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FEDERAL EXPRESS

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In reply refer to SHEA 108177

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

BOEING

Attention: LB Nye, 401 Certification Program Unit Chief

Reference: CLEANUP AND ABATEMENT ORDER NO. R4-2007-0054

Subject: December 2008 Monthly Monitoring Report Submittal
Northern Drainage and LOX Area Debris Removal Project
Santa Susana Field Laboratory, Ventura County, California

Dear Ms. Nye,

The Boeing Company (Boeing) hereby submits the monthly monitoring report (MMR) for the Santa Susana Field Laboratory (SSFL) Northern Drainage and LOX Area Debris Removal Project (Northern Drainage/LOX Area Project), as required by Section B. xii of Cleanup and Abatement Order No. R4-2007-0054 (CAO). Monthly reports are to provide a summary of wet weather sampling activities and analytical results. Based on CAO requirements, MMRs will be submitted to the California Regional Water Quality Control Board-Los Angeles Region (RWQCB) by the 15th day of each calendar month for the previous month. This report covers sampling activities during December 2008.

Project History

As previously reported, two distinct debris areas have been identified in the northeast portion of the SSFL, along the Northern Drainage: the LOX Debris Area and the Former Shooting Range/Clay Target Debris Area. In addition to these specific areas, but still within the Northern Drainage, clay target debris has been observed extending westward from the Former Shooting Range down drainage, and foam insulation debris has been observed extending westward from the LOX Debris Area. Based on work scopes, the project has been divided into two specific task areas: the LOX Debris Area and the Northern Drainage Debris Area (including the Former Shooting Range).

Boeing submitted a mitigation work plan to the Department of Toxic Substances Control (DTSC) on September 10, 2007 (*Sage Ranch Debris/Asbestos Removal Work Plan*) for review and approval. In anticipation of commencing this project, Boeing submitted a *Request to Amend a Lake or Streambed Alteration Agreement* to the California Department of Fish and Game (CDFG) on August 15, 2007. Additionally, a site-specific storm water pollution prevention plan (SWPPP) was submitted to the RWQCB on October 10, 2007. Based on discussion and

communication with the United States Army Corps of Engineers (ACOE), Clean Water Act Section 404 authorization or permitting was not necessary or required for this project.

Project Implementation

Soil and debris removal began in the LOX Debris Area on November 14, 2007 and was completed on December 20, 2007. The LOX Debris Area removal action was performed in an area covering approximately 0.3 acres, with approximately 2,500 cubic yards of debris and soil removed, shipped off-site and appropriately managed. Debris removal from the Former Shooting Range/Clay Target Debris Area began on July 22 and is currently in progress. Additional information regarding the field activities for the LOX Debris Area was described in previous MMRs.

A cultural survey to identify and protect historical anthropogenic sites at the Former Shooting Range Area and biological survey to identify protected natural resources were initiated on May 12, 2008 and will be concluded after the completion of the debris removal. Historical sites and protected species identified during the surveys were marked with red flags so they could be preserved during the debris removal.

In preparation for the clay target debris removal, clearing and grubbing of vegetation at the Former Shooting Range Area was performed between June 3, 2008 and June 27, 2008. Pursuant to a DTSC requirement, radiological surveys were performed in the cleared areas.

Debris removal in the Northern Drainage Debris Area commenced on July 22, 2008 at the Former Shooting Range area and at the LOX Removal area. Soil that was removed from the drainage was either placed in roll-off bins or stockpiled on site for waste profiling. Anthropogenic debris discovered during excavation activities at the Former Shooting Range Area were removed and contained in roll-off bins on site and will be profiled for waste characterization. Confirmation soil sampling was performed between September 17, 2008 and September 26, 2008 to identify potential impacts from the material removed from the anthropogenic debris area. To address elevated concentrations of analytical results identified during the initial confirmation soil sampling event, additional soil removal was performed at the Former Shooting Range Area. Confirmation soil sampling was performed intermittently between October 31, 2008 and December 5, 2008 concurrently with the additional soil removal.

Down-drainage confirmation soil sampling between the Former Shooting Range and the LOX Debris Area was conducted on October 24, 2008. Based on the analytical results from confirmation sampling, additional removal action in this stretch of the drainage is necessary and will be performed after the conclusion of the 2008/2009 rainy season.

As requested by the RWQCB, previously installed straw wattles and straw bale barriers were removed at locations where they will interfere with natural pathway of the drainage. Silt barriers were installed at the Former Shooting Range area and at the bottom of Wells 12 road to reduce sediment loads into the drainage. Approximately 1.5 acres of Hydroseed was applied at the Former Shooting Range

area on November 10, 2008 and an additional 1 acre was applied on December 19, 2008.

Wet Weather Flow and Sampling

The CAO requires surface water samples to be collected when wet weather flow discharging downstream of the cleanup area occurs. Samples are to be collected during the first hour of discharge or at the first safe opportunity. Samples are to be collected not more than 50 feet upstream or downstream of the area where work is occurring. Samples are to be collected for three rain events or two years, whichever occurs first, after work is complete. To establish whether a rain event resulted in wet weather flow, field inspections are conducted during and after rain events.

Boeing observed rain events on December 7 and 8, 2008; December 14 through December 17, 2008; on December 22, 2008; and on December 24 through December 25, 2008. Field inspections were conducted prior to and during each rain event. The SSFL rain gauge recorded the following amounts of precipitation for the month of December:

- A total of 0.02 inches of rain between approximately 4:00 pm on December 7 and 4:00 am on December 8, 2008
- A total of 1.71 inches of rain between approximately 10:00 pm on December 14 and 5:00 pm on December 17, 2008.
- A total of 0.35 inches of rain between approximately 4:00 am and 10 am December 22, 2008
- A total of 0.32 inches of rain between approximately 3:00 pm on December 24 and 2:00 pm on December 25, 2008.

Flow was not observed at the upstream location during the rain events noted above. Flow was observed at Outfall 009 only during the December 14 through 17, 2008 event. Because of the unsafe conditions in accessing the downstream sampling location, which is approximately 500 feet downstream of Outfall 009,[1] it was not possible to collect a downstream sample during this event. The variable weather conditions, the fact that access to the location could be obtained only by forging in the stream bed 500 feet in-flow downstream while carrying heavy equipment-containing coolers, and the potentially treacherous muddy and rocky terrain rendered access to the location unsafe.

Figure 1 is a site location map showing the upstream sampling location and the extent of the work through the Former Shooting Range area downstream to date.

Wet Weather Flow Sample Results Reporting

As required by the CAO, surface water samples are to be collected when wet weather flow discharging downstream of the cleanup area occurs. The samples are to be collected not more than 50 feet upstream or downstream of the area where work is occurring and for three rain events or two years, whichever occurs first, after work is complete. To establish whether a rain event resulted in wet weather flow, field inspections are conducted during and after rain events.

[1] Sampling was conducted at Outfall 009 under the SSFL NPDES permit and verified data from the sampling event will be provided with the NPDES permit quarterly report.

During the month of December, Boeing recorded four rain events. Although flow was observed at Outfall 009 only during the December 14 through 17, 2008 event, downstream surface water samples were not collected due to unsafe conditions as described above.

If there are any questions regarding this report, you may contact Ms. Lori Blair at (818) 466-8741.

Sincerely,

BOEING

Thomas D. Gallacher
Director
Santa Susana Field Laboratory
Environment, Health and Safety

Attachment: Figure 1. Excavation Extents in the Northern Drainage

cc: Norm Riley, DTSC
Gerard Abrams, DTSC
Cassandra Owens, RWQCB
Allen Elliott, NASA
Dixie Hambrick, MWH

Excavation Extents in the Northern Drainage

Base Map Legend

- Administrative Area Boundary
- RFI Site Boundary
- Existing Building or Structure
- Removed Building or Structure
- Dirt Road
- Fences
- A/C Paving
- Pipe
- Drainage
- NPDES Outfall

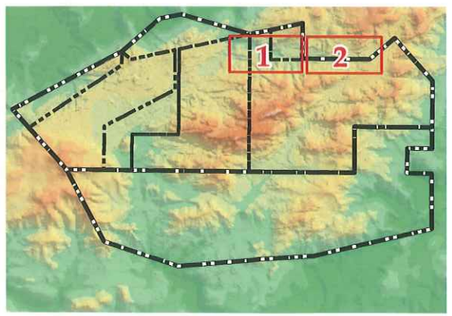
Figure Legend

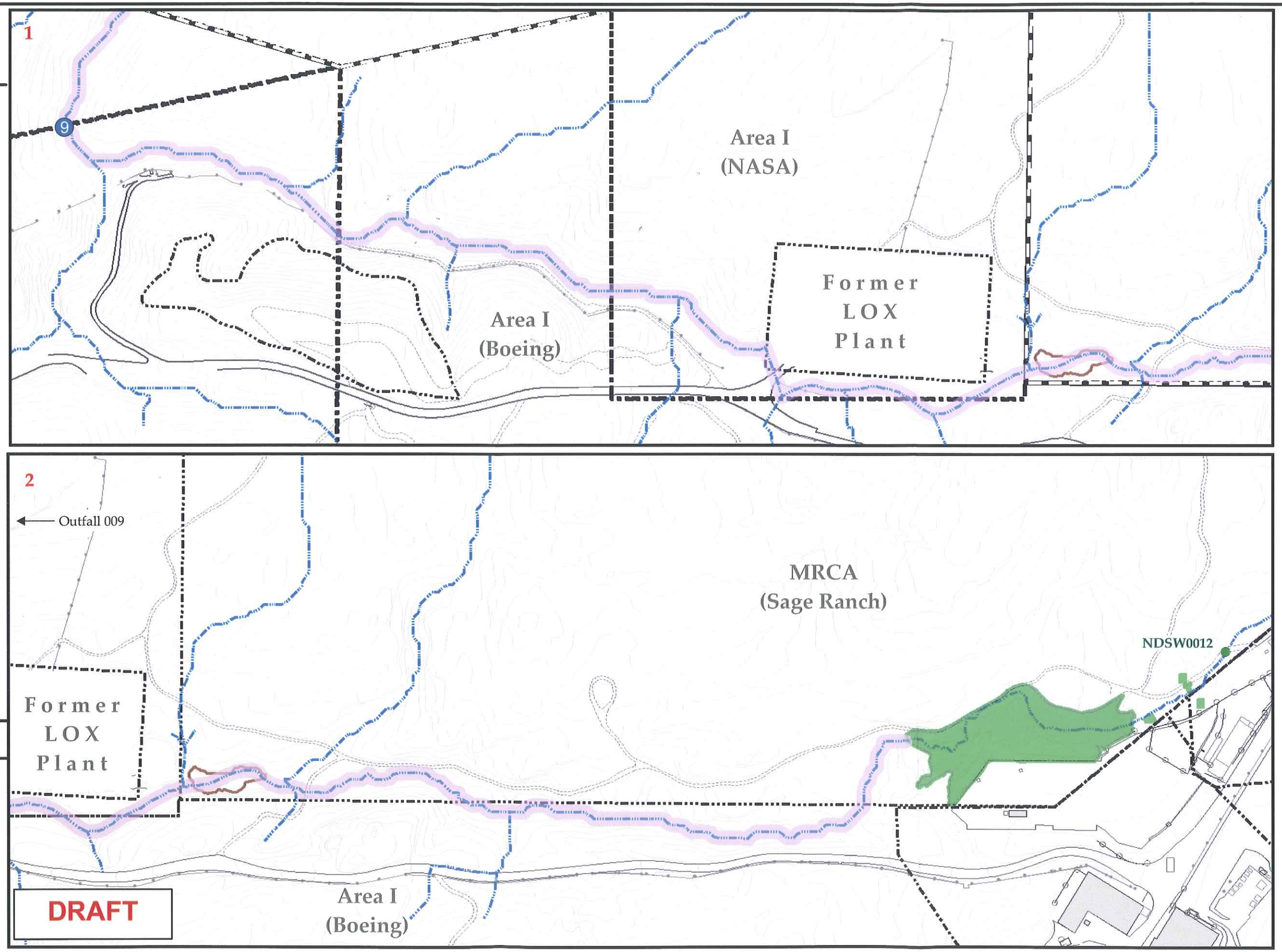
- Clay Target Excavation Extent
- Drainage Excavation and Debris Removal
- Extent of Lox Debris / Asbestos

Document: NorthDrainage_ExcavationExtents.MXD

Date: Dec. 12, 2008

0 130 260 520 Feet





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MWH FIGURE 1