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Via FedEx

September 24, 2009
In reply refer to SHEA-109154

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

Attention: Ms. Tracy Egoscue

Subject: Characterization, Management, and Disposal Plan for Soils Excavated from Interim Source Removal Action (ISRA) Areas ELV-1C and ELV-1D, California Water Code Section 13304 Order, Santa Susana Field Laboratory, Canoga Park, CA (NPDES NO. CA0001309, CI NO. 6027, SCP NO. 1111, SITE ID NO. 2040109)

Dear Ms. Egoscue:

Pursuant to a verbal request made by Los Angeles Regional Water Quality Control Board (RWQCB) staff on September 10, 2009, this letter is being submitted by The Boeing Company (Boeing) on behalf of the National Aeronautic Space Administration (NASA) to the RWQCB. This letter serves to summarize the *in situ* waste characterization, management, and disposal plan for soils excavated from Interim Source Removal Action (ISRA) areas ELV-1C and ELV-1D located on federal property administered by NASA within Outfall 009.

Interim Source Removal Actions, including those at the ELV-1C and ELV-1D, are being performed to address potential soil sources of constituents that exceeded NPDES permit limits and benchmarks at Outfalls 008 and 009 pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by the Los Angeles RWQCB dated December 3, 2008. The ISRA project is an interim cleanup action under RWQCB oversight; final remedial requirements for the SSFL, including the Outfall 008 and 009 areas, will be addressed as part of RCRA Corrective Action project under oversight of the Department of Toxic Substances Control (DTSC).

The Final ISRA Work Plan, submitted to the RWQCB in May 2009 per the CAO, identified the ISRA constituents of concern (COCs) at the ELV-1C as dioxins and at ELV-1D as cadmium, copper, dioxins, lead, and mercury. The work plan identified excavation and offsite disposal as the recommended remedial alternative for these two areas.

In order to characterize the soil for offsite disposal, *in situ* waste characterization sampling (chemical and radiological) has been performed per the Final ISRA Work





Plan. Waste characterization samples were collected, contained, and handled according to requirements in SW-846, including sampling at randomly selected locations and depths. Twenty (20) *in situ* waste characterization samples were collected from ELV-1C and 16 *in situ* waste characterization samples were collected from ELV-1D. ELV-1C and ELV-1D *in situ* waste characterization sample locations are shown on Figures 1 and 2, respectively. Chemical and radiological waste characterization data and certifications will be available on the Boeing website (http://www.boeing.com/aboutus/environment/santa_susana/isra.html).

Results of this sampling indicate that the STLC limit for lead was exceeded in two waste characterization samples collected within the northeastern portion of the planned ELV-1C excavation. All other chemical analytical results were below hazardous waste limits. In addition, five waste characterization samples collected within the planned ELV-1C excavation and three waste characterization samples collected within the planned ELV-1D excavation slightly exceeded the current, local background comparison concentration for cesium 137. All other radionuclides analyzed are either non-detect or consistent with current, local background concentrations. It should be noted that the USEPA is in the process of establishing soil background levels for radionuclides (including cesium 137). Radionuclides are not ISRA COCs identified in the CAO, and therefore, the cesium 137 results do not affect the planned ELV-1C and ELV-1D excavation footprints. Additional investigation of the cesium 137, if warranted, will be addressed under DTSC oversight as part of the RCRA Corrective Action Program.

Based on the *in situ* waste characterization results, the ELV ISRA areas will be partitioned into four distinct areas as shown on Figures 1 and 2. Soils from each distinct area will be segregated and managed in accordance with the ISRA Soil Management Plan and Addenda. The soil designation and management plan for each area is described below.

- ELV-1C northeast soils will be designated as non-RCRA hazardous waste (lead) and will be containerized in storage bins prior to disposal. These soils also contain cesium 137 slightly above background.
- ELV-1C remaining soils will be designated non-hazardous waste and will be stockpiled separately prior to disposal. These soils contain cesium 137 slightly above background).
- ELV-1D soils will be designated as F-listed RCRA hazardous waste, and will be containerized in storage bins prior to disposal. These soils also contain cesium 137 slightly above background.
- ELV-1D drainage soils will be designated as non-hazardous waste and will be stockpiled separately prior to disposal. These soils do not contain cesium 137 above background.

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Boeing and NASA are working closely with the California Department of Public Health (CDPH) to confirm that the excavated ISRA ELV soils that contain cesium 137 above background levels can be disposed of at a California Class I or II landfill. A draft radiological waste certification has been prepared for the ELV soils based on the radiological results and provided to the CDPH for review. As stated in the certification, our current understanding is that these soils do meet Class I or II landfill permit requirements, and we plan to dispose of all ELV-1C and ELV-1D excavated soils at Waste Management's Kettleman Hills Class I Landfill. If the CDPH determine that the soils containing cesium 137 above background do not meet those criteria, then our plan is to dispose of all ELV-1C and ELV-1D soils at the EnergySolutions Landfill in Clive, Utah. If this facility is used, appropriate approvals will be obtained from agencies and the disposal facility prior to shipment.

We understand the handling and disposal procedures of these soils are of interest to both the RWQCB and DTSC; if you have any questions or require anything further, please contact me at 818-466-8161, or Art Lenox at 818-466-8795. Boeing and NASA will consider this approach acceptable for project implementation if no further questions or requirements are indicated by the RWQCB staff. Thank you for your attention to this information.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Gallacher", with a long horizontal flourish extending to the right.

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

LNB:bjc

Attachments:

- Figure 1 – ELV-1C *In Situ* Waste Characterization Sample Locations
- Figure 2 – ELV-1D *In Situ* Waste Characterization Sample Locations

cc: Cassandra Owens, RWQCB
Peter Raftery, RWQCB
Rick Brausch, DTSC
Buck King, DTSC
Jim Pappas, DTSC
James Thomas, DPH
Steve Slaten, NASA
Allen Elliott, NASA

Outfall 009 ELV-1C Waste Characterization Sample Locations

Base Map Legend

-  Administrative Area Boundary
-  RFI Site Boundary
-  Excavation Area
-  Surface Water Drainage
-  Surface Water Divide
-  Outfall Water Divide
-  NPDES Outfall
-  Elevation Contour
-  Waste Characterization Sample Location



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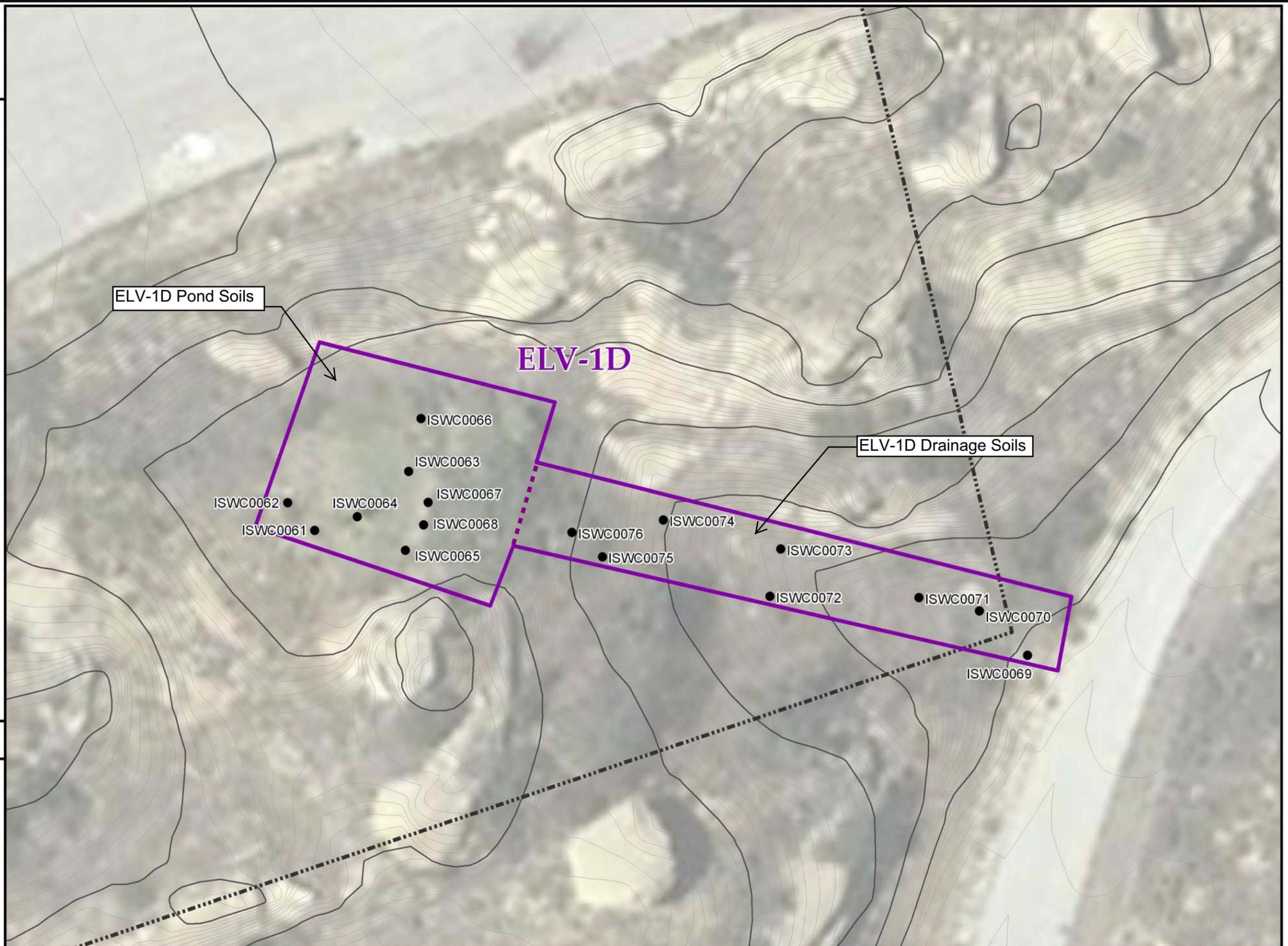
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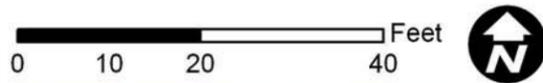
Outfall 009 ELV-1D Waste Characterization Sample Locations

Base Map Legend

-  Administrative Area Boundary
-  RFI Site Boundary
-  Excavation Area
-  Surface Water Drainage
-  Surface Water Divide
-  Outfall Water Divide
-  NPDES Outfall
-  Elevation Contour
-  Waste Characterization Sample Location



September 23, 2009



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