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Certified Mail

September 15, 2009

In reply refer to SHEA-109089

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

Attention: Dr. L. B. Nye, 401 Certification Program Unit Chief

Reference: Cleanup and Abatement Order No. R4-2007-0054

Subject: August 2009 Monthly Monitoring Report Submittal
Northern Drainage Debris Area and LOX Debris Area Removal Project
Santa Susana Field Laboratory, Ventura County, California

Dear Dr. Nye:

The Boeing Company (Boeing) hereby submits the monthly monitoring report (MMR) for the Santa Susana Field Laboratory (SSFL) Northern Drainage Debris Area and LOX Debris Area Removal 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 activities during August 2009.

Project History

As previously reported, two distinct debris areas were 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 was observed extending westward from the Former Shooting Range down drainage, and foam insulation debris was observed extending westward from the LOX Debris Area. Based on work scopes, the project was divided into two specific task areas: (i) the LOX Debris Area and (ii) 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

LOX Debris Area. 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 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. Additional information regarding the field activities for the LOX Debris Area was provided in previous MMRs.

Northern Drainage Clay Target Removal. Phase 1 of the clay target removal from the Northern Drainage Clay Target Area occurred between July 22, 2008 and mid December 2008. Additional clay target removal began on June 8, 2009 between the Former Shooting Range area and Outfall 009 and will continue during the 2009 fall season.

A cultural survey to identify and protect historical anthropogenic sites and a biological survey to identify protected natural resources within the Northern Drainage including the Former Shooting Range Area were initiated on May 12, 2008. A second cultural survey was performed within a 1,000 foot radius of the Former Shooting Range on March 19, 2009 to prepare for the Northern Drainage clay target removal described above. Historical sites and protected species identified during the surveys were marked with red flags so they could be preserved during the clay target removal.

Following the cultural and biological survey, 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.

Phase I of clay target removal in the Northern Drainage Clay Target Area between the Former Shooting Range and Outfall 09 was conducted between July and December 2008. Soil that was removed from the drainage was either placed in roll-off bins or stockpiled on site for waste profiling. Concurrently, down-drainage

confirmation soil sampling was performed between the Former Shooting Range and the LOX Debris Area.

As the analytical results from down-drainage confirmation soil sampling indicated that additional soil removal in the drainage was necessary, clay target removal resumed on June 8, 2009 between the Former Shooting Range area and Outfall 009. Phase II clay target removal in the northern drainage was initiated using a vacuum truck and manual excavation to remove visible clay target fragments and confirmation sampling locations that exceeded the target cleanup level after Phase I.



Phase II clay target removal continued using a vacuum truck and manual excavation between former Shooting Range and former LOX Plant throughout the month of August. Since the clay target removal started on June 8, 2009, a total of 33 roll off bins have been filled. Phase II clay target removal south of the former LOX Plant began in August and is expected to extend past Outfall 009 onto the Brandeis Bardin Institute property and continue throughout the 2009 summer/fall season.

As a result of the clay target removal activities, Boeing is taking action to control sedimentation and reduce turbidity by upgrading its current BMPs beginning at the upstream sampling location and extending down to Outfall 009. In the month of August, silt fencing and fiber rolls were installed following the clay target removal activities. Detailed descriptions of current BMPs installed and planned upgrades are included in the previously submitted *BMP Compliance Report for Outfall 009* on June 15, 2009 as part of its May 2009 MMR.

Former Shooting Range Debris Removal

During clay target removal activities conducted in 2008, anthropogenic debris was discovered within the Former Shooting Range area of the Northern Drainage. Anthropogenic debris was excavated and contained in roll-off bins on site for waste characterization. Approximately 9,400 cubic yards of sediment, soil and debris were removed, characterized, and transported off-site for disposal. 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.

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 further define a "rain event," the Los Angeles RWQCB agreed to adopt the requirements of the SSFL National Pollution Discharge Elimination System (NPDES) permit, which provides that a discharge (rain) event is greater than 0.1 inch of rainfall in a 24-hour period, that no more than one sample per week need be obtained during extended periods of rainfall and that a storm must be preceded by at least 72 hours of dry weather. To establish whether a rain event results in wet weather flow, field inspections are conducted before, during and after rain events.

During the month of August, Boeing did not observe any rain events. Therefore, surface water samples were not collected, and no analytical results are presented in this MMR.

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

Sincerely,



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

LNB:bjc

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