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VIA EMAIL & US MAIL

Mr. James R. Carroll
Program Administrator
Land Restoration Program
Land Management Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 625
Baltimore, Maryland 21230

**Re: Water Management Administration Inspection; Response Regarding Outfall 008 Repair
Lockheed Martin Corporation; Middle River Complex
2323 Eastern Boulevard, Middle River, Baltimore County, Maryland**

Dear Mr. Carroll:

Lockheed Martin Corporation (Lockheed Martin) is providing this correspondence to explain the pre-existing plans for repair of Outfall 008 as part of sediment remediation activities planned for Dark Head Cove, and how these plans meet the need for such repair noted by the Maryland Department of the Environment (MDE) Water Management Administration in a recent inspection report.

An announced compliance evaluation inspection, primarily related to State Discharge Permit No. 06-DP-0298 (NPDES Permit No. DP-0298), conducted on December 18 and 22, 2015, resulted, in part, in a request to repair the collapsed storm water Outfall 008 in order to achieve compliance with Environmental Article Title 9. The scope of this repair is incorporated into the sediment remediation project being planned to comply with Administrative Consent Order and Settlement Agreement ACO-SAR-MDE0746-2015-1-0, effective December 2015, for environmental remediation of the Middle River Complex and sediment in waters adjacent to the facility.

The scope of the sediment cleanup includes storm drain cleaning and repair, installation of new sheet pile for soil retention along a portion of the existing bulkhead in Dark Head Cove, removal of impacted sediment(s) in Cow Pen Creek and Dark Head Cove, and *in situ* remediation using activated carbon amendment in portions of Dark Head Cove. This remediation project is under review for approval by the Maryland Department of the Environment (MDE) Land Management Administration and the United

States Environmental Protection Agency, as well as by a range of other agencies with permitting responsibilities for portions of the work. Specifically related to permitting, the Baltimore County Department of Environmental Protection and Sustainability, Baltimore County Soil Conservation District, and MDE will review and approve ground disturbance activities in the upland associated with pipe repair as part of the sediment remediation grading, erosion and sediment, and Construction General Permit approval, respectively. Also, impacts to waters of the United States at the outfall have been described and quantified as part of the bulkhead sheet pile replacement and sediment dredging in Dark Head Cove within the Joint Permit Application submitted to both MDE Tidal Wetlands Division and the United States Army Corps of Engineers. Simultaneous with the reviews by governmental authorities, Lockheed Martin Corporation is evaluating contractors and receiving bids to conduct the remediation project. The project is estimated to be completed between September 2016 and February 2018, if all permits and approvals are received in a timely manner.

Relevant to the MDE Water Management Administration compliance inspection is the storm drain repair and cleaning, and the soil retention portion, of the sediment remediation project. Based on field studies, a variety of repairs to existing storm drains have been identified, and the existing steel sheet pile portion of the bulkhead has been found significantly degraded. The concrete covered riprap portion of the bulkhead is generally in good condition. Thus, as part of the sediment remediation, several storm drain lines will be repaired and cleaned, and a new sheet pile bulkhead will be constructed to prevent upland soils from being eroded and transported to Dark Head Cove. Repair of Outfall 008, need for which is specifically identified in the MDE Water Management Inspection Report, is already captured in plans for the sediment remediation project. This outfall has failed near the riprap portion of the bulkhead due to significant degradation of aged corrugated metal pipe (CMP). This 24-inch diameter CMP was an extension of original reinforced concrete pipe (RCP) which was found during field studies to be approximately 65 feet inland from the bulkhead and in good condition. Thus, the repair planned for Outfall 008 is to replace the approximately 65 feet of CMP with corrugated high density polyethylene (HDPE) pipe and restore the outfall in the riprap bulkhead. The storm drain repair, driving of new sheet pile, and extension of all outfalls through the new bulkhead (sheet pile portion) is first in the construction sequence of the sediment remediation project. If all permits and approvals are granted, it is anticipated that Outfall 008 will be repaired in the September to November 2016 timeframe.

In addition to the repairs to the Outfall 008 storm drain line, several other outfalls to Dark Head Cove are also identified for repair during the sediment remediation project. Specifically, repairs are necessary to replace aged CMP (Outfalls 005 West; 00X). A few minor repairs will be performed on other storm drain lines to correct joint failure or separation in RCP or box culverts (Outfalls 005 East, 006, 007).

Also, per the recommendation contained in the MDE Water Management inspection report, on December 21, 2015, Lockheed Martin has installed orange safety fencing around the landward side of Outfall 008 to identify the physical hazard of the erosional feature to any facility occupants or visitors. This safety fence will be maintained until the repairs to Outfall 008 are made.

Please contact me at (301) 548-2209 if you have any questions or need any additional information.

Sincerely,



Thomas D. Blackman
Project Lead, Environmental Remediation

cc: (via email)
Gary Schold, MDE
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