

An aerial photograph of a rugged, mountainous landscape. The terrain is characterized by steep, rocky slopes and a dense network of roads and trails that wind through the valleys and across the ridges. The overall appearance is that of a high-altitude, mountainous region. The text is overlaid on the upper portion of the image.

Lockheed Propulsion Company Beaumont Test Facilities

Beaumont Site #. 1
Treatment Plant
Standard Operating Policies

LOCKHEED MARTIN



BURBANK PROGRAM OFFICE

BEAUMONT SITE NO.1
TREATMENT PLANT
STANDARD OPERATING POLICIES

Approved By:

A handwritten signature in black ink, appearing to read "D. Jensen", is written over a horizontal line.

David Jensen, P.E.
Manager, Groundwater Projects

BURBANK PROGRAM OFFICE

BEAUMONT SITE NO. 1 TREATMENT PLANT
STANDARD OPERATING POLICIES

- 1.0 Communications With Regulatory Agencies
- 2.0 Documentation Of Operational Data
- 3.0 Reporting Of Operational Data
- 4.0 Operations And Maintenance Procedures
- 5.0 Collection And Interpretation Of Monitoring Data
- 6.0 Safety And Health
- 7.0 Waste Disposal Procedures
- 8.0 Site Access And Security
- 9.0 Operator Training
- 10.0 Documentation for Modifying Software and Operating Procedures

TREATMENT PLANT STANDARD OPERATING POLICIES**1.0 COMMUNICATIONS WITH REGULATORY AGENCIES****1.1 Purpose**

The purpose of this standard operating policy is to establish guidelines and responsibilities for coordinating treatment plant operations with the relevant regulatory agencies. It also establishes the policies for documenting communications with these agencies. For this policy, a regulatory agency is defined as any federal, state, or local government entity which affects the operation of the treatment plant.

1.2 Procedures And Responsibilities**1.2.1 General Communication Procedures**

Contact with regulatory agencies will be conducted in accordance with BPO ESH manual procedure No : BPO / ESH - 03 : Regulatory Agency Visits, Inspections and Phone Communications.

1.2.2 Project Manager Responsibilities

The Project manager is responsible for the following actions.

- Immediately informing the Department Manager in the event of an unscheduled site visit by any agency representative.
- Documenting all conversations with agency representatives utilizing Regulatory log form "attachment 1 to BPO / ESH - 03" and informing the Project Manager of such conversations. Distribute the regulatory log to the Director, Deputy Director, Department Manager and the appropriate Regulatory staff.
- Coordinating with the Department Manager and the BPO Regulatory Affairs Department to ensure that all agency reporting requirements are met on schedule. This includes providing all of the appropriate operational data necessary for reporting purposes.
- Documenting all meetings and phone conversations with agency representatives. Copies of this documentation will be provided to the

Department Manager and the BPO Regulatory Affairs Department.

- Attending all site visits made by agency representatives.
- Performing periodic reviews of treatment plant operations to ensure that the site specific procedures developed as a result of this policy are being implemented.

1.3 Review Of Policy And Procedures

The policy and procedures for regulatory agency communications will be reviewed, and amended as necessary, by the Project and Department Managers following the occurrence of any of the events listed below.

- A change in the operating procedures of the facility is made.
- A change in the manner of reporting operational data is requested by a regulatory agency.
- The agency communication policies established by the BPO Regulatory Affairs Department are changed.
- The existing procedures are found to be deficient.

TREATMENT PLANT STANDARD OPERATING POLICIES**2.0 DOCUMENTATION OF OPERATIONAL DATA****2.1 Purpose**

The purpose of this standard operating policy is to define the requirements and responsibilities for documenting data associated with treatment plant operations. It includes the areas of general operations, maintenance, and compliance monitoring.

2.2 Procedures And Responsibilities

The Project Manager is responsible for filling out the operating data log sheet provided in the Operation and Maintenance Plan. The Project Manager is also responsible for implementing the activities identified in Section 2.2.1 through 2.2.5.

The Project Manager is responsible for ensuring that plant operations are documented in accordance with this policy. The Project Manager is also responsible for ensuring that the data identified in Sections 2.2.1 through 2.2.5 are kept up to date.

2.2.1 Operating Logs

Process data for the catox unit will be documented on the operating data log sheet, in the operating data log book located in the conex box at the catox unit. The operation of the treatment plants will be documented in the operations log book provided in the control room. The operating data log sheet will be completed each day the treatment plant is manned.

2.2.2 Maintenance Logs

Scheduled and unscheduled maintenance activities will be documented in the operations log book provided in the control room.

2.2.3 Storage Of Operational Data

Operational data monitored by the treatment plant PLC will be stored to the hard drive of the control room computer. This data will be periodically down loaded to an external storage medium. The frequency of down loading will not

be any less frequent than once a week. All down loaded data will be stored in the treatment plant control room.

2.2.4 Monitoring Data

Copies of all laboratory reports from treatment plant monitoring data will be kept at the Burbank Program Office (BPO).

2.2.5 Inventory Tracking

An inventory of all spare parts for the treatment plant will be kept on site. The inventory will include part information, purchasing information, and the location and quantity of each part. Whenever a spare part is taken, the use of the part will be documented by identifying the user and the date the part was taken and a replacement spare part will be ordered within three working days.

2.2.6 Agency Required Reports

The Project Manager will assure that the agency required reports will be kept on site and are available for inspection for a minimum of three years.

2.3 Review Of Policy And Procedures

The policy and procedures for documenting treatment plant operational data will be reviewed, and amended as necessary, following the occurrence of any of the events listed below.

- A modification of the process is made.
- A regulatory agency requests that additional data be monitored, recorded, and/or reported.
- The existing procedures are found to be deficient.

TREATMENT PLANT STANDARD OPERATING POLICIES

3.0 REPORTING OF OPERATIONAL DATA

3.1 Purpose

The purpose of this standard operating policy is to establish the requirements and responsibilities for the reporting of treatment plant operational data to the relevant government agencies.

3.2 Procedures And Responsibilities

The Project Manager is responsible for the collection and reporting of operational data in accordance with the procedures listed in Sections 3.2.1 and 3.2.2.

3.2.1 Operational Data

Treated volumes, plant availability percentages and operation highlights will be collected and prepared in a format suitable for incorporation into the necessary monthly, quarterly, or annual reports. The operational data will be provided to the Department Manager and the BPO Regulatory Affairs Department monthly. All transmittals of operational data to a regulatory agency will be coordinated with the BPO Regulatory Affairs Department.

3.2.2 Monitoring Data

Monitoring data (e.g., influent and effluent concentrations) will be collected and prepared in a format suitable for incorporation into the necessary monthly, quarterly, or annual reports. The monitoring data will be stored at the BPO office and will be readily accessible to the Department Manager and the BPO Regulatory Affairs Department upon request. All transmittals of monitoring data to a regulatory agency will be coordinated with the BPO Regulatory Affairs Department.

3.3 Review Of Policy And Procedures

The policy and procedures for reporting treatment plant operational data will be reviewed, and amended as necessary, in the event of a request for

additional data or a modification in an existing reporting procedure from a regulatory agency.

TREATMENT PLANT STANDARD OPERATING POLICIES**4.0 OPERATION AND MAINTENANCE PROCEDURES****4.1 Purpose**

The purpose of this standard operating policy is to establish guidelines and responsibilities for operation and maintenance activities associated with treatment plant facilities.

4.2 Procedures And Responsibilities

The Project Manager is responsible for performing operation and maintenance activities in accordance with the procedures listed in Sections 4.2.1, 4.2.2 and 4.2.3. The Project Manager is responsible for reviewing plant operations on a routine basis to ensure that this policy is being implemented. The Project Manager is also responsible for ensuring that the Operation and Maintenance Plan is kept up to date.

4.2.1 Operations

The operation of each treatment plant will be performed in accordance with the procedures established in the Operation and Maintenance Plan and the Health and Safety Plan developed for the facility.

4.2.2 Maintenance Activities

Routine, preventative, and unscheduled maintenance activities will be performed in accordance with the procedures identified in the Operation and Maintenance Plan and the Health and Safety Plan developed for the facility. All maintenance activities will be recorded in the operations log book located in the control room.

4.2.3 Contractors

Contractors performing hazardous waste operations will be required to prepare a site / task specific safety and health plan. Servicing contractors and vendors performing non hazardous waste operations will be briefed on site hazards and escorted by on site personnel.

4.3 Review Of Policy And Procedures

The policy and procedures for treatment plant operations and maintenance will be reviewed, and amended as necessary, following the occurrence of any of the events listed below.

- A modification of the facility is made.
- The treatment plant is shut down or found to be operating out of specifications due to a failure to perform adequate maintenance, operator error, or unexpected operating conditions.
- A significant material spill or accident.
- The existing procedures are found to be deficient.

TREATMENT PLANT STANDARD OPERATING POLICIES

5.0 COLLECTION AND INTERPRETATION OF MONITORING DATA

5.1 Purpose

The purpose of this standard operating policy is to establish guidelines and responsibilities for monitoring treatment plant operations with respect to the performance requirements set forth for the facility. It also establishes guidelines for determining what actions are to be taken in response to monitoring results.

5.2 Procedures And Responsibilities

The Project Manager is responsible for the operation and maintenance of all on-site monitoring instruments. The Project Manager is responsible for ensuring that the procedures identified in Sections 5.2.1 and 5.2.2 are implemented. The Project Manager is also responsible for keeping the treatment plant monitoring program up to date.

Analytical data for monitoring the performance and compliance of the treatment plant will be collected in accordance with the schedule and procedures identified in the Lockheed Beaumont No. 1 Site - FINAL OPERATION AND MAINTENANCE AGREEMENT, AND REMEDIAL ACTION CERTIFICATION dated July 1, 1994.

5.3 Review Of Policy And Procedures

The policy and procedures for collecting treatment plant monitoring data will be reviewed, and amended as necessary, following the occurrence of any of the events listed below.

- A modification to the process is made.
- A significant change in influent water quality is detected.
- The performance criteria for the treatment plant are modified.
- The monitoring requirements for treatment plant operations are modified.
- The existing procedures are shown not to provide adequate safeguard against the discharge of material which does not meet the specified limitations.

TREATMENT PLANT STANDARD OPERATING POLICIES**6.0 SAFETY AND HEALTH****6.1 Purpose**

The purpose of this standard operating policy is to establish health and safety guidelines and responsibilities for the operation and maintenance of treatment plant facilities.

6.2 Procedures And Responsibilities

The Project Manager will be responsible for ensuring that all on-site activities are performed in accordance with the procedures described in Sections 6.2.1 and 6.2.2. The Project Manager is responsible for implementing the procedures identified in Sections 6.2.3, 6.2.4, and 6.2.5. The Project Manager is also responsible for ensuring that the facility's Operation & Maintenance, Health & Safety, and Facility Emergency Action Plans are kept up to date.

6.2.1 Routine Operations

All routine operations of the treatment plant will be carried out according to the procedures defined in the Operation and Maintenance Plan , the O&M Health and safety plan and the BPO ESH manual.

6.2.2 Emergency Situations

All emergency situations will be handled in accordance with the procedures identified in the Facility Emergency Action Plan.

6.2.3 MSDS And Inventory Information

A Material Safety Data Sheet for each hazardous material present at the site will be kept in the control room and will be readily available for all personnel. In addition, an inventory of all hazardous materials present at the site will be kept in the control room. Hazardous materials labeling, MSDS's, and employee training requirements are outlined in the BPO ESH manual procedure No : BPO / ESH - 02 : Hazard Communication.

6.2.4 Compliance Auditing

The operations of the treatment plant will be reviewed no less than monthly for the purpose of ensuring that proper health and safety procedures are being followed and that health and safety related documents and procedures are up to date.

6.2.5 Accident Reporting

All accidents and near miss situations will be documented and reported to the Department Manager and the BPO Health and Safety Officer. Accident investigation and injury reporting will be conducted in accordance with BPO ESH manual procedure No : BPO / ESH - 05.

6.3 Review Of Policy And Procedures

The health and safety policy and procedures for treatment plant operations will be reviewed, and modified as necessary, following the occurrence of any of the event listed below.

- The treatment plant is modified.
- An accident or near miss event occurs.
- The existing safety and health procedures are found to be deficient.

TREATMENT PLANT STANDARD OPERATING POLICIES

7.0 WASTE DISPOSAL PROCEDURES

7.1 Purpose

The purpose of this standard operating policy is to establish guidelines and responsibilities for the identification and disposal of waste materials generated by treatment plant operations.

7.2 Procedures And Responsibilities

The Project Manager is responsible for the following waste related activities:

- Notifying the Department Manager in the event of a spill or other waste related accident occurring at the site.
- The proper disposal of all non-hazardous trash generated during plant operations.
- Notifying the Department Manager in the event of a spill or other waste related accident occurring at the site.
- Coordinating the on-site activities of all spill and emergency response personnel called to the site.
- Coordinating with the BPO Regulatory Affairs Department to ensure that all waste materials are handled in accordance with the procedures defined in Sections 7.2.1 and 7.2.2.

7.2.1 Routine Operations

The identification, handling, and disposal of wastes generated by the routine operation of the treatment plant will be performed in accordance with the policies and procedures established in the BPO ESH manual.

7.2.2 Hazardous Materials Spills

The BPO Regulatory Affairs Department will be notified in the event of a non-

contained spill or other waste related emergency. BPO ESH manual procedure NO : BPO / ESH - 01 and BPO / ESH - 02 will be followed for waste identification, handling and disposal of waste following a hazardous spill. Copies of manifests and land disposal restriction forms will be kept on-site and at the BPO office for a minimum of 5 years.

7.3 Review Of Policy And Procedures

The policy and procedures for identifying and disposing of waste materials generated by treatment plant operations will be reviewed, and amended as necessary, following any change in the policies and procedures established by the BPO Regulatory Affairs Department.

TREATMENT PLANT STANDARD OPERATING POLICIES

8.0 SITE ACCESS AND SECURITY

8.1 Purpose

The purpose of this standard operating policy is to establish guidelines and responsibilities for controlling access to treatment plant facilities.

8.2 Procedures And Responsibilities

It is the responsibility of the Beaumont security personnel present at the facility to ensure that the site access controls described in Section 8.2.1 are implemented, with the exception of issuing facility keys.

It is the responsibility of the Project Manager to periodically review plant operations to ensure that site access controls are being implemented. The Project Manager also is responsible for implementing all changes in the procedures for controlling site access and for issuing and collecting keys to the facility.

8.2.1 Site Access Control

The following describes routine site access control procedures:

- Sign-in all visits to the site by non-Lockheed personnel on the visitor sign-in sheet.
- Document the arrival and departure of maintenance contractors in the operations log book.
- Lock facility buildings at all times when the treatment facility is not manned.
- Secure perimeter fences at all times when the treatment facility is not manned and at all times that access is not under the direct control of facility personnel.
- Document all personnel issued keys to the facility in the key log. The key log will include the date of issue and return. At least one spare set of keys will be kept in the Burbank Program Office key box.

8.3 Review Of Policy And Procedures

The policy and procedures for controlling access to treatment plant facilities will be reviewed, and amended as necessary, following the occurrence of an unauthorized entry in to the plant facilities or the departure of an employee involved in the operation of the facility.

TREATMENT PLANT STANDARD OPERATING POLICIES**9.0 OPERATOR TRAINING****9.1 Purpose**

The purpose of this standard operating policy is to establish the training requirements for personnel involved with treatment plant operations and to establish the responsibility for operator training.

9.2 Procedures And Responsibilities

It is the responsibility of the Project Manager to ensure that all new plant operators receive training in accordance with the requirements listed in Section 9.2.1. This includes ensuring that additional operator training is performed, as needed, following any modifications to the treatment process. All training activities will be documented as part of the daily operational log. The Project Manager also is responsible for ensuring that the training policy, requirements, and procedures are up to date. This role will be carried out by a periodic audit of the training records and requirements.

9.2.1 Training Requirements / Medical Surveillance

Prior to operating a treatment plant without supervision, an operator must complete the training and medical requirements defined in section 8.0 of the O&M Safety and Health Plan. The treatment plant operator must also satisfy the requirements indicated in BPO ESH manual procedure No : BPO ESH - 01 : ESH Training.

9.3 Review Of Policy And Procedures

The policy and procedures for operator training will be reviewed and amended as necessary, following the occurrence of any of the event listed below.

- The treatment plant is modified.
- An accident or near miss event occurs.
- Water which does not meet the effluent limitations is discharged as a result of operator error.

- . The facility is damaged or shut down as a result of operator error.
- The existing training procedures are found to be deficient.



BURBANK PROGRAM OFFICE

TREATMENT PLANT STANDARD OPERATING POLICIES

10.0 DOCUMENTATION FOR MODIFYING SOFTWARE AND OPERATING PROCEDURES

10.1 Purpose

The purpose of this standard operating policy is to delineate the procedures and responsibilities for implementing: a) operating software modifications for the treatment plant and b) treatment plant operating procedure or process modifications.

10.1.1 Procedures and Responsibilities for Modification of Plant Operating Software

The following steps will be followed to implement any modifications related to the treatment plant operating software:

- The Project Manager will prepare a Plant Modification Authorization form providing problem description, proposed changes, and a verification procedure of the changes.
- The Plant Modification Authorization form will be reviewed by the Department Manager and a designated consultant (as required).
- Upon approval from the Department Manager, the approved changes will be made by the plant personnel and/or the designated consultant under the direction of the Project Manager only after an entire hard-drive back-up.

After the desired software modifications have been made, the Project Manager will ensure the following:

- The software modifications have been field tested.
- Document the changes and include them in the treatment plant operation and maintenance manual.
- Backup the entire hard-drive.
- Ensure that the operating staff has been notified and trained on the

implemented changes.

10.1.2 Exceptions

In the event that the Project Manager observes an emergency situation warranting immediate changes to the operating software, he/she may execute the changes provided that the conditions leading to the emergency situation, if known, have been immediately communicated to the Department Manager verbally followed by a Plant Modification Authorization form at the first available opportunity.

10.2.1 Procedure and Responsibilities for Modification of the Treatment Plant Operating Procedure

The following steps will be followed to implement any modifications related to the treatment plant operating procedure:

- The Project Manager will prepare a Plant Modification Authorization form providing problem description, proposed changes, and a verification procedure of the changes.
- The Plant Modification Authorization form will be reviewed by the Department Manager and a designated consultant (as required).
- Upon approval from the Department Manager, the approved changes will be made by the plant personnel and/or the designated consultant under the direction of the Project Manager.

After the desired operating procedure modifications have been made, the Project Manager will ensure the following:

- Document the changes and include them in the treatment plant operation and maintenance manual.
- Ensure that the operating staff has been notified and trained on the implemented changes.

10.2.2 Exceptions

In the event that the Project Manager observes an emergency situation warranting immediate changes to the operating procedure, he/she may execute the changes provided that the conditions leading to the emergency situation, if known, have been immediately communicated to the Department Manager verbally followed by a at the first possible opportunity.