4,000	$4,000			$4,000			
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY			2	Sample	$2,000	$4,000		$4,000			$4,000	$4,000			$4,000			
	Backfilling	Backfilling in 6-inch lifts and compaction to 95% of dry density.			507	CY	$20	$10,130		$10,130			$10,130	$10,130			$10,130			
	Placement of top soil and seed in areas of excavation and areas of slab removal.	6-inch thick			4597	SY	$10	$45,972		$45,972			$45,972	$45,972			$45,972			
	Deed restrictions and legal/administrative costs				1	LS	$10,000	$10,000		$10,000			$10,000	$10,000			$10,000			
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			1	LS or LOE	$5,316	$5,316		$5,316			$5,316	$5,316			$5,316	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost			1	LS or LOE	$29,940.93	$29,941		$29,941			$29,941	$29,941			$29,941			
17	Third Party Payments					UC		$0		$0			$0	$0			$0	$0	$0	$0
18	NRDs					LS		$0		$0			$0	$0			$0	$0	$0	$0
19	**Subtotal**							**$620,059**		**$620,059**			**$620,059**	**$620,059**			**$620,059**	**$0**	**$0**	**$0**
20	**OM&M**					**Annual**											**Note: Make sure there are no blanks in these cells. All s**			
21	Maintenance					%, V, or LOE		$0			$0		$0		$0		$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			1	LS	$125,000	$125,000			$125,000		$36,917		$36,917		$2,500	$2,500	$2,500	$2,500
23	Field Activities					UC and LOE		$0			$0		$0		$0		$0	$0	$0	$0
24	Materials, Fuels and Treatment Media					UC or V		$0			$0		$0		$0		$0	$0	$0	$0
25	Reporting/Deliverables					LS or LOE		$0			$0		$0		$0		$0	$0	$0	$0
26	Modeling					LOE		$0			$0		$0		$0		$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)					LOE Attached Work Sheet					$0		$0		$0		$0	$0	$0	$0
28	**Subtotal**										**$125,000**		**$36,917**		**$36,917**		**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**																**Note: Make sure there are no blanks in these cells. All s**			
30	Assessments	Assume 4% of Design+Implementation			1	V or UC and LOE	$28,110	$28,110				$28,110	$26,271			$26,271	$0	$28,110	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			1	LS, % or V	$28,110	$28,110				$28,110	$26,271			$26,271	$0	$28,110	$0	$0
32	**Subtotal**							**$56,219**				**$56,219**	**$52,541**			**$52,541**	**$0**	**$56,219**	**$0**	**$0**
33	**Project Management[3]**																			
34	During Implementation	Assumed			8%	%	Of Remedial Design & Remedy Implementation	$56,219		$56,219			$56,219	$56,219			$56,219	$0	$0	$0
	During OM&M	Assumed			8%	%	Of OM&M	$10,000			$10,000		$2,953		$2,953		$200	$200	$200	$200
	During Closure	Assumed			8%	%	Of Closure	$4,497.54				$4,498	$4,203			$4,203	$0	$4,498	$0	$0
35	**Subtotal**									**$56,219**	**$10,000**	**$4,498**	**$63,376**	**$56,219**	**$2,953**	**$4,203**	**$56,419**	**$4,698**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**									**$758,960**	**$135,000**	**$60,717**	**$855,575**	**$758,960**	**$39,870**	**$56,745**	**$761,660**	**$63,417**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																
38	Scope (10 to 25%)	12.2%	15%	25%						$92,593	$20,250	$15,179	$112,760	$92,593	$5,981	$14,186				
39	Bid (10 to 20%)	10%	10%	20%						$75,896	$13,500	$12,143	$91,232	$75,896	$3,987	$11,349				
40	**Subtotal**									**$168,489**	**$33,750**	**$27,323**	**$203,992**	**$168,489**	**$9,968**	**$25,535**				
41	**GRAND TOTAL COST**									**$927,449**	**$168,750**	**$88,039**		**$927,449**	**$49,838**	**$82,280**				
42										**$1,184,239**			**$1,059,567**							
43																				
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**												**$873,677**				**$761,660**	**$63,417**	**$2,700**	**$2,700**
	Escalation Factor																100%	100%	100%	100%

For use in the CDP analysis
Capital Cost = ####### **NPV**
OM&M Cost = $49,838 **NPV**

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by equation.
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level estimates.
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

NOTES:
1 Fill in costs in years that they will occur, costs not required for all 50 years if remedy is completed earlier.
2 Reference to worksheets, etc. that provide any detailed backup.
3 Formulas are set up to calculate project management costs during implementation and OM&M as a percentage of these latter costs. In the event annual costs vary and have been separately estimated, they should be entered directly into the appropriate cells for each year.

TEMPLATE 6.3

SITE: MRC Block D Panhandle

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

COST ESTIMATES FOR REMEDY SELECTION

A	B	C	D	E	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
4	Element	Description (Explain Element as necessary)																								
5					5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
6	**Remedial Design**				**should be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																					
7	Bench/Pilot Testing	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																								
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**				**should be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																					
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																									
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																								
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Traipezoidal - 96-ft x 154-ft x 331-ft																								
	Disposal of Concrete/Asphalt Slab	6-inch thick																								
	Excavation of soils	based on RRA																								
	Disposal of soils	based on RRA																								
	Post excavation sampling per MDE requirements	VOCs + SVOCs + Metals ; 1 sample per 50 CY																								
	Disposal Sampling - per waste facility requirements	VOCs + SVOCs + Metals ; 1 sample per 500 CY																								
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY																								
	Backfilling	Backfilling in 6-inch lifts and compaction to 95% of dry density.																								
	Placement of top soil and seed in areas of excavation and areas of slab removal.	6-inch thick																								
	Deed restrictions and legal/administrative costs																									
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																								
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**				**should be filled with $ 0's, numbers or equations.**																					
21	Maintenance				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Field Activities				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**				**should be filled with $ 0's, numbers or equations.**																					
30	Assessments	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management**[3]																									
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																						
38	Scope (10 to 25%)	12.2%	15%	25%																						
39	Bid (10 to 20%)	10%	10%	20%																						
40	**Subtotal**																									
41	**GRAND TOTAL COST**																									
42																										
43																										
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by e
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level e
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value

NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3

SITE: MRC Block D Panhandle

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

COST ESTIMATES FOR REMEDY SELECTION

A	B	C	D	E	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO
4	Element	Description (Explain Element as necessary)																										
5					27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
6	**Remedial Design**																											
7	Bench/Pilot Testing	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																										
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																											
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																											
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																										
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Traipezoidal - 96-ft x 154-ft x 331-ft																										
	Disposal of Concrete/Asphalt Slab	6-inch thick																										
	Excavation of soils	based on RRA																										
	Disposal of soils	based on RRA																										
	Post excavation sampling per MDE requirements	VOCs + SVOCs + Metals ; 1 sample per 50 CY																										
	Disposal Sampling - per waste facility requirements	VOCs + SVOCs + Metals ; 1 sample per 500 CY																										
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY																										
	Backfilling	Backfilling in 6-inch lifts and compaction to 95% of dry density.																										
	Placement of top soil and seed in areas of excavation and areas of slab removal.	6-inch thick																										
	Deed restrictions and legal/administrative costs																											
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																										
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**																											
21	Maintenance				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Field Activities				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**																											
30	Assessments	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management[3]**																											
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																								
38	Scope (10 to 25%)	12.2%	15%	25%																								
39	Bid (10 to 20%)	10%	10%	20%																								
40	**Subtotal**																											
41	**GRAND TOTAL COST**																											
42																												
43																												
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by e
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level e
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value

NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3

COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

ALTERNATIVE : 4. Excavation & Disposal of All Impacted Surface Soils to the Groundwater Table, Plus

DATE: ____August, 2012_____

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

DISCOUNT RATE: 7%

ESCALATION RATE

BACKUP REFERENCE[2]: _____

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
4	Element	Description (Explain Element as necessary)			Qty	Units (Select as appropriate)	$/Unit	Cost Extension $ (F x H)		Cost in Current Dollars (Add costs that have been distributed over 50 years)			Cost in NPV Dollars (NPV costs that have been distributed over 50 years)				Years[1]			
5										Implementation	OM&M	Closure	TOTAL (O+P+Q)	Implementation	OM&M	Closure	1	2	3	4
6	**Remedial Design**																Note: Make sure there are no blanks in these cells. All sl			
7	Bench/Pilot Testing	n/a				LS or V		$0		$0			$0	$0			$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF			4	Sample	$2,000	$8,275		$8,275			$8,275	$8,275			$8,275			
1	Modeling	n/a			0	LS		$0		$0			$0	$0			$0	$0	$0	$0
2	Reporting/Deliverables				0	LS		$0		$0			$0	$0			$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				12%	%	Of Remedy Implementation (Excluding NRDs)	$77,679		$77,679			$77,679	$77,679			$77,679	$0	$0	$0
12	**Subtotal**							**$85,954.212**		$85,954.212			$85,954	$85,954			$85,954	$0	$0	$0
13	**Remedy Implementation**																Note: Make sure there are no blanks in these cells. All sl			
14	Mobilization				1	LS or %	$55,534	$55,534		$55,534			$55,534	$55,534			$55,534	$0	$0	$0
15	Implementation					V or UC		$0		$0			$0	$0			$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control				1	LS	$50,000	$50,000		$50,000			$50,000	$50,000			$50,000			
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance			1	LS	$30,000	$30,000		$30,000			$30,000	$30,000			$30,000			
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft			41375	SF	$4	$165,500		$165,500			$165,500	$165,500			$165,500			
	Disposal of Concrete/Asphalt Slab	6-inch thick			766	CY	$150	$114,931		$114,931			$114,931	$114,931			$114,931			
	Excavation of soils	based on "Hill Topping" analysis			597	CY	$20	$11,941		$11,941			$11,941	$11,941			$11,941			
	Disposal of soils	based on "Hill Topping" analysis			896	Ton	$100	$89,558		$89,558			$89,558	$89,558			$89,558			
	Post excavation sampling per MDE requirements	VOCs + SVOCs + Metals ; 1 sample per 50 CY			12	Sample	$1,000	$12,000		$12,000			$12,000	$12,000			$12,000			
	Disposal Sampling - per waste facility requirements	VOCs + SVOCs + Metals ; 1 sample per 500 CY			2	Sample	$2,000	$4,000		$4,000			$4,000	$4,000			$4,000			
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY			2	Sample	$2,000	$4,000		$4,000			$4,000	$4,000			$4,000			
	Backfilling	Backfilling in 6-inch lifts and compaction to 95% of dry density.			597	CY	$20	$11,941		$11,941			$11,941	$11,941			$11,941			
	Groundwater handling in excavation	Assume 30% porosity (for estimation purposes), and a trash pump will be used to dewater the excavation.			5500	Gallon	$1	$5,500		$5,500			$5,500	$5,500			$5,500			
	Placement of top soil and seed in areas of excavation and areas of slab removal	6-inch thick			4597	SY	$10	$45,972		$45,972			$45,972	$45,972			$45,972			
	Deed restrictions and legal/administrative costs				1	LS	$10,000	$10,000		$10,000			$10,000	$10,000			$10,000			
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			1	LS or LOE	$5,553	$5,553		$5,553			$5,553	$5,553			$5,553	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost			1	LS or LOE	$30,895.67	$30,896		$30,896			$30,896	$30,896			$30,896			
17	Third Party Payments					UC		$0		$0			$0	$0			$0	$0	$0	$0
18	NRDs					LS		$0		$0			$0	$0			$0	$0	$0	$0
19	**Subtotal**							**$647,327**		**$647,327**			**$647,327**	**$647,327**			**$647,327**	**$0**	**$0**	**$0**
20	**OM&M**					**Annual**											Note: Make sure there are no blanks in these cells. All sl			
21	Maintenance					%, V, or LOE		$0			$0		$0		$0		$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			1	LS	$125,000	$125,000			$125,000		$36,917		$36,917		$2,500	$2,500	$2,500	$2,500
23	Field Activities					UC and LOE		$0			$0		$0		$0		$0	$0	$0	$0
24	Materials, Fuels and Treatment Media					UC or V		$0			$0		$0		$0		$0	$0	$0	$0
25	Reporting/Deliverables					LS or LOE		$0			$0		$0		$0		$0	$0	$0	$0
26	Modeling					LOE		$0			$0		$0		$0		$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)					LOE Attached Work Sheet					$0		$0		$0		$0	$0	$0	$0
28	**Subtotal**										**$125,000**		**$36,917**		**$36,917**		**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**																Note: Make sure there are no blanks in these cells. All sl			
30	Assessments	Assume 4% of Design+Implementation			1	V or UC and LOE	$29,331	$29,331				$29,331	$27,412			$27,412	$0	$29,331	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			1	LS, % or V	$29,331	$29,331				$29,331	$27,412			$27,412	$0	$29,331	$0	$0
32	**Subtotal**							**$58,662**				**$58,662**	**$54,825**			**$54,825**	**$0**	**$58,662**	**$0**	**$0**
33	**Project Management[3]**																			
34	During Implementation	Assumed			8%	%	Of Remedial Design & Remedy Implementation	$58,662		$58,662			$58,662	$58,662			$58,662	$0	$0	$0
	During OM&M	Assumed			8%	%	Of OM&M	$10,000			$10,000		$2,953		$2,953		$200	$200	$200	$200
	During Closure	Assumed			8%	%	Of Closure	$4,693.00				$4,693	$4,386			$4,386	$0	$4,693	$0	$0
35	**Subtotal**									**$58,662**	**$10,000**	**$4,693**	**$66,002**	**$58,662**	**$2,953**	**$4,386**	**$58,862**	**$4,893**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**									**$791,943**	**$135,000**	**$63,355**	**$891,025**	**$791,943**	**$39,870**	**$59,211**	**$794,643**	**$66,055**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																
38	Scope (10 to 25%)	12.2%	15%	25%						$96,617	$20,250	$15,839	$117,400	$96,617	$5,981	$14,803				
39	Bid (10 to 20%)	10%	10%	20%						$79,194	$13,500	$12,671	$95,024	$79,194	$3,987	$11,842				
40	**Subtotal**									**$175,811**	**$33,750**	**$28,510**	**$212,424**	**$175,811**	**$9,968**	**$26,645**				
41	**GRAND TOTAL COST**									**$967,755**	**$168,750**	**$91,865**		**$967,755**	**$49,838**	**$85,856**				
42										**$1,228,370**			**$1,103,448**							
43																				
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**												**$909,299**				**$794,643**	**$66,055**	**$2,700**	**$2,700**
	Escalation Factor																100%	100%	100%	100%

For use in the CDP analysis
Capital Cost = $1,053,610 NPV
OM&M Cost = $49,838 NPV

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by equation.
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level estimates.
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

NOTES:
1 Fill in costs in years that they will occur, costs not required for all 50 years if remedy is completed earlier.
2 Reference to worksheets, etc. that provide any detailed backup.
3 Formulas are set up to calculate project management costs during implementation and OM&M as a percentage of these latter costs. In the event annual costs vary and have been separately estimated, they should be entered directly into the appropriate cells for each year.

TEMPLATE 6.3

SITE: MRC Block D Panhandle

COST ESTIMATES FOR REMEDY SELECTION

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

A	B	C	D	E	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
4	Element	Description (Explain Element as necessary)																											
5					5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
6	**Remedial Design**				**hould be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																								
7	Bench/Pilot Testing	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																											
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**				**hould be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																								
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																												
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																											
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft																											
	Disposal of Concrete/Asphalt Slab	6-inch thick																											
	Excavation of soils	based on "Hill Topping" analysis																											
	Disposal of soils	based on "Hill Topping" analysis																											
	Post excavation sampling per MDE requirements	VOCs + SVOCs + Metals ; 1 sample per 50 CY																											
	Disposal Sampling - per waste facility requirements	VOCs + SVOCs + Metals ; 1 sample per 500 CY																											
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY																											
	Backfilling	Backfilling in 6-inch lifts and compaction to 95% of dry density.																											
	Groundwater handling in excavation	Assume 30% porosity (for estimation purposes), and a trash pump will be used to dewater the excavation.																											
	Placement of top soil and seed in areas of excavation and areas of slab removal	6-inch thick																											
	Deed restrictions and legal/administrative costs																												
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																											
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**				**hould be filled with $ 0's, numbers or equations.**																								
21	Maintenance				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Field Activities				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**				**hould be filled with $ 0's, numbers or equations.**																								
30	Assessments	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management[3]**																												
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																									
38	Scope (10 to 25%)	12.2%	15%	25%																									
39	Bid (10 to 20%)	10%	10%	20%																									
40	**Subtotal**																												
41	**GRAND TOTAL COST**																												
42																													
43																													
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by e
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level es
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3

COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

A	B	C	D	E	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO
4	Element	Description (Explain Element as necessary)																							
5					30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
6	**Remedial Design**																								
7	Bench/Pilot Testing	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																							
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																								
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																								
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																							
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft																							
	Disposal of Concrete/Asphalt Slab	6-inch thick																							
	Excavation of soils	based on "Hill Topping" analysis																							
	Disposal of soils	based on "Hill Topping" analysis																							
	Post excavation sampling per MDE requirements	VOCs + SVOCs + Metals ; 1 sample per 50 CY																							
	Disposal Sampling - per waste facility requirements	VOCs + SVOCs + Metals ; 1 sample per 500 CY																							
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY																							
	Backfilling	Backfilling in 6-inch lifts and compaction to 95% of dry density.																							
	Groundwater handling in excavation	Assume 30% porosity (for estimation purposes), and a trash pump will be used to dewater the excavation.																							
	Placement of top soil and seed in areas of excavation and areas of slab removal	6-inch thick																							
	Deed restrictions and legal/administrative costs																								
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																							
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**																								
21	Maintenance				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Field Activities				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**																								
30	Assessments	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management[3]**																								
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																					
38	Scope (10 to 25%)	12.2%	15%	25%																					
39	Bid (10 to 20%)	10%	10%	20%																					
40	**Subtotal**																								
41	**GRAND TOTAL COST**																								
42																									
43																									
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by e
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level es
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

ALTERNATIVE : 5. Soil Cover Over Entire Panhandle + ICs

DATE: August, 2012

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

DISCOUNT RATE: 7%

ESCALATION RATE

BACKUP REFERENCE[2]:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
4	Element	Description (Explain Element as necessary)			Qty	Units (Select as appropriate)	$/Unit	Cost Extension $ (F x H)		Cost in Current Dollars (Add costs that have been distributed over 50 years)			Cost in NPV Dollars (NPV costs that have been distributed over 50 years)				Years[1]			
5										Implementation	OM&M	Closure	TOTAL (O+P+Q)	Implementation	OM&M	Closure	1	2	3	4
6	**Remedial Design**																**Note: Make sure there are no blanks in these cells. All**			
7	Bench/Pilot Testing	n/a				LS or V		$0		$0			$0	$0			$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF			4	Sample	$2,000	$8,275		$8,275			$8,275	$8,275			$8,275			
1	Modeling	n/a			0	LS		$0		$0			$0	$0			$0	$0	$0	$0
2	Reporting/Deliverables				0	LS		$0		$0			$0	$0			$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				12%	%	Of Remedy Implementation (Excluding NRDs)	$66,605		$66,605			$66,605	$66,605			$66,605	$0	$0	$0
12	**Subtotal**							**$74,880.001**		**$74,880.001**			**$74,880**	**$74,880**			**$74,880**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																**Note: Make sure there are no blanks in these cells. All**			
14	Mobilization				1	LS or %	$47,238	$47,238		$47,238			$47,238	$47,238			$47,238	$0	$0	$0
15	Implementation					V or UC		$0		$0			$0	$0			$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control				1	LS	$50,000	$50,000		$50,000			$50,000	$50,000			$50,000			
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance			1	LS	$30,000	$30,000		$30,000			$30,000	$30,000			$30,000			
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft			41375	SF	$4	$165,500		$165,500			$165,500	$165,500			$165,500			
	Disposal of Concrete/Asphalt Slab	6-inch thick			766	CY	$150	$114,931		$114,931			$114,931	$114,931			$114,931			
	Placement of 1'-6" Soil Cover	based on "Hill Topping" analysis; 6-inch lifts and compaction to 95			2299	CY	$20	$45,972		$45,972			$45,972	$45,972			$45,972			
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY			5	Sample	$2,000	$10,000		$10,000			$10,000	$10,000			$10,000			
	Placement of top soil and seed in areas of excavation and areas of slab removal	6-inch thick			4597	SY	$10	$45,972		$45,972			$45,972	$45,972			$45,972			
	Deed restrictions and legal/administrative costs				1	LS	$10,000	$10,000		$10,000			$10,000	$10,000			$10,000			
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			1	LS or LOE	$4,724	$4,724		$4,724			$4,724	$4,724			$4,724	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost			1	LS or LOE	$30,705.43	$30,705		$30,705			$30,705	$30,705			$30,705			
17	Third Party Payments					UC		$0		$0			$0	$0			$0	$0	$0	$0
18	NRDs					LS		$0		$0			$0	$0			$0	$0	$0	$0
19	**Subtotal**							**$555,042**		**$555,042**			**$555,042**	**$555,042**			**$555,042**	**$0**	**$0**	**$0**
20	**OM&M**					**Annual**											**Note: Make sure there are no blanks in these cells. All**			
21	IC Monitoring and Inspection	IC monitoring & inspection over 50 years			1	%, V, or LOE	$125,000	$125,000			$125,000		$36,917		$36,917		$2,500	$2,500	$2,500	$2,500
22	Cover Maintenance	Cover maintenance, monitoring & inspection over 50 years. Assume 24 mowes/year and inspection of cover once a quarter			1	LS	$75,000	$75,000			$75,000		$22,150		$22,150		$1,500	$1,500	$1,500	$1,500
23	Field Activities					UC and LOE		$0			$0		$0		$0		$0	$0	$0	$0
24	Materials, Fuels and Treatment Media					UC or V		$0			$0		$0		$0		$0	$0	$0	$0
25	Reporting/Deliverables					LS or LOE		$0			$0		$0		$0		$0	$0	$0	$0
26	Modeling					LOE		$0			$0		$0		$0		$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				LOE Attached Work						$0		$0		$0		$0	$0	$0	$0
28	**Subtotal**										**$200,000**		**$59,067**		**$59,067**		**$4,000**	**$4,000**	**$4,000**	**$4,000**
29	**Project Closure**																**Note: Make sure there are no blanks in these cells. All**			
30	Assessments	Assume 4% of Design+Implementation			1	V or UC and LOE	$25,197	$25,197				$25,197	$23,548			$23,548	$0	$25,197	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			1	LS, % or V	$25,197	$25,197				$25,197	$23,548			$23,548	$0	$25,197	$0	$0
32	**Subtotal**							**$50,394**				**$50,394**	**$47,097**			**$47,097**	**$0**	**$50,394**	**$0**	**$0**
33	**Project Management[3]**																			
34	During Implementation	Assumed			8%	%	Of Remedial Design & Remedy Implementation	$50,394		$50,394			$50,394	$50,394			$50,394	$0	$0	$0
	During OM&M	Assumed			8%	%	Of OM&M	$16,000			$16,000		$4,725		$4,725		$320	$320	$320	$320
	During Closure	Assumed			8%	%	Of Closure	$4,031.50				$4,031	$3,768			$3,768	$0	$4,031	$0	$0
35	**Subtotal**									**$50,394**	**$16,000**	**$4,031**	**$58,887**	**$50,394**	**$4,725**	**$3,768**	**$50,714**	**$4,351**	**$320**	**$320**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**									**$680,315**	**$216,000**	**$54,425**	**$794,973**	**$680,315**	**$63,793**	**$50,865**	**$684,635**	**$58,745**	**$4,320**	**$4,320**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																
38	Scope (10 to 25%)	12.2%	15%	25%						$82,998	$32,400	$13,606	$105,284	$82,998	$9,569	$12,716				
39	Bid (10 to 20%)	10%	10%	20%						$68,032	$21,600	$10,885	$84,584	$68,032	$6,379	$10,173				
40	**Subtotal**									**$151,030**	**$54,000**	**$24,491**	**$189,867**	**$151,030**	**$15,948**	**$22,889**				
41	**GRAND TOTAL COST**									**$831,345**	**$270,000**	**$78,917**		**$831,345**	**$79,741**	**$73,754**				
42										**$1,180,262**			**$984,840**							
43																				
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**												**$821,141**				**$684,635**	**$58,745**	**$4,320**	**$4,320**
	Escalation Factor																100%	100%	100%	100%

For use in the CDP analysis
Capital Cost = $905,099 NPV
OM&M Cost = $79,741 NPV

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by equation.
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level estimates.
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRD Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

NOTES:
1 Fill in costs in years that they will occur, costs not required for all 50 years if remedy is completed earlier.
2 Reference to worksheets, etc. that provide any detailed backup.
3 Formulas are set up to calculate project management costs during implementation and OM&M as a percentage of these latter costs. In the event annual costs vary and have been separately estimated, they should be entered directly into the appropriate cells for each year.

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

A	B	C	D	E	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
4	Element	Description (Explain Element as necessary)																									
5					5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
6	**Remedial Design**				**should be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																						
7	Bench/Pilot Testing	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																									
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**				**should be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																						
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																										
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																									
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft																									
	Disposal of Concrete/Asphalt Slab	6-inch thick																									
	Placement of 1'-6" Soil Cover	based on "Hill Topping" analysis; 6-inch lifts and compaction to 95																									
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY																									
	Placement of top soil and seed in areas of excavation and areas of slab removal	6-inch thick																									
	Deed restrictions and legal/administrative costs																										
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																									
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**				**should be filled with $ 0's, numbers or equations.**																						
21	IC Monitoring and Inspection	IC monitoring & inspection over 50 years			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
22	Cover Maintenance	Cover maintenance, monitoring & inspection over 50 years. Assume 24 mowes/year and inspection of cover once a quarter			$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
23	Field Activities				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**
29	**Project Closure**				**should be filled with $ 0's, numbers or equations.**																						
30	Assessments	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management**[3]																										
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																							
38	Scope (10 to 25%)	12.2%	15%	25%																							
39	Bid (10 to 20%)	10%	10%	20%																							
40	**Subtotal**																										
41	**GRAND TOTAL COST**																										
42																											
43																											
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRD Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

LEVEL OF ESTIMATE: **Screening ☐ or Detailed □**

A	B	C	D	E	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO
4	Element	Description (Explain Element as necessary)																									
5					28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
6	**Remedial Design**																										
7	Bench/Pilot Testing	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																									
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																										
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																										
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																									
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft																									
	Disposal of Concrete/Asphalt Slab	6-inch thick																									
	Placement of 1'-6" Soil Cover	based on "Hill Topping" analysis; 6-inch lifts and compaction to 95																									
	Sampling of borrow pit to ensure procurement of clean fill	Analytical - VOC, SVOC, PAHs, Metals, and labor for sample collection: 1 sample per 500 CY																									
	Placement of top soil and seed in areas of excavation and areas of slab removal	6-inch thick																									
	Deed restrictions and legal/administrative costs																										
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																									
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**																										
21	IC Monitoring and Inspection	IC monitoring & inspection over 50 years			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
22	Cover Maintenance	Cover maintenance, monitoring & inspection over 50 years. Assume 24 mowes/year and inspection of cover once a quarter			$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
23	Field Activities				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**
29	**Project Closure**																										
30	Assessments	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management**[3]																										
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320	$320
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**	**$320**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																							
38	Scope (10 to 25%)	12.2%	15%	25%																							
39	Bid (10 to 20%)	10%	10%	20%																							
40	**Subtotal**																										
41	**GRAND TOTAL COST**																										
42																											
43																											
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**	**$4,320**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRD Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

ALTERNATIVE : 6. Enhanced Bioremediation of impacted soils in the top two feet + ICs

DATE: August, 2012

LEVEL OF ESTIMATE: Screening ☐ or Detailed ☐

DISCOUNT RATE: 7%

ESCALATION RATE

BACKUP REFERENCE[2]:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
4	Element	Description (Explain Element as necessary)			Qty	Units (Select as appropriate)	$/Unit	Cost Extension $ (F x H)		Cost in Current Dollars (Add costs that have been distributed over 50 years)			Cost in NPV Dollars (NPV costs that have been distributed over 50 years)				Years[1]			
5										Implementation	OM&M	Closure	TOTAL (O+P+Q)	Implementation	OM&M	Closure	1	2	3	4
6	**Remedial Design**																Note: Make sure there are no blanks in these cells. All shou			
7	Bench/Pilot Testing	Bench-scale testing to ascertain amendment dose.			1	LS or V	$15,000	$15,000		$15,000			$15,000	$15,000			$15,000	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF			4	Sample	$2,000	$8,275		$8,275			$8,275	$8,275			$8,275			
1	Modeling	n/a			0	LS		$0		$0			$0	$0			$0	$0	$0	$0
2	Reporting/Deliverables				0	LS		$0		$0			$0	$0			$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				12%	%	Of Remedy Implementation (Excluding NRDs)	$73,199		$73,199			$73,199	$73,199			$73,199	$0	$0	$0
12	**Subtotal**							**$96,473.583**		**$96,473.583**			**$96,474**	**$96,474**			**$96,474**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																Note: Make sure there are no blanks in these cells. All shou			
14	Mobilization				1	LS or %	$51,842	$51,842		$51,842			$51,842	$51,842			$51,842	$0	$0	$0
15	Implementation					V or UC		$0		$0			$0	$0			$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control				1	LS	$50,000	$50,000		$50,000			$50,000	$50,000			$50,000			
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance			1	LS	$30,000	$30,000		$30,000			$30,000	$30,000			$30,000			
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft			41,375	SF	$4	$165,500		$165,500			$165,500	$165,500			$165,500			
	Disposal of Concrete/Asphalt Slab	6-inch thick			766	CY	$150	$114,931		$114,931			$114,931	$114,931			$114,931			
	Application of Amendments - Nutrients and possibly bacterial consortium (if required).	based on "Hill Topping" analysis			17	Ton	$2,000	$33,020		$33,020			$33,020	$33,020			$33,020			
	Procurement and Installation of Irrigation System (Tanks, pumps and sprinkler system)				1	LS	$50,000	$50,000		$50,000			$50,000	$50,000			$50,000			
	Soil Sampling and Analysis	Analytical - PAHs: 1 sample per 20 CY			19	Sample	$1,000	$19,000		$19,000			$19,000	$19,000			$19,000			
	Placement of top soil and seed in areas of bioremediation and areas of slab removal.	6-inch thick			4597	SY	$10	$45,972		$45,972			$45,972	$45,972			$45,972			
	Deed restrictions and legal/administrative costs				1	LS	$10,000	$10,000		$10,000			$10,000	$10,000			$10,000			
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			1	LS or LOE	$5,184	$5,184		$5,184			$5,184	$5,184			$5,184	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost			1	LS or LOE	$34,538.90	$34,539		$34,539			$34,539	$34,539			$34,539			
17	Third Party Payments					UC		$0		$0			$0	$0			$0	$0	$0	$0
18	NRDs					LS		$0		$0			$0	$0			$0	$0	$0	$0
19	**Subtotal**							**$609,988**		**$609,988**			**$609,988**	**$609,988**			**$609,988**	**$0**	**$0**	**$0**
20	**OM&M**					**Annual**											Note: Make sure there are no blanks in these cells. All shou			
21	Maintenance					%, V, or LOE		$0			$0		$0		$0		$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			1	LS	$125,000	$125,000			$125,000		$36,917		$36,917		$2,500	$2,500	$2,500	$2,500
23	Field Activities	Use of tractor and tiller rental			1	UC and LOE	$36,000	$36,000			$36,000		$34,822		$34,822		$18,000	$18,000	$0	$0
24	Materials, Fuels and Treatment Media	Water requirements			53350	UC or V	$0.05	$2,667			$5,335		$5,160		$5,160		$2,667.49	$2,667.49	$0	$0
25	Reporting/Deliverables					LS or LOE		$0			$0		$0		$0		$0	$0	$0	$0
26	Modeling					LOE		$0			$0		$0		$0		$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)					LOE Attached Work Sheet					$0		$0		$0		$0	$0	$0	$0
28	**Subtotal**										**$166,335**		**$76,900**		**$76,900**		**$23,167**	**$23,167**	**$2,500**	**$2,500**
29	**Project Closure**																Note: Make sure there are no blanks in these cells. All shou			
30	Assessments	Assume 4% of Design+Implementation			1	V or UC and LOE	$28,258	$28,258				$28,258	$26,410			$26,410	$0	$28,258	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			1	LS, % or V	$28,258	$28,258				$28,258	$26,410			$26,410	$0	$28,258	$0	$0
32	**Subtotal**							**$56,517**				**$56,517**	**$52,820**			**$52,820**	**$0**	**$56,517**	**$0**	**$0**
33	**Project Management[3]**																			
34	During Implementation	Assumed			8%	%	Of Remedial Design & Remedy Implementation	$56,517		$56,517			$56,517	$56,517			$56,517	$0	$0	$0
	During OM&M	Assumed			8%	%	Of OM&M	$13,306.80			$13,307		$6,152		$6,152		$1,853	$1,853	$200	$200
	During Closure	Assumed			8%	%	Of Closure	$4,521.36				$4,521	$4,226			$4,226	$0	$4,521	$0	$0
35	**Subtotal**									**$56,517**	**$13,307**	**$4,521**	**$66,894**	**$56,517**	**$6,152**	**$4,226**	**$58,370**	**$6,375**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**									**$762,979**	**$179,642**	**$61,038**	**$903,076**	**$762,979**	**$83,052**	**$57,045**	**$788,000**	**$86,059**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																
38	Scope (10 to 25%)	12.2%	15%	25%						$93,083	$26,946	$15,260	$119,802	$93,083	$12,458	$14,261				
39	Bid (10 to 20%)	10%	10%	20%						$76,298	$17,964	$12,208	$96,012	$76,298	$8,305	$11,409				
40	**Subtotal**									**$169,381**	**$44,910**	**$27,467**	**$215,815**	**$169,381**	**$20,763**	**$25,670**				
41	**GRAND TOTAL COST**									**$932,360**	**$224,552**	**$88,506**		**$932,360**	**$103,815**	**$82,715**				
42										**$1,245,418**			**$1,118,890**							
43																				
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**												**$922,659**				**$788,000**	**$86,059**	**$2,700**	**$2,700**
	Escalation Factor																100%	100%	100%	100%

For use in the CDP analysis
Capital Cost = $1,015,075 NPV
OM&M Cost = $103,815 NPV

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by equation.
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level estimates.
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

NOTES:
1 Fill in costs in years that they will occur, costs not required for all 50 years if remedy is completed earlier.
2 Reference to worksheets, etc. that provide any detailed backup.
3 Formulas are set up to calculate project management costs during implementation and OM&M as a percentage of these latter costs. In the event annual costs vary and have been separately estimated, they should be entered directly into the appropriate cells for each year.

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

A	B	C	D	E	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
4	Element	Description (Explain Element as necessary)																									
5					5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
6	**Remedial Design**				**uld be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																						
7	Bench/Pilot Testing	Bench-scale testing to ascertain amendment dose.			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																									
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**				**uld be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																						
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																										
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																									
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft																									
	Disposal of Concrete/Asphalt Slab	6-inch thick																									
	Application of Amendments - Nutrients and possibly bacterial consortium (if required).	based on "Hill Topping" analysis																									
	Procurement and Installation of Irrigation System (Tanks, pumps and sprinkler system)																										
	Soil Sampling and Analysis	Analytical - PAHs: 1 sample per 20 CY																									
	Placement of top soil and seed in areas of bioremediation and areas of slab removal.	6-inch thick																									
	Deed restrictions and legal/administrative costs																										
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																									
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**				**uld be filled with $ 0's, numbers or equations.**																						
21	Maintenance				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Field Activities	Use of tractor and tiller rental			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media	Water requirements			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**				**uld be filled with $ 0's, numbers or equations.**																						
30	Assessments	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management**[3]																										
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																							
38	Scope (10 to 25%)	12.2%	15%	25%																							
39	Bid (10 to 20%)	10%	10%	20%																							
40	**Subtotal**																										
41	**GRAND TOTAL COST**																										
42																											
43																											
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by eq
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level es
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

A	B	C	D	E	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO
4	Element	Description (Explain Element as necessary)																									
5					28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
6	**Remedial Design**																										
7	Bench/Pilot Testing	Bench-scale testing to ascertain amendment dose.			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																									
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																										
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																										
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																									
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft																									
	Disposal of Concrete/Asphalt Slab	6-inch thick																									
	Application of Amendments - Nutrients and possibly bacterial consortium (if required).	based on "Hill Topping" analysis																									
	Procurement and Installation of Irrigation System (Tanks, pumps and sprinkler system)																										
	Soil Sampling and Analysis	Analytical - PAHs: 1 sample per 20 CY																									
	Placement of top soil and seed in areas of bioremediation and areas of slab removal.	6-inch thick																									
	Deed restrictions and legal/administrative costs																										
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																									
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**																										
21	Maintenance				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Field Activities	Use of tractor and tiller rental			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media	Water requirements			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**																										
30	Assessments	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 4% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management**[3]																										
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																							
38	Scope (10 to 25%)	12.2%	15%	25%																							
39	Bid (10 to 20%)	10%	10%	20%																							
40	**Subtotal**																										
41	**GRAND TOTAL COST**																										
42																											
43																											
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by eq
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level es
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

ALTERNATIVE : 7. In-Situ Stabilization Of All Impacted Soilsto the groundwater table + ICs

DATE: August, 2012

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

DISCOUNT RATE: 7%

ESCALATION RATE

BACKUP REFERENCE[2]:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
4	Element	Description (Explain Element as necessary)			Qty	Units (Select as appropriate)	$/Unit	Cost Extension $ (F x H)		Cost in Current Dollars (Add costs that have been distributed over 50 years)			Cost in NPV Dollars (NPV costs that have been distributed over 50 years)				Years[1]			
5										Implementation	OM&M	Closure	TOTAL (O+P+Q)	Implementation	OM&M	Closure	1	2	3	4
6	**Remedial Design**																Note: Make sure there are no blanks in these cells. All sl			
7	Bench/Pilot Testing	Bench-scale testing to ascertain stabilization amendment mix			1	LS or V	$15,000	$15,000		$15,000			$15,000	$15,000			$15,000	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF			4	Sample	$2,000	$8,275		$8,275			$8,275	$8,275			$8,275			
1	Modeling	n/a			0	LS		$0		$0			$0	$0			$0	$0	$0	$0
2	Reporting/Deliverables				0	LS		$0		$0			$0	$0			$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				12%	%	Of Remedy Implementation (Excluding NRDs)	$89,189		$89,189			$89,189	$89,189			$89,189	$0	$0	$0
12	**Subtotal**							**$112,463.536**		**$112,463.536**			**$112,464**	**$112,464**			**$112,464**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																Note: Make sure there are no blanks in these cells. All sl			
14	Mobilization				1	LS or %	$63,009	$63,009		$63,009			$63,009	$63,009			$63,009	$0	$0	$0
15	Implementation					V or UC		$0		$0			$0	$0			$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control				1	LS	$50,000	$50,000		$50,000			$50,000	$50,000			$50,000			
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance			1	LS	$30,000	$30,000		$30,000			$30,000	$30,000			$30,000			
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft			41,375	SF	$4	$165,500		$165,500			$165,500	$165,500			$165,500			
	Disposal of Concrete/Asphalt Slab	6-inch thick			766	CY	$150	$114,931		$114,931			$114,931	$114,931			$114,931			
	Impacted soils (surface and subsurface) stabilization including mixing.	based on "Hill Topping" analysis			597	CY	$100	$59,706		$59,706			$59,706	$59,706			$59,706			
	Water for stabilization	Assume 10% by weight			22980	gal														
	Procurement & transportation of Cement.	Assume soils to cement ration of 7:1 by weight			128	Ton	$200	$25,588		$25,588			$25,588	$25,588			$25,588			
	Procurement & transportation - Amendment	other amendments 0.5% by weight			4	Ton	$2,000	$8,956		$8,956			$8,956	$8,956			$8,956			
	Post stabilization attainment sampling	VOCs + SVOCs + Metals; 1 sample per 50 CY			12	Sample	$2,000	$24,000		$24,000			$24,000	$24,000			$24,000			
	Placement of top soil and seed in areas of bioremediation and areas of slab removal.	Trapezoidal - 96-ft x 154-ft x 331-ft			4597	SY	$10	$45,972		$45,972			$45,972	$45,972			$45,972			
	Deed restrictions and legal/administrative costs				1	LS	$105,440	$105,440		$105,440			$105,440	$105,440			$105,440			
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			1	LS or LOE	$6,301	$6,301		$6,301			$6,301	$6,301			$6,301	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost			1	LS or LOE	$43,835.39	$43,835		$43,835			$43,835	$43,835			$43,835			
17	Third Party Payments					UC		$0		$0			$0	$0			$0	$0	$0	$0
18	NRDs					LS		$0		$0			$0	$0			$0	$0	$0	$0
19	**Subtotal**							**$743,238**		**$743,238**			**$743,238**	**$743,238**			**$743,238**	**$0**	**$0**	**$0**
20	**OM&M**				**Annual**												Note: Make sure there are no blanks in these cells. All sl			
21	Maintenance					%, V, or LOE		$0			$0		$0		$0		$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			1	LS	$125,000	$125,000			$125,000		$36,917		$36,917		$2,500	$2,500	$2,500	$2,500
23	Field Activities					UC and LOE		$0			$0		$0		$0		$0	$0	$0	$0
24	Materials, Fuels and Treatment Media					UC or V		$0			$0		$0		$0		$0.00	$0.00	$0	$0
25	Reporting/Deliverables					LS or LOE		$0			$0		$0		$0		$0	$0	$0	$0
26	Modeling					LOE		$0			$0		$0		$0		$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				LOE Attached Work						$0		$0		$0		$0	$0	$0	$0
28	**Subtotal**										**$125,000**		**$36,917**		**$36,917**		**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**																Note: Make sure there are no blanks in these cells. All sl			
30	Assessments	Assume 5% of Design+Implementation			1	V or UC and LOE	$42,785	$42,785				$42,785	$39,986			$39,986	$0	$42,785	$0	$0
31	Decommissioning	Assume 5% of Design+Implementation			1	LS, % or V	$42,785	$42,785				$42,785	$39,986			$39,986	$0	$42,785	$0	$0
32	**Subtotal**							**$85,570**				**$85,570**	**$79,972**			**$79,972**	**$0**	**$85,570**	**$0**	**$0**
33	**Project Management[3]**																			
34	During Implementation	Assumed			8%	%	Of Remedial Design & Remedy Implementation	$68,456		$68,456			$68,456	$68,456			$68,456	$0	$0	$0
	During OM&M	Assumed			8%	%	Of OM&M	$10,000.00			$10,000		$2,953		$2,953		$200	$200	$200	$200
	During Closure	Assumed			8%	%	Of Closure	$6,845.61				$6,846	$6,398			$6,398	$0	$6,846	$0	$0
35	**Subtotal**									**$68,456**	**$10,000**	**$6,846**	**$77,807**	**$68,456**	**$2,953**	**$6,398**	**$68,656**	**$7,046**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**									**$924,157**	**$135,000**	**$92,416**	**$1,050,398**	**$924,157**	**$39,870**	**$86,370**	**$926,857**	**$95,116**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																
38	Scope (10 to 25%)	12.2%	15%	25%						$112,747	$20,250	$23,104	$140,320	$112,747	$5,981	$21,592				
39	Bid (10 to 20%)	10%	10%	20%						$92,416	$13,500	$18,483	$113,677	$92,416	$3,987	$17,274				
40	**Subtotal**									**$205,163**	**$33,750**	**$41,587**	**$253,997**	**$205,163**	**$9,968**	**$38,866**				
41	**GRAND TOTAL COST**									**$1,129,320**	**$168,750**	**$134,003**		**$1,129,320**	**$49,838**	**$125,236**				
42										**$1,432,073**			**$1,304,395**							
43																				
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**												**$1,070,573**				**$926,857**	**$95,116**	**$2,700**	**$2,700**
	Escalation Factor																100%	100%	100%	100%

	No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
	Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by equation.
	Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level estimates.
	Subtotal or Grand Total lines

For use in the CDP analysis

Capital Cost = $1,254,557 NPV

OM&M Cost = $49,838 NPV

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

NOTES:
1 Fill in costs in years that they will occur, costs not required for all 50 years if remedy is completed earlier.
2 Reference to worksheets, etc. that provide any detailed backup.
3 Formulas are set up to calculate project management costs during implementation and OM&M as a percentage of these latter costs. In the event annual costs vary and have been separately estimated, they should be entered directly into the appropriate cells for each year.

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

LEVEL OF ESTIMATE: Screening ☐ or Detailed □

A	B	C	D	E	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
4	Element	Description (Explain Element as necessary)																											
5					5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
6	**Remedial Design**				**hould be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																								
7	Bench/Pilot Testing	Bench-scale testing to ascertain stabilization amendment mix			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																											
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**				**hould be filled with equations linking to, and distributing the appropriate total costs in column I, or with zeros.**																								
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																												
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																											
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft																											
	Disposal of Concrete/Asphalt Slab	6-inch thick																											
	Impacted soils (surface and subsurface) stabilization including mixing.	based on "Hill Topping" analysis																											
	Water for stabilization	Assume 10% by weight																											
	Procurement & transportation of Cement.	Assume soils to cement ration of 7:1 by weight																											
	Procurement & transportation - Amendment	other amendments 0.5% by weight																											
	Post stabilization attainment sampling	VOCs + SVOCs + Metals; 1 sample per 50 CY																											
	Placement of top soil and seed in areas of bioremediation and areas of slab removal.	Trapezoidal - 96-ft x 154-ft x 331-ft																											
	Deed restrictions and legal/administrative costs																												
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																											
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**				**hould be filled with $ 0's, numbers or equations.**																								
21	Maintenance				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Field Activities				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**				**hould be filled with $ 0's, numbers or equations.**																								
30	Assessments	Assume 5% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 5% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management[3]**																												
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																									
38	Scope (10 to 25%)	12.2%	15%	25%																									
39	Bid (10 to 20%)	10%	10%	20%																									
40	**Subtotal**																												
41	**GRAND TOTAL COST**																												
42																													
43																													
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by e
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level es
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

TEMPLATE 6.3
COST ESTIMATES FOR REMEDY SELECTION

SITE: MRC Block D Panhandle

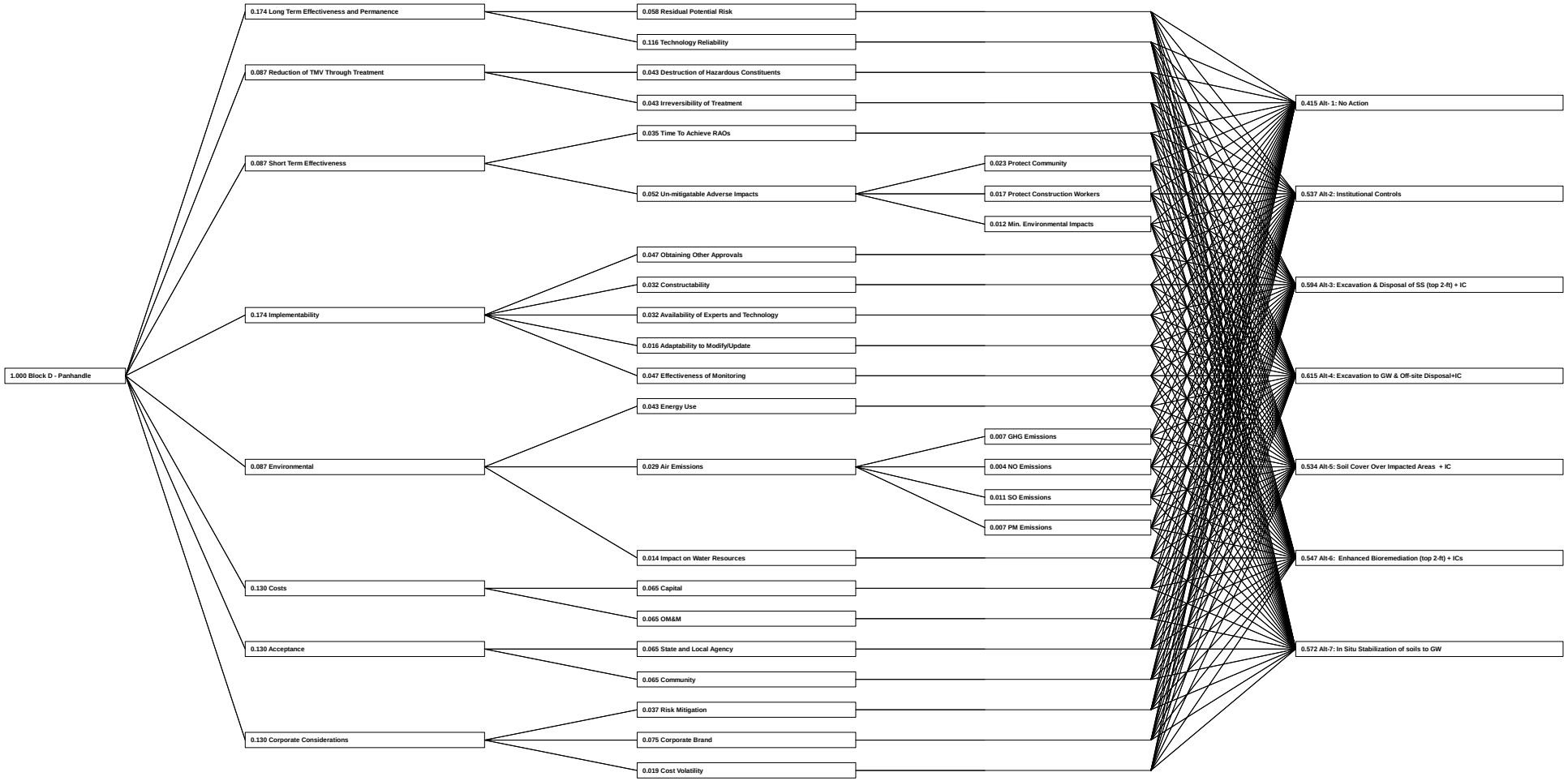
LEVEL OF ESTIMATE: Screening ☐ or Detailed □

A	B	C	D	E	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO
4	Element	Description (Explain Element as necessary)																							
5					30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
6	**Remedial Design**																								
7	Bench/Pilot Testing	Bench-scale testing to ascertain stabilization amendment mix			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Pre-remedial sampling	VOCs + SVOCs + Metals ; 1 sample per 10,000 SF																							
1	Modeling	n/a			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Total Remedial Design Effort (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
13	**Remedy Implementation**																								
14	Mobilization				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	Implementation				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sediment & Erosion Control & Stormwater Control																								
	Bulkhead repair - Panhandle section only	Based on Bulkhead reconnaissance																							
	Demolition of Concrete/Asphalt Slab	Concrete slab size: Trapezoidal - 96-ft x 154-ft x 331-ft																							
	Disposal of Concrete/Asphalt Slab	6-inch thick																							
	Impacted soils (surface and subsurface) stabilization including mixing.	based on "Hill Topping" analysis																							
	Water for stabilization	Assume 10% by weight																							
	Procurement & transportation of Cement.	Assume soils to cement ration of 7:1 by weight																							
	Procurement & transportation - Amendment	other amendments 0.5% by weight																							
	Post stabilization attainment sampling	VOCs + SVOCs + Metals; 1 sample per 50 CY																							
	Placement of top soil and seed in areas of bioremediation and areas of slab removal.	Trapezoidal - 96-ft x 154-ft x 331-ft																							
	Deed restrictions and legal/administrative costs																								
16	Reporting/Deliverables	Contractor submittals, pre/post-construction surveying, as-built			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sale Tax	Maryland sales tax (7.5%) applied to Remedy Implementation excluding disposal cost																							
17	Third Party Payments				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	NRDs				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
20	**OM&M**																								
21	Maintenance				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	IC Monitoring and Inspection	Monitoring and inspection over 50 years based on EPA estimation tool			$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
23	Field Activities				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	Materials, Fuels and Treatment Media				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Reporting/Deliverables				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
26	Modeling				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
27	Total OM&M Costs (Alternative to above sub-topics)				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
28	**Subtotal**				**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**
29	**Project Closure**																								
30	Assessments	Assume 5% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Decommissioning	Assume 5% of Design+Implementation			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	**Subtotal**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
33	**Project Management[3]**																								
34	During Implementation	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	During OM&M	Assumed			$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
	During Closure	Assumed			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	**Subtotal**				**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**	**$200**
36	**SUBTOTAL COST OF ELEMENT ESTIMATES**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
37	**Contingencies**	**Implementation**	**OM&M**	**Closure**																					
38	Scope (10 to 25%)	12.2%	15%	25%																					
39	Bid (10 to 20%)	10%	10%	20%																					
40	**Subtotal**																								
41	**GRAND TOTAL COST**																								
42																									
43																									
44	**ESCALATED CASH FLOW COSTS (20 YEARS)**				**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**	**$2,700**
	Escalation Factor				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

No shading indicates a cell that does NOT need to be changed and contains a standard formula and value.
Cells that require input for specific site; either entered directly into the cell or pulled in from an attached worksheets by e
Items that will only be included if cost is significantly different for the various Alternatives and only for the detailed level es
Subtotal or Grand Total lines

LOE Level Of Effort
LS Lump Sum
NPV Net Present Value
NRDs Natural Resource Damages
OM&M Operational, Maintenance & Monitoring
UC Unit Cost
V Vendor
% Percent

APPENDIX I—*CRITERIUM® DECISIONPLUS®* ANALYSIS


1.000 Block D - Panhandle
0.174 Long Term Effectiveness and Permanence
0.087 Reduction of TMV Through Treatment
0.087 Short Term Effectiveness
0.174 Implementability
0.087 Environmental
0.130 Costs
0.130 Acceptance
0.130 Corporate Considerations
0.058 Residual Potential Risk
0.116 Technology Reliability
0.043 Destruction of Hazardous Constituents
0.043 Irreversibility of Treatment
0.035 Time To Achieve RAOs
0.052 Un-mitigatable Adverse Impacts
0.047 Obtaining Other Approvals
0.032 Constructability
0.032 Availability of Experts and Technology
0.016 Adaptability to Modify/Update
0.047 Effectiveness of Monitoring
0.043 Energy Use
0.029 Air Emissions
0.014 Impact on Water Resources
0.065 Capital
0.065 OM&M
0.065 State and Local Agency
0.065 Community
0.037 Risk Mitigation
0.075 Corporate Brand
0.019 Cost Volatility
0.023 Protect Community
0.017 Protect Construction Workers
0.012 Min. Environmental Impacts
0.007 GHG Emissions
0.004 NO Emissions
0.011 SO Emissions
0.007 PM Emissions
0.415 Alt- 1: No Action
0.537 Alt-2: Institutional Controls
0.594 Alt-3: Excavation & Disposal of SS (top 2-ft) + IC
0.615 Alt-4: Excavation to GW & Off-site Disposal+IC
0.534 Alt-5: Soil Cover Over Impacted Areas + IC
0.547 Alt-6: Enhanced Bioremediation (top 2-ft) + ICs
0.572 Alt-7: In Situ Stabilization of soils to GW

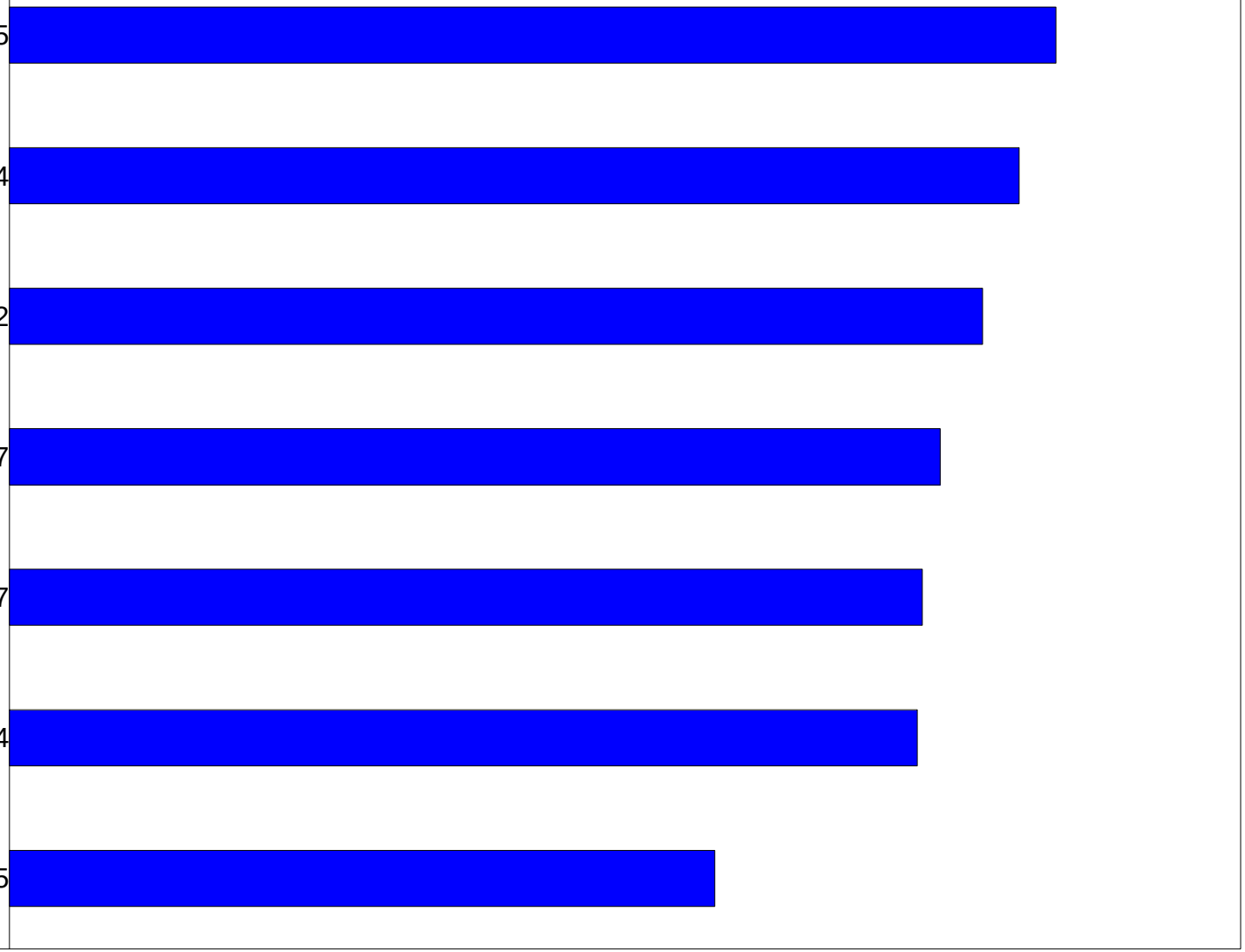
Goal Level	Weights	Rating Set	No Level Name	Weights	Rating Set
Block D - Panhan	100.00	Long Term Effectiveness and Per	Long Term Effectiveness and Per	50.00	Residual Potential Risk
	50.00	Reduction of TMV Through Treat		100.00	Technology Reliability
	50.00	Short Term Effectiveness	Reduction of TMV Through Treat	50.00	Destruction of Hazardous Con
	100.00	Implementability		50.00	Irreversibility of Treatment
	50.00	Environmental	Short Term Effectiveness	50.00	Time To Achieve RAOs
	75.00	Costs		75.00	Un-mitigatable Adverse Impacts
	75.00	Acceptance	Implementability	75.00	Obtaining Other Approvals
	75.00	Corporate Considerations		50.00	Constructability
				50.00	Availability of Experts and Tec
				25.00	Adaptability to Modify/Update
				75.00	Effectiveness of Monitoring
			Environmental	75.00	Energy Use
				50.00	Air Emissions
				25.00	Impact on Water Resources
			Costs	50.00	Capital
				50.00	OM&M
			Acceptance	50.00	State and Local Agency
				50.00	Community
			Corporate Considerations	50.00	Risk Mitigation
				100.00	Corporate Brand
				25.00	Cost Volatility

Level 2	Weights	Rating Set	Attributes	Alt- 1: No Acti	Alt-2: Institutional Co
Residual Potential Risk		Alternatives	Residual Potential Risk	0.00	3.00
Technology Reliability		Alternatives	Technology Reliability	0.00	7.00
Destruction of Hazardous Con		Alternatives	Destruction of Hazardous Con	0.00	0.00
Irreversibility of Treatment		Alternatives	Irreversibility of Treatment	0.00	0.00
Time To Achieve RAOs		Alternatives	Time To Achieve RAOs	0.00	10.00
Un-mitigatable Adverse Impacts	100.00	Protect Community	Protect Community	10.00	10.00
	75.00	Protect Construction W	Protect Construction Workers	10.00	10.00
	50.00	Min. Environmental Imp	Min. Environmental Impacts	10.00	10.00
Obtaining Other Approvals		Alternatives	Obtaining Other Approvals	10.00	8.00
Constructability		Alternatives	Constructability	10.00	10.00
Availability of Experts and Tec		Alternatives	Availability of Experts and Tec	10.00	10.00
Adaptability to Modify/Update		Alternatives	Adaptability to Modify/Update	10.00	10.00
Effectiveness of Monitoring		Alternatives	Effectiveness of Monitoring	0.00	2.00
Energy Use		Alternatives	Energy Use	10.00	9.00
Air Emissions	50.00	GHG Emissions	GHG Emissions	10.00	9.00
	25.00	NO Emissions	NO Emissions	10.00	9.00
	75.00	SO Emissions	SO Emissions	10.00	9.00
	50.00	PM Emissions	PM Emissions	10.00	9.00
Impact on Water Resources		Alternatives	Impact on Water Resources	10.00	10.00
Capital		Alternatives	Capital	10.00	8.90
OM&M		Alternatives	OM&M	10.00	5.20
State and Local Agency		Alternatives	State and Local Agency	0.00	3.00
Community		Alternatives	Community	0.00	0.00
Risk Mitigation		Alternatives	Risk Mitigation	0.00	2.00
Corporate Brand		Alternatives	Corporate Brand	0.00	1.00
Cost Volatility		Alternatives	Cost Volatility	10.00	10.00

Alt-3: Excavation & Disposal of SS (	Alt-4: Excavation to GW & Off-site	Alt-5: Soil Cover Over Impacted Ar	Alt-6: Enhanced Bioremediation (to
7.00	9.00	5.00	6.00
9.00	10.00	9.00	6.00
0.00	0.00	0.00	7.00
8.00	9.00	5.00	8.00
9.00	8.00	9.00	4.00
5.00	3.00	7.00	7.00
3.00	1.00	5.00	7.00
3.00	1.00	5.00	7.00
6.00	6.00	3.00	6.00
8.00	5.00	3.00	7.00
10.00	9.00	10.00	5.00
8.00	8.00	4.00	7.00
6.00	8.00	4.00	6.00
0.00	1.10	6.10	5.10
6.20	5.70	0.00	7.80
2.60	1.60	2.20	0.00
1.50	0.00	1.00	3.00
2.00	0.00	1.00	1.00
9.90	9.90	9.90	0.00
1.90	1.60	2.80	1.90
5.20	5.20	2.30	0.00
8.00	10.00	8.00	6.00
7.00	6.00	5.00	6.00
4.00	6.00	4.00	8.00
6.00	6.00	6.00	8.00
5.00	4.00	8.00	5.00

Alt-7: In Situ Stabilization of soil
6.00
6.00
7.00
5.00
8.00
8.00
7.00
7.00
7.00
7.00
5.00
7.00
6.00
5.20
1.20
5.90
3.50
2.00
6.60
0.00
5.20
6.00
6.00
7.00
6.00
8.00

Alternatives	Value	Decision Scores
Alt-4: Excavation to G	0.615	
Alt-3: Excavation & Dis	0.594	
Alt-7: In Situ Stabilizati	0.572	
Alt-6: Enhanced Biore	0.547	
Alt-2: Institutional Contr	0.537	
Alt-5: Soil Cover Over I	0.534	
Alt- 1: No Action	0.415	



Attribute	Alt- 1: No Acti	Alt-2: Instituti	Alt-3: Excavat	Alt-4: Excavat	Alt-5: Soil Co	Alt-6: Enhanc	Alt-7: In Situ
Impact on Water Resources	1.000	1.000	0.990	0.990	0.990	0.000	0.660
Energy Use	1.000	0.900	0.000	0.110	0.610	0.510	0.520
Constructability	1.000	1.000	0.800	0.500	0.300	0.700	0.700
Obtaining Other Approvals	1.000	0.800	0.600	0.600	0.300	0.600	0.700
NO Emissions	1.000	0.900	0.260	0.160	0.220	0.000	0.590
Availability of Experts and Technology	1.000	1.000	1.000	0.900	1.000	0.500	0.500
Irreversibility of Treatment	0.000	0.000	0.800	0.900	0.500	0.800	0.500
State and Local Agency	0.000	0.300	0.800	1.000	0.800	0.600	0.600
Residual Potential Risk	0.000	0.300	0.700	0.900	0.500	0.600	0.600
Cost Volatility	1.000	1.000	0.500	0.400	0.800	0.500	0.800
GHG Emissions	1.000	0.900	0.620	0.570	0.000	0.780	0.120
Adaptability to Modify/Update	1.000	1.000	0.800	0.800	0.400	0.700	0.700
Community	0.000	0.000	0.700	0.600	0.500	0.600	0.600
Min. Environmental Impacts	1.000	1.000	0.300	0.100	0.500	0.700	0.700
PM Emissions	1.000	0.900	0.200	0.000	0.100	0.100	0.200
OM&M	1.000	0.520	0.520	0.520	0.230	0.000	0.520
Time To Achieve RAOs	0.000	1.000	0.900	0.800	0.900	0.400	0.800
Capital	1.000	0.890	0.190	0.160	0.280	0.190	0.000
Risk Mitigation	0.000	0.200	0.400	0.600	0.400	0.800	0.700
Technology Reliability	0.000	0.700	0.900	1.000	0.900	0.600	0.600
SO Emissions	1.000	0.900	0.150	0.000	0.100	0.300	0.350
Destruction of Hazardous Constituents	0.000	0.000	0.000	0.000	0.000	0.700	0.700
Corporate Brand	0.000	0.100	0.600	0.600	0.600	0.800	0.600
Protect Community	1.000	1.000	0.500	0.300	0.700	0.700	0.800
Effectiveness of Monitoring	0.000	0.200	0.600	0.800	0.400	0.600	0.600
Protect Construction Workers	1.000	1.000	0.300	0.100	0.500	0.700	0.700
Results	0.415	0.537	0.594	0.615	0.534	0.547	0.572

Model Weights
0.014
0.043
0.032
0.047
0.004
0.032
0.043
0.065
0.058
0.019
0.007
0.016
0.065
0.012
0.007
0.065
0.035
0.065
0.037
0.116
0.011
0.043
0.075
0.023
0.047
0.017

APPENDIX J—PERMITS

Appendix J
Permit List
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Middle River Complex, Middle River, Maryland

Regulation/Statute	Permit	Applicability	Permit Process	Cost	Approval Time	Duration	Link	Agency	Contact
Section 404 Clean Water Act (33 U.S.C. 1344) USACE Regulations 33 CFR Part 320-330	Maryland State Programmatic General Permit (MDSPGP-4) or Individual Department of the Army (DA) Permit - Note: Part of "Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland" application.	Fill of Waters of the U.S. including non-tidal wetlands and waters and tidal wetlands and waters including all areas below the Mean High Water or landward extent of tidal wetlands	Complete the Joint Application for alteration " of any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland"" application. 2) Mail the original plus four copies of the application, plans, vicinity maps and any supporting documentation to: Regulatory Services Coordination (RSC)Office MDE, Water Management Administration 1800 Washington Boulevard, Suite 430 Baltimore, Maryland 21230-1708 3) Upon receipt of the application package, the RSC will determine what type of permit is necessary and will forward the application to the appropriate governmental agencies. The RSC receives applications for the Nontidal Wetlands and Waterways Division, Tidal Wetlands Division, and Dam Safety Division of the Maryland Department of the Environment, as well as the U.S. Army Corps of Engineers. The Department conducts the review in cooperation with local, state, and federal agencies. Although the Department often coordinates with local governments on specific applications, it is the applicant's responsibility to obtain all local approvals for the project. 4) Depending on the nature of the project, it may be advertised for comment and an opportunity for a public informational hearing. The applicant may be required to notify adjacent property owners. 5) The Department may perform a site evaluation. 6) At the conclusion of the review process, the Department will make a decision on the application. Upon receipt of final construction plans, a permit or license is issued by the Department. In some instances, a license may be issued by the Maryland Board of Public Works (BPW) based on a recommendation from the Department	No Fee	Minor projects - 6 to 9 months Major projects - 12 months Minor Projects: Projects that involve less than 1 acre and/or 2,000 lf of stream for non-tidal and less than 1/2 acre and less than 400 cy of fill in tidal wetlands/waters. Minor projects are not placed on public notice. Major Projects: Projects that propose permanent impacts to: construct, reconstruct a reservoir, dam or other waterway obstruction; construct a waterway; or, dredge, fill, bulkhead or change the shoreline. Major projects are placed on public notice.	Maximum of five years and may be extended for an additional five years. Construction must be initiated within three years.	http://www.nab.usace.army.mil/Wetlands%20Permits/permits.htm	USACE and EPA	Jon Romeo (410) 962-6079 or jon.romeo@usace.army.mil
USACE – Section 10 Rivers and Harbors Act - 33 USC 401, et seq	Maryland State Programmatic General Permit (MDSPGP-4) or Individual DA Permit - Note: Part of "Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland" application.	Impacts including dredge and fill of navigable waters from Mean High Water Line Seaward	See above	No Fee	See above	See above	http://www.nab.usace.army.mil/Wetlands%20Permits/permits.htm	USACE and EPA	Jon Romeo (410) 962-6079 or jon.romeo@usace.army.mil

Regulation/Statute	Permit	Applicability	Permit Process	Cost	Approval Time	Duration	Link	Agency	Contact
MDE Tidal Wetlands Protection Act – Environment Article 16 of the Annotated Code of Maryland – COMAR 26.24	Maryland State Programmatic General Permit (MDSPGP-4) or Tidal Wetland License - Note: Part of "Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland" application.	The following activities in tidal wetlands/waters are regulated by the Department: • Filling of open water and vegetated wetlands • Construction of piers, bulkheads, revetments • Dredging • Marsh establishmentAlteration of Non-tidal Wetlands and other Jurisdictional Waters of the State	See above	A fee of up to $1000 may be assessed by the BPW, depending on the purpose of the project.	See above	Maximum of 3 years	http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/PermitsandApplications/Pages/Programs/WaterPrograms/Wetlands_Waterways/permits_applications/tidal_permits.aspx	MDE Wetlands/Waterways Division	Robert Rushlow - 410-537-4023
Section 106 of the National Historic Preservation Act (Public Law 89-665; 16 U.S.C. 470 et seq)	Maryland Heritage Trust (MHT) Review and Approval is required to comply with the conditions of the MDSPGP-4 or Individual DA Permit	Section 106 regulates any direct or indirect effects on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register	Section 404 permitting triggers the need for review of the project by the Maryland Heritage Trust. If the MHT determineds that the project will have "no effect" on listed or eligible sites no further action will be required. If the MHT determines that an impact would occur avoidance, minimization, or potential mitigation measures will need to be employed	No Fee	Approximately one month	3 years	http://mht.maryland.gov/projectreview.html	Maryland Heritage Trust	Beth Cole (410) 514-7631 bcole@mdp.state.md.us
Section 7 of the Federal Endangered Species Act (ESA)	USFWS review and (potentially) consultation is required to comply with the conditions of the MDSPGP-4 or Individual DA Permit	Section 7 of the ESA requires federal agencies to evaluate potential impacts on listed species and/or habitat as a result of issuance of a federal permit including a Section 404 MDSPGP-4 or Individual DA permit	Review request letter is submitted to the USFWS to request information on listed species/habitat in the proejct area. If the USACE/Lockheed determine that there is potential impacts on listed species/habitat an evaluation and preliminary determination of affect is prepared and submitted to the USFWS for concurrence. If the project will have either a "no affect" or "may affect, but not likely to adversely affect" determination then informal consultation is concluded and no further action is required. If the project will have an adverse affect formal consultation with the USFWS must be initiated to acquire an incidental take permit	No Fee	3 months for informal consultation and up to 18 months for formal consultation	5 years	http://www.fws.gov/chesapeakebay/EndSppWeb/ELEMENTS/ProjReview.html	United States Fish and Wildlife Service	Cherry Keller 410/573 4532 cherry_keller@fws.gov
NOAA Fisheries review Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act	NOAA Fisheries review and (potentially) consultation is required to comply with the conditions of the MDSPGP-4 or Individual DA Permit	MSA requires federal agencies to evaluate potential impacts on listed species and/or habitat as a result of issuance of a federal permit including a Section 404 MDSPGP-4 or Individual DA permit	Review request letter is submitted to NOAA Fisheries to request information on listed species and EFH in the proejct area. If NOAA/Lockheed determine that there is potential impacts on listed species/habitat an evaluation and preliminary determination of affect is prepared and submitted to NOAA for concurrence. If the project will have either a "no affect" or "may affect, but not likely to adversely affect" determination then informal consultation is concluded and no further action is required. If the project will have an adverse affect formal consultation with NOAA must be initiated to acquire approval	No Fee	3 months for informal consultation and up to 18 months for formal consultation	5 years		NOAA Fisheries	

Appendix J
Permit List
Block D Panhandle Soil Remedial Action Plan
Lockheed Martin Middle River Complex, Middle River, Maryland

Regulation/Statute	Permit	Applicability	Permit Process	Cost	Approval Time	Duration	Link	Agency	Contact
Maryland Nongame and Endangered Species Conservation Act (Annotated Code of Maryland 10-2A-01; also, Code of Maryland Regulations 08.03.08	Maryland DNR Review and Approval to comply with the requirements of the MDSPGP-4 or Individual DA Permit	Potential impacts to state listed species need to be evaluated as part of the Joint Permit Application review process	Review request letter is submitted to DNR to request information on listed species in the proejct area. If DNR/Lockheed determine that there is potential impacts on listed species/habitat an evaluation and preliminary determination of affect is prepared and submitted to DNR for concurrence. If the project will have either a "no affect" determination then the review is concluded and no further action is required. If the project will have an adverse affect avoidance, minimization, and possibly mitigation measures may be required to acquire approval	No Fee	3 months	N/A	http://www.dnr.state.md.us/wildlife/Habitat/er.asp	Maryland Department of Natural Resources	Lori Byrne Phone: 410-260-8573
Chesapeake Bay Critical Area Act, Title 8, Subtitle 18 of the Natural Resources Article of the Annotated Code of Maryland – Also, Maryland Critical Area Regulations for Development in the Critical Area Resulting from State Programs are found in Title 27, Subtitle 02 of the Code of Maryland Regulations (COMAR).	Critical Area Plan and Notification	Chesapeake Bay Critical Area consists of all land within 1,000 feet of mean high tidal waters or the edge of tidal wetlands. Land use must follow criteria specific to that category of land. Furthermore, land within 100 feet of mean high tidal waters or the edge of tidal wetlands is considered to be the Tidal Buffer, {COMAR 27.01.09.01}. Impacts to regulated features within the critical area such as the Tidal Buffer or forested areas must be mitigated as necessary. At the conclusion of the review process, the Department will make a decision on the application	"Prior to submission of a project to the Critical Area Commission ,the following requirements must be completed: Public notice of the project was published for one business day in a newspaper of general circulation in the geographic area in which the proposed development would occur; At least 14 days were provided for public comment in the local jurisdiction in which the proposed development would occur; and The affected land was posted in accordance with the posting requirements in COMAR 27.03.01.03 D.Critical Area Project Notification Applications are submitted for review and approval by the BC DEPRM. A Critical Area Project Notification Application must be submitted for sites wholly or partially within IDAs in which the land disturbance is at least15,000 square feet .Necessary Critical Area Project Notification Application content includes the application, site plans with Buffer areas and other Habitat Protection Features shown (as applicable) on each plan,site maps with Critical Area and 100-year floodplain boundaries indicated, acreage of IDA, LDA, RCA areas, acreage of disturbed area, pre- and post-work impervious surface area, and pre- and post-work woodland/trees area."	No Fee	A Critical Area Project Notification Application will be sent for BC DEPRM review at the same time that the Erosion and Sediment Control Plan and Stormwater Management Plan are submitted for review. The time of review by the BC DEPRM is expected to be similar to the review periods for the Erosion and Sediment Control Plan and Stormwater Management Plans.	Two years plus any applicable extension	http://www.baltimorecountymd.gov/Agencies/environment/eir/index.html	Baltimore County Department of Environmental Protection and Sustainability Environmental Impact Review	Regina Esslinger 410-887-3980
Utility Clearance	N/A	Miss Utility for Maryland will be notified (1- 800-257-7777, www.missutility.net) at least 48 hours, but not more than 10 working days, before any excavation or well drilling activities are conducted.	N/A	No Fee	N/A	10 Working Days		N/A	Miss Utility of Maryland 800-257-7777

Regulation/Statute	Permit	Applicability	Permit Process	Cost	Approval Time	Duration	Link	Agency	Contact
MDE/Baltimore County – Well Construction Permit		A well construction permit is required before installing any well that will explore for water, obtain or monitor ground water, or inject water into any underground formation from which ground water may be produced. The well construction permit is obtained by the well driller from the local health department	Permits are obtained through a well driller licensed in the State of Maryland	Environment Article Section 9-1307 allows up to $160 per permit. Each county establishes the fee, but may not exceed $160 per permit. Baltimore County indicates cost of $80 per permit.	30 days (This may vary depending on the local health department.)				MDE - Barry Glotfelty Delegated Program Section bglotfelty@mde.state.md.us (410) 537-3784
Baltimore County – Building Permits	Baltimore County – Building Permits	A well construction permit is required before installing any well that will explore for water, obtain or monitor ground water, or inject water into any underground formation from which ground water may be produced. The well construction permit is obtained by the well driller from the local health department" "Any time a building greater than 100 square feet in size is erected, altered, added to, or demolished, a permit is required. Building permits also are required for piers, bulkheads, retaining walls, swimming pools over 250 square feet, fences over 42 inches high, and accessory buildings	Develop and submit a site plan (two to ten copies, depending on the type of work) drawn to scale and showing what is to be built and how it is to be situated on the property. Construction plans (two sets) are required for buildings over 1,000 square feet and additions over 600 square feet. Commercial permit applications require a Plan Review Data Sheet (three copies). Major work and commercial work requires these plans be sealed by an architect or engineer. The tax account number of the property will also be required		Up to 30 days				Building Permit Processing Bureau 410-887-3900

Regulation/Statute	Permit	Applicability	Permit Process	Cost	Approval Time	Duration	Link	Agency	Contact
Section 402 Clean Water Act (33 U.S.C. 1342) and 40 CFR 122.26; Maryland Environment Article, Title 9, Subtitle 3: COMAR 26.08.04	Notice of Intent for Coverage under the Construction General Permit for Stormwater	Required for all construction activity in Maryland with a planned total disturbance of 1 acre or more. Conditions of the permit include compliance with approved erosion/sediment control and stormwater management plans, compliance with water quality standards and TMDLs, self-monitoring and record keeping.	1) Obtain an application form for an individual permit at the website below or by calling the Department at (410)537-3510. Complete the form and mail with payment to: MDE, Water Management Administration P.O. Box 2057 Baltimore, MD 21203-2057 The individual permit can be submitted any time prior to the start of construction activity, but note that the permit issuance process takes 60 to 90 days, and may take longer in some instances. 2) The Department reviews the application to insure completion. 3) The Department then places the NOI on the publicly available database. 4) Following the public database posting period and submission to the department of the approval for erosion and sediment control from the SCD, the Department then sends the applicant a package which includes a letter verifying coverage and issuing the project a unique permit number, a copy of the individual permit, and a receipt card which must be posted at the site.	1 to less than 10 acres - $100 10 to less than 15 acres - $500 15 to less than 20 acres - $1,500 20 acres or more - $2,500	At least 60 to 90 days	Expires five years from the date the permit is issued to the project or until a Notice of Termination has been completed	http://www.mde.state.md.us/programs/Permits/WaterManagementPermits/WaterDischargePermitApplications/Pages/permits/watermanagementpermits/water_applications/gp_construction.aspx	Maryland Department of the Environment	Karen Smith ksmith@mde.state.md .us Phone: (410) 537-3510
Section 1.04 of the Code of the Baltimore County Regulations (COBAR) Baltimore County Grading Permit (Baltimore County Code 33-4 and 33-5; COMAR 26.17.01 and 26.17.02)	Grading Plan approval. Also requires approval or variance from stormwater management from Baltimore County and approval of E&S plans from Baltimore County Soil Conservation District	If the proposed grading disturbs over 5,000 square feet of surface area or over 100 cubic yards of fill material is utilized, a permit is required. As a condition of grading permit issuance, a Stormwater Management Plan (see below) will be submitted to Baltimore County for review and approval as well as erosion and sediment control approval from SCD.	To acquire the grading permit for the MRC site, a combined Grading Plan and Erosion and Sediment Control Plan will be submitted for review and approval by the Baltimore County Soil Conservation District (BC SCD). Per BCC 33-5-202(b)(1) and COMAR 26.17.01.05F, the grading permit application must include the approved Grading Plan and the approved Erosion and Sediment Control Plan. Additionally, a grading permit may notbe issued for any site unless a performance security has been posted, an environmental agreement has been executed, and a Stormwater Management Plan has either been approved or an exemption, waiver, or variance for the Stormwater Management Plan has been granted (BCC 33-4-108).Necessary grading plan content includes the site plan and vicinity maps, limits of disturbance, existing and proposed contours reflecting changes made to topography and surface finishes, and changes in the site impervious area. Separate proposed contours maps will not be necessary for the MRC site because post construction site grades will match pre-construction grades and post-construction surface finishes will be the same as preconstruction site finishes	$0.002 per square foot of land on which grading activities occur. The minimum fee is $40 and the maximum fee is $5,000. In addition, a performance security equal to $0.05 per square foot of land area to be disturbed, not to exceed $30,000, is also required.	An estimate of the average review time is approximately 3-6 months.	Two years from the date of issuance with an option to request an extension of up to one additional year upon written request	http://www.baltimorecountymd.gov/Agencies/environment/stormwater/index.html	Baltimore County EPS Stormwater Engineering and Baltimore County Soil Conservation District	Al Wirth/Ed Schmaus with Baltimore County Grading and Stormwater Engineering 410-887-3768 eschmaus@baltimorecountymd.gov rwirth@baltimorecountymd.gov

Regulation/Statute	Permit	Applicability	Permit Process	Cost	Approval Time	Duration	Link	Agency	Contact
Baltimore County - Erosion/Sediment Control Plan	Baltimore County – Erosion/Sediment Control Plan Approvals	Erosion/Sediment Control Plan approval is required for any construction activity that disturbs 5,000 square feet or more of soil or results in the excavation of 100 cubic yards or more of soil.	An erosion and sediment control plan will be prepared in accordance with the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control (MDE, 1994), the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, and the Baltimore County Urban Policy and Guidelines Manual; draft standards and specifications published in early 2010 will also be considered. An initial submittal will be made that will include signed/sealed plan sheets, plan information sheet, drainage area maps, and the calculated fee. The review process will then follow the 3 stage review procedure for the stormwater management and grading plan process including concept, development, and final plan review.	Flat rate of $0.004 per square foot of disturbed area with a maximum fee of $3,000.	An estimate of the average review time is approximately 6 weeks	2 years from date of issuance	http://www.mascd.net/BCSCD/	Baltimore County Soil Conservation District	Dave Bachman with Baltimore County Soil Conservation District (410) 527-5920, ext. 115 dbachman@baltimorecountymd.gov
Section 402 Clean Water Act (33 U.S.C. 1342) and 40 CFR 122.26; Environment Article, Title 4, Subtitle 1 for erosion and sediment control and Subtitle 2 for stormwater management (COMAR 26.17.01 and 26.17.02); Article 33 Title 4 of the Code of the Baltimore County Regulations (COBAR) Baltimore County Stormwater Management	Stormwater Management Variance from Baltimore County	General stormwater discharges to waters of the US and state (Federal NPDES program adminstered by MDE); In Baltimore County this includes new stormwater discharges; Development or redevelopment of land for residential, commercial, industrial, institutional, or governmental use	A Stormwater Management Plan is required to be submitted to the Baltimore County Department of Environmental Protection and Sustainability for review and approval before a grading permit can be issued and soil response action activities can commence unless an exemption, waiver, or variance has been granted. The Stormwater Management Plan will be designed in accordance with the “2000 Maryland Stormwater Design Manual, Volumes I and II,” revised in 2009.	Flat rate of $50.00 per acre of disturbed area with a minimum fee of $50.00 and a maximum fee of $450	An estimate of the average review time is approximately 6 weeks.	2 years from date of issuance	http://www.baltimorecountymd.gov/Agencies/environment/stormwater/index.html	Baltimore County EPS Stormwater Engineering	Al Wirth/Ed Schmaus with Baltimore County Grading and Stormwater Engineering 410-887-3768 eschmaus@baltimorecountymd.gov rwirth@baltimorecountymd.gov