



ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

August 28, 2010

Project No. 0902-1044

The Boeing Company  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304

**Attention: Ms. Lori Blair**

**Subject: Addendum to Biological Resources Study for ISRA Outfall 009 – Pre-Activity Biological Survey Results for Proposed Soil Borrow Area adjacent to RD-47**

Dear Lori:

Padre Associates, Inc. (Padre) is pleased to provide you with the following letter-report documenting our findings during biological survey activities conducted at the proposed Santa Susana Field Laboratory (SSFL) Outfall 009 Interim Source Removal Area (ISRA) soil borrow area and associated access road (herein collectively referred to as "Site"). The survey area included an approximately 2,000 foot-long existing unpaved access road, and a 0.7-acre site located immediately east of groundwater monitoring well RD-47 in SSFL Area I. The Site was chosen subsequent to a soil characterization study performed by MWH, who determined that this location is suitable to provide soil borrow material for backfilling the subject ISRA areas. Previous biological surveys were conducted at various locations throughout the Outfall 009 watershed and were documented in the *Biological Resources Study for the Interim Source Removal Action Areas for Outfall 009 – Santa Susana Field Laboratory* (herein referred to as "Study", prepared by Padre in June 2010). This letter-report serves as an addendum to the Study.

### **Biological Survey Methods and Results**

Biological survey activities focused on the presence or absence of special-status plant species including, but not limited to Santa Susana tarplant (*Deinandra minthornii*), Braunton's milkvetch (*Astragalus brauntonii*) and Plummer's mariposa lily (*Calochortus plummerae*), and special-status wildlife species including, but not limited to coastal western whiptail, coast horned lizard, and silvery legless lizard. Survey methods included visual observations of the Site and surrounding areas with the use of 10x50 binoculars, and slowly walking transects of opportunity throughout all vegetation types. In addition to visual identification of wildlife species, auditory cues were noted. Any bird breeding/nesting activities (if observed, including nest material collection or completed nests, courting, food deliveries, or begging young) were also noted. Finally, general vegetation characteristics of the Site were noted.

Surveys were conducted by Matt Ingamells, Padre Senior Biologist on June 10, 2010 and by Chris Dunn, Padre Project Biologist on August 27, 2010. Special-status plants observed within or immediately adjacent to the proposed excavation area and access route were flagged with fluorescent pink ribbon to alert workers of their presence, and to avoid impacting these

plants during work activities. To ensure the protection of these plants, it is our understanding that these plants will be fenced prior to entry by heavy equipment similar to orange construction fencing placed around special-status plants at the ISRA areas.

**Site Characterization.** The proposed soil borrow area is composed of a slightly sloping area between exposed sandstone rock formations, and exhibits little or no obvious past human intrusion (with exception to several pieces of wood likely from a former fence). Past fire activity in the region (as recent as 2005) apparently swept through this location as evidenced in the burned snags of chaparral shrubs and coast live oak (*Quercus agrifolia*) trees. One large coast live oak tree shown on the aerial photographic figure provided by MWH at the west end of the soil borrow area is currently a pile of burned branches and fallen logs. The soil borrow area has since become recolonized with chaparral or coastal sage scrub vegetation.

The 2,000 foot-long access road leading to the soil borrow area begins off of Service Area Road directly across from Area II Landfill. It is well established and mostly clear of vegetation, with chaparral and coastal sage scrub vegetation bordering both sides of the road. At its upper, eastern end, groundwater monitoring well RD-47 is located in a small clearing before the road terminates at the western end of the proposed soil borrow area.

**Vegetation.** Vegetation at the Site includes chaparral, coastal sage scrub, annual grassland, and scattered coast live oak trees. As stated above, evidence of recent fire is present throughout the Site, with nearby trees and shrubs having been completely burned, or exhibiting regeneration from individual stumps. Within the soil borrow area, a thicket of vegetation has become re-established subsequent to the last fire, supporting native plant species including hairy ceanothus (*Ceanothus oliganthus*), chamise (*Adenostoma fasciculatum*), yerba santa (*Eriodictyon crassifolium*), chaparral bush mallow (*Malacothamnus fasciculatus* ssp. *fasciculatus*), giant wild rye (*Leymus condensatus*), poison oak (*Toxicodendron diversilobum*), and scattered laurel sumac (*Malosma laurina*), coyote brush (*Baccharis pilularis*) and birch-leaf mountain mahogany (*Cercocarpus betuloides* var. *betuloides*) shrubs. In addition, four (4) fire-recovered coast live oak trees are located along the east and southeast perimeter of the soil borrow area, measuring 12 inches, 20 inches, 24 inches, and 10 and 12 inches (two trunks) in diameter at breast height (4.5 feet), respectively. Non-native species observed within the soil borrow area includes wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), and Italian thistle (*Carduus pycnocephalus*).

Vegetation along the access road is dominated by yerba santa, deerweed (*Lotus scoparius* var. *scoparius*), chamise, California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*) and California aster (*Lessingia filaginifolia*), and non-native species including red brome (*Bromus madritensis* ssp. *rubens*) and tocalote (*Centaurea melitensis*). Please refer to Appendix A of the Study for an complete vascular plant flora of the Outfall 009 ISRA areas; many species of which were also observed at the soil borrow area and along the access road.

Special-status plants observed at the Site include nine (9) Santa Susana tarplants along the north edge of the access road, approximately 1,500 feet above the entrance off Service Area Road (500 feet below the entrance to the soil borrow area), and scattered Santa Susana tarplants on rock outcrops adjacent to the soil borrow area. In addition, as stated above, 4 coast live oak trees (protected by Ventura County tree protection ordinance) are located

immediately adjacent to the soil borrow area. No other special-status plants were observed at the Site. Please refer to the attached appendix for selected photographs of the Site.

**Wildlife.** Wildlife observed at or near the Site during the June and August 2010 biological surveys included the following bird species: Anna's hummingbird, ash-throated flycatcher, Bewick's wren, bushtit, California quail, California towhee, house finch (juveniles and adults), house wren, lesser goldfinch, mourning dove, oak titmouse (juveniles and adults), red-tailed hawk, spotted towhee, turkey vulture, violet-green swallow, western scrub-jay, and wrentit. No current breeding/nesting activity was observed at or near the Site, but juvenile birds and adult pairs of birds were observed during both surveys, and one (1) abandoned nest (likely house finch) was observed during the August 2010 survey in a chaparral bush mallow shrub within the soil borrow area. Mammals included Audubon's cottontail, black-tailed deer (scat and 1 antler), coyote (scat and tracks), pocket gopher (burrows), ground squirrel (scat), and dusky-footed woodrat (nest and scat). Reptiles included coastal western whiptail (a CDFG Special Animal), side-blotched lizard, and western fence lizard. No amphibians were observed at the Site. No suitable habitat for fish is present at the Site; accordingly, no fish species were observed.

### **Conservation Recommendations**

All Site access, vegetation clearing and soil borrow activities should avoid the Santa Susana tarplants along the access road and on adjacent sandstone rock outcrops. All Santa Susana tarplants along the access road should be fenced with orange construction fencing prior to commencement of soil borrow activities.

All vegetation clearing and soil borrow activities should avoid the coast live oak trees adjacent to the soil borrow area.

Work crews have been provided an environmental sensitivity training session describing the known or potential presence of special-status plant and wildlife species in the area. Informational placards providing sensitive species identification characteristics should be placed at the entrance to the access road off of Service Area Road. If encountered, sensitive wildlife species should be given sufficient space and time to exit the work area to ensure that mortality is avoided. If sensitive species require relocation out of the work area, a qualified biologist is available to conduct the capture and relocation procedure to suitable nearby habitat. It is anticipated that coastal western whiptail and coast horned lizard are two likely species to occur at the Site. Coastal western whiptail is a highly active species, and is expected to avoid vehicle and equipment traffic, but coast horned lizard may be expected to attempt to hide in place and may potentially be crushed by work activities. Therefore, special care should be taken when moving equipment around the Site (such as keeping to a 5 mile per hour speed limit, and providing a spotter to inspect the routes of heavy equipment).

Work activities will be periodically monitored (at least twice weekly) by a qualified biologist throughout the duration of the project, and a summary of biological survey and monitoring results will be provided at the project's completion.

It is recommended that a portion of the soil horizons be left onsite during the soil borrow procedure. Preserving a portion of the topsoil will assist in the restoration of this area, and allow for natural regeneration of vegetation through germination of seeds.

Should you have any questions regarding our survey results or proposed plans for biological monitoring, please contact me at (805) 644-2220, ext. 12.

Sincerely,

PADRE ASSOCIATES, INC.



Chris Dunn  
Project Manager/Biologist

Cc: Ms. Shelby Valenzuela, MWH

Attach: Site Photographic Appendix

## PHOTOGRAPHIC APPENDIX AUGUST 27, 2010



Figure 1. View of the soil borrow area from its western end.



Figure 2. View of the soil borrow area from its eastern end. Note Santa Susana tarplant in foreground on an adjacent sandstone rock outcrop.



Figure 3. View of access road, approximately 1,500 feet above the entrance off of Service Area Road (and 500 feet below the soil borrow area), at the location of 9 flagged Santa Susana tarplants. Photograph is toward the northwest.



ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

February 28, 2011  
Project No. 1102-0161

The Boeing Company  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304

**Attention: Mr. Art Lenox**

**Subject: Santa Susana Field Laboratory Outfall 009 ISRA Biological Survey and Construction Monitoring Report – June 2010 to February 2011**

Dear Mr. Lenox:

Padre Associates, Inc. (Padre) is pleased to provide The Boeing Company (Boeing) with the following letter-report documenting our findings during biological survey and monitoring activities conducted at the Santa Susana Field Laboratory (SSFL) Outfall 009 Interim Source Removal Action Areas and Soil Borrow Area from June 2010 to February 2011. Past documentation for this project included the *Biological Resources Study for the Interim Source Removal Action Areas for Outfall 009 – Santa Susana Field Laboratory* (“Study”, Padre, June 2010), and associated *Addendum to Biological Resources Study for ISRA Outfall 009 – Pre-Activity Biological Survey Results for Proposed Soil Borrow Area adjacent to RD-47* (“Addendum”, Padre, August 2010). Each of these reports provided specific data and background information on biological resources known to occur or potentially occur at the subject project sites, a brief evaluation of the potential impacts on biological resources, and conservation measures for minimization of impacts to biological resources. Biological survey and monitoring activities were performed according to these conservation measures at the areas listed in Table 1 below. Additional areas were initially surveyed, but this report focuses on the active work areas for the time period of June 2010 through February 2011.

**Table 1. Interim Source Removal Action (ISRA) Areas and associated Soil Borrow Area for Outfall 009 Watershed (June 2010 through February 2011)**

Historical Operations Areas	ISRA Areas and Soil Borrow Area	Watershed	Property Owner/SSFL or Other Area
B1	B1-1A, B1-1B, B1-1C, B1-1D, B1-2	009	Boeing/Area I
IEL	IEL-1, IEL-2	009	Boeing/Area I
CTL-1	CTL1-1A, CTL1-1B	009	Boeing/Area I
Adjacent to RD-47	Soil Borrow Area	009	Boeing/Area I
Ash Pile/B515 STP	AP/STP-1A, 1D, 1E-2, 1E-3, 1F	009	NASA/Area II*

\*NASA-related tabular documentation is shaded in light blue throughout this report.

## Permit Compliance Summary

Work activities for the subject project were conducted as directed by the Cleanup and Abatement Order (Order) adopted by the Los Angeles Regional Water Quality Control Board (LARWQCB) on December 3, 2008, requiring the evaluation, selection, and implementation of cleanup activities at areas within Outfall 009. Work activities were also conducted in compliance with California Department of Fish and Game (CDFG) Streambed Alteration Agreement (SAA) No. 1600-2003-5052-R5 (and associated extensions and amendments), which requires the completion of pre-construction, concurrent biological surveys and monitoring, and post-construction reporting. Biological survey and monitoring results for the subject project are provided below.

### Personnel

Biological surveys and monitoring were conducted by Chris Dunn, Padre Project Biologist throughout a majority of the project duration, with back-up assistance by Matt Ingamells, Padre Senior Biologist. Mr. Dunn and Mr. Ingamells have a combined 35 years experience conducting biological surveys and monitoring, including over 14 combined years at SSFL.

### Survey and Monitoring Dates

Biological surveys and construction monitoring, job walks with Boeing, Contractor and Agency staff, and planting oversight and inspections were conducted at one or more of the subject sites on the days listed in Table 2 below:

**Table 2. Biological Survey and Monitoring Days**

Location(s)	Personnel	Activity	Date(s)
B1, IEL, CTL1,	Dunn	Bio Study surveys	3/24/10, 3/25/10, 3/26/10, 4/15/10, 4/16/10
AP/STP	Dunn	Bio Study surveys	3/24/10, 4/16/10
B1, IEL, CTL1	Dunn	Job walk	6/2/10
Soil Borrow Area	Ingamells*, Dunn	Bio Study Addendum	6/10/10*, 8/27/10
IEL	Dunn	Pre-activity surveys	6/28/10, 9/23/10
CTL1	Dunn	Pre-activity survey	7/1/10
B1-1	Dunn	Pre-activity survey	7/1/10
B1-2	Dunn	Pre-activity survey	7/2/10
B1-2, CTL1, IEL	Dunn	Job walk	7/8/10

**Table 2. Biological Survey and Monitoring Days (Cont.)**

Location(s)	Personnel	Activity	Date(s)
AP/STP	Dunn	Job walk	8/30/10
AP/STP	Dunn	Pre-activity meeting	9/28/10
AP/STP	Dunn	Pre-activity survey	9/28/10
AP/STP	Dunn	Veg clearance monitoring	10/4/10
AP/STP	Dunn	Construction monitoring	10/5/10, 10/7/10, 10/11/10, 10/14/10
AP/STP	Dunn	Follow-up surveys	12/3/10, 12/15/10
Soil Borrow Area	Dunn	Pre-activity survey	10/28/10
B1-1	Dunn	Veg clearance monitoring	7/6/10, 7/13/10, 7/15/10
CTL1	Dunn	Veg clearance monitoring	7/13/10, 7/15/10
CTL1	Dunn	Construction monitoring	7/19/10, 7/21/10, 7/26/10, 7/27/10, 8/4/10, 9/10/10, 9/14/10
B1-1	Dunn	Construction monitoring	7/27/10, 7/30/10, 8/2/10, 8/3/10, 8/4/10, 8/9/10, 8/10/10, 8/11/10, 8/16/10, 8/17/10, 8/19/10, 8/20/10, 8/25/10, 8/27/10, 9/20/10, 9/28/10, 10/4/10, 11/2/10, 11/11/10
B1-2	Dunn, Ingamells*	Construction monitoring	8/2/10, 8/3/10, 8/9/10, 8/11/10, 8/13/10, 8/16/10, 8/17/10, 8/19/10, 8/20/10, 8/23/10, 8/24/10, 8/25/10, 8/27/10, 8/30/10, 8/31/10, 9/2/10*, 9/10/10, 9/20/10, 9/23/10, 9/28/10, 11/2/10, 11/4/10, 11/11/10, 11/17/10, 11/18/10, 11/22/10, 11/23/10, 12/1/10, 12/3/10, 12/15/10, 1/27/11, 1/31/10, 2/10/11
Soil Borrow Area	Dunn	Job walk	10/21/10
Soil Borrow Area	Dunn	Construction monitoring	10/28/10, 11/11/10, 11/23/10, 12/3/10, 2/10/11
Hydrogen Lab	Dunn	Nursery plant inspections	11/2/10, 11/23/10, 12/3/10, 12/13/10, 1/12/11, 1/31/11, 2/10/11, future visits TBD
IEL-1	Dunn	Construction monitoring & follow-up survey	8/10/10, 11/2/10
CTL1	Dunn	Planting oversight & inspections	11/18/10, 11/22/10, 11/23/10, 12/1/10, 12/3/10, 12/7/10, 12/13/10, 1/27/11, 2/10/11, future visits TBD
B1-1	Dunn	Planting oversight & inspections	2/10/11, future visits TBD
B1, CTL1, Soil Borrow Area	Dunn	Follow-up surveys	2/10/11, 2/17/11

## Biological Survey Methods and Results

Each project area and adjacent areas were surveyed by walking transects of opportunity throughout all vegetation types. Vegetation types were quantified, and a plant species list was compiled for all of the ISRA Areas and the Soil Borrow Area, and provided in Appendix A of the Study. Presence/absence surveys were also conducted at the time for special-status plant species including, but not limited to Santa Susana tarplant (SSTP, *Deinandra minthornii*, a State Rare and California Native Plant Society [CNPS] List 1B.2 species), Braunton's milk-vetch (*Astragalus brauntonii*, a federal endangered and CNPS List 1B.1 species), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*, a federal candidate, State endangered, and CNPS List 1B.1 species), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*, a CNPS List 4 species), Plummer's mariposa lily (*Calochortus plummerae*, a CNPS List 1B.2 species), coast live oak (*Quercus agrifolia*, a Ventura County protected tree species) and southern California black walnut (*Juglans californica* var. *californica*, a CNPS List 4 species), and special-status wildlife species including, but not limited to coastal western whiptail (a CDFG Special Animal), coast horned lizard (a California Species of Special Concern), silvery legless lizard (a California Species of Special Concern), San Bernardino ring-neck snake (a U.S. Forest Service Sensitive Species), Cooper's hawk (a CDFG Watch List species when nesting), southern California rufous-crowned sparrow (a CDFG Watch List species), and yellow warbler (a California Species of Special Concern when nesting).

Special-status plants observed within or immediately adjacent to the subject sites and access routes were flagged with fluorescent pink tape to alert workers of their presence and to later have them fenced as an avoidance measure (discussed below). All wildlife species observed at or near the survey area were noted through direct observation or with the use of 10x42 binoculars. Breeding bird activity (e.g., courting behavior, carrying nesting material, and food deliveries to nests) was also noted, if observed.

Initial biological surveys for the ISRA Areas were conducted by Chris Dunn in March and April 2010, and were summarized in the aforementioned June 2010 Study. Initial biological surveys for the Soil Borrow Area (and its associated access road) were conducted in similar fashion by Matt Ingamells in June 2010 and by Chris Dunn in August 2010, and were summarized in the aforementioned August 2010 Addendum. Please refer to these documents for specific survey results.

Pre-activity biological surveys were conducted by Chris Dunn in June, July, September and October 2010 prior to work activities progressing to each site. Surveys were conducted in similar fashion as described above, and included the addition of flagging of special-status plants, where necessary. A job walk was also conducted at each of the sites to alert the project staff of any sensitive issues. A discussion on the findings for the pre-activity biological surveys is provided in the paragraphs below:

**Vegetation.** As discussed in the June 2010 Study and August 2010 Addendum, vegetation communities within the ISRA Areas and Soil Borrow Area were composed of thick leaf yerba santa (*Eriodictyon crassifolium*) scrub, chamise-black sage (*Adenostoma fasciculatum-Salvia mellifera*) scrub, chaparral bush mallow (*Malacothamnus fasciculatus* ssp. *fasciculatus*) scrub, deerweed (*Lotus scoparius*) scrub, canyon sunflower (*Venegasia*

*carpesioides*) scrub, laurel sumac (*Malosma laurina*) scrub, mulefat (*Baccharis salicifolia*) thicket, arroyo willow (*Salix lasiolepis*) thicket, hairy leaf ceanothus (*Ceanothus oliganthus* var. *oliganthus*) chaparral, coyote brush (*Baccharis pilularis*) scrub, California sagebrush (*Artemisia californica*) scrub, coast live oak riparian and upland woodland, and annual grassland. Portions of these areas also exhibited undifferentiated exotic vegetation, bare soil, rock outcrops, and asphalt and gravel areas. These conditions were largely unchanged during the pre-activity surveys. With exception to the observation of Plummer's mariposa lily during the pre-activity surveys (see Table 3 below), all other species observed at the subject sites are listed in Appendix A of the Study. Observations of special-status plants at or adjacent to the ISRA Areas and Soil Borrow Area were refined (added to) during the pre-activity surveys, and included the following:

**Table 3. Special-Status Plants Observed During Pre-Activity Surveys**

Santa Susana tarplant	<ul style="list-style-type: none"> <li>• B1-1 (22 individuals onsite, several individuals adjacent);</li> <li>• B1-2 (54 individuals onsite);</li> <li>• A1LF-1 (1 individual onsite);</li> <li>• CTL1-1 (1 individual adjacent);</li> <li>• Soil Borrow Area (9 individuals along the access road, 31 individuals on adjacent rock outcrops);</li> </ul>
Plummer's mariposa lily	<ul style="list-style-type: none"> <li>• CTL1-1 (29 individuals adjacent);</li> <li>• B1-1 (3 individuals onsite, 1 individual adjacent)</li> </ul>
Coast live oak	<ul style="list-style-type: none"> <li>• B1-1 (2 trees onsite);</li> <li>• B1-2 (22 trees onsite);</li> <li>• Soil Borrow Area (4 trees adjacent);</li> <li>• AP/STP-1A (1 oak onsite);</li> <li>• AP/STP-1D (1 oak onsite);</li> <li>• AP/STP-1F (4 oaks onsite)</li> </ul>

These tallies were then refined again as the project progressed, as indicated in Table 5 below.

**Wildlife Observations.** Wildlife observed during pre-activity biological surveys collectively throughout the ISRA Areas and the Soil Borrow Area included many of the species listed in the June 2010 Study and August 2010 Addendum. Several of bird species listed in Table 4 below exhibited courting behavior and food collection, but no active bird nests were observed onsite. Other nesting birds such as cliff swallows were evaluated and were determined to be located in areas sufficiently separated from the ISRA Areas, so as to not be affected by work activities.

**Table 4. Bird Species Observed during Pre-activity Biological Surveys of the ISRA Areas and Soil Borrow Area.**

• acorn woodpecker	• common raven	• owl sp. (pellets)
• Anna's hummingbird*	• Cooper's hawk	• red-tailed hawk***
• Bewick's wren	• Costa's hummingbird	• rock wren
• black-headed grosbeak	• house finch*	• song sparrow
• black phoebe	• house wren	• spotted towhee
• bushtit	• lesser goldfinch	• turkey vulture
• California quail (covey)	• MacGillivray's warbler	• western meadowlark
• California thrasher	• mourning dove	• western scrub jay
• California towhee	• northern mockingbird	• white-crowned sparrow
• canyon wren	• Nuttall's woodpecker	• wrenit
• cliff swallow**	• oak titmouse	

\*Pairing

\*\*Nesting on cliff face east of CTL1

\*\*\*Including an unoccupied nest on cliff face east of CTL1 (However, this nest was successful earlier in the year).

Mammal observations included Audubon's cottontail, black-tailed deer (tracks, scat), coyote (scat), pocket gopher (burrows), ground squirrel, and woodrat (likely dusky footed, nests). No special-status mammals were observed at the ISRA Areas or Soil Borrow Area.

Reptile and amphibian (including special-status species) observations included side-blotched lizard, western fence lizard, southern Pacific rattlesnake, and western whiptail (2 individuals observed at CTL1 and 1 individual at B1-1A). Although not observed during these surveys, coast horned lizard, San Bernardino ring-neck snake, and silvery legless lizard have been observed at SSFL, and were moderately expected to occur at the ISRA Areas or Soil Borrow Area, depending on site-specific habitats.

No suitable habitat for fish was observed at the ISRA Areas and Soil Borrow Area, as permanent drainages or ponds are absent from all the sites; accordingly, no fish species were observed or expected.

### **Biological Monitoring Activities**

Padre Biologist Chris Dunn completed periodic construction monitoring duties requested by Boeing to ensure that permit conditions described in the CDFG SAA were upheld. Work activities for the project's 2010 phase began on July 6, 2010 but were not completed until approximately February 16, 2011. The monitor's duties included the following items, in no particular order:

- Advising Boeing (and its contractors) on conditions outlined in the project's SAA, and facilitating compliance with each SAA condition.
- Participating in job walks at each site to provide information to contractors on sensitive biological resources (if present).
- Conducting environmental sensitivity training sessions for contractor personnel on subjects relating to protection of special-status plant and wildlife species and other SAA compliance issues. One morning tailgate meeting and numerous in-field

discussions were conducted with various project personnel regarding sensitive biological issues throughout the project duration.

- Re-flagging of special-status plants to alert workers of their presence and need for avoidance.
- Ensuring that the contractor had clearly defined the limits of the project, including the placement of water hoses across adjacent areas that potentially contain special-status plants.
- Ensuring that the contractor had installed and maintained protective fencing around special-status plants within or adjacent to each project site throughout the project duration.
- Photodocumentation of project activities (selected photographs provided in Appendix A).
- Completion of field observations sheets (can be provided upon request).
- Monitoring for any wildlife species (including special-status species) that may enter the site, and if necessary, informing Boeing so that CDFG would be notified. Monitoring included activities such as surveys and inspections of oak tree duff layers for silvery legless lizard, scrub and rocky outcrop habitats for coast horned lizard, and various potential bird nesting habitat.
- Conducting relocations (if necessary) of captured wildlife (i.e., reptiles or amphibians) within the project site, and establishment of suitable habitat relocation areas according to the CDFG-approved wildlife relocation plan (established via email correspondence in 2008).
- If special-status wildlife species were encountered, completion of California Native Species Field Survey Forms and submittal to the CDFG Natural Diversity Data Base (CNDDDB) for observations of special status species.
- Noting any required native tree or mulefat shrub removals for future mitigation purposes.
- Monitoring work activities around oak trees to ensure impacts to tree and root systems were minimized or avoided, including consultations with Pacific Horticulture (Don Rodrigues, Certified Arborist).
- Providing supervision for the installation of containerized plantings through coordination with WRA Environmental Consultants (the Project's Landscape Architect).

**Special-Status Plant Protection.** As activities progressed and the work areas (including any adjacent access points) became more clearly defined, additional special-status plants observed within or adjacent to each work area were noted, flagged and fenced (where necessary). A tally of all special-status plants observed throughout the project is provided in Table 5 below (and includes data from the pre-activity survey data in Table 3). Please refer to Appendix A for photodocumentation of protective measures.

**Table 5. Total Project Observations of Special-Status Plants\***

Santa Susana tarplant	<ul style="list-style-type: none"> <li>• B1-1 (25 individuals onsite, 8 individuals adjacent);</li> <li>• B1-2 (54 individuals onsite, 6 individuals adjacent);</li> <li>• A1LF-1 (1 individual onsite);</li> <li>• CTL1-1 (4 individuals adjacent);</li> <li>• Soil Borrow Area (9 individuals along the access road, 31 individuals on adjacent rock outcrops);</li> </ul>
Plummer's mariposa lily	<ul style="list-style-type: none"> <li>• CTL1-1 (29 individuals adjacent);</li> <li>• B1-1 (10 individuals onsite, 1 individual adjacent)</li> </ul>
Coast live oak	<ul style="list-style-type: none"> <li>• B1-1 (2 trees onsite);</li> <li>• B1-2 (22 trees onsite);</li> <li>• Soil Borrow Area (4 trees adjacent);</li> <li>• AP/STP-1A (1 oak onsite);</li> <li>• AP/STP-1D (1 oak onsite);</li> <li>• AP/STP-1F (4 oaks onsite)</li> </ul>

\*Includes data from Table 3 above

Concerted efforts to protect special-status plants were made throughout the duration of the project by 1) conducting repeated discussions with staff members of the plants' presence; 2) installation and maintenance of flagging and protective fencing; 3) avoiding encroachment of adjacent habitats at vehicle and equipment parking/staging areas; and 4) carefully navigating each site while dragging hoses, plastic sheeting or other materials across each site. As a result, no confirmed losses of individual plants occurred throughout the project duration. However, potential loss of one (1) Santa Susana tarplant seedling may have accidentally occurred at CTL1, as discussed in the Vegetation Impacts section below.

**Wildlife Observations and Relocations.** Many of the birds observed during the pre-construction surveys (listed in Table 4 above) were observed throughout the duration of the project, in addition to American goldfinch, dark-eyed junco and yellow-rumped warbler.

Amphibians and reptiles observed throughout the duration of the project included two (2) western whiptails at CTL1, numerous western fence lizards and side-blotched lizards, California tree frog, gopher snake, and alligator lizard (1 individual captured and relocated to woodland habitat near the SSFL entrance). No coast horned lizards were observed throughout the duration of the project despite repeated surveys in suitable habitat areas (dry, scrubby or rocky areas). One (1) silvery legless lizard was allegedly captured by project staff on October 6, 2010 beneath the oak tree duff layer at AP/STP-1F. According to project staff, the individual was unharmed and was relocated to beneath an adjacent oak tree, approximately 75 feet to the southwest. Several discussions were previously conducted with project staff on the potential presence of silvery legless lizard in oak woodlands at SSFL, and their morphological characteristics (including viewing of color photographs). In particular, discussions were conducted on October 5, 2010, and then again on October 7, 2010 when the project biologist was onsite to conduct a follow-up survey of the alleged legless lizard sighting location. On this day, it was reiterated that a qualified biologist should be the individual to capture and relocate special-status species such as silvery legless lizard, even if the biologist is not immediately

available. If such an instance occurs, work activities should be directed elsewhere until the biologist arrives. No additional silvery legless lizards were found during the October 7, 2010 survey, or throughout the remainder of the project.

Mammals observed throughout the duration of the project included pocket gopher, Audubon's cottontail, black-tailed deer (scat), coyote (scat), ground squirrel, and dusky-footed woodrat (including 1 adult and 1 juvenile adjacent to AP/STP-1F).

No evidence of any wildlife mortality or substantial disturbance to wildlife was observed throughout the duration of the project.

**Vegetation Impacts.** Vegetation removal activities were conducted and monitored during July and October 2010 according to the project plans, immediately prior to soil excavation activities. Where feasible, vegetation was trimmed to ground level to expose the sediment below, with the stumps of shrubs and trees left in place to allow for their regeneration subsequent to project activities. Notable vegetation impacts, protections, or observations of regeneration included the following:

- One (1) Santa Susana tarplant (SSTP) was possibly removed at CTL-1A, as the protective fencing was observed lying down and this individual was absent as of September 10, 2010. Upon discovery of its absence, project and Boeing staff were contacted on this day, and the requirement for protective measures was reiterated. However, this individual was a small seedling when it was initially observed and could potentially have desiccated from natural causes. The large, mature SSTP adjacent to it was unharmed. It is anticipated that this large plant will provide a substantial seedbank to naturally replace the one lost SSTP seedling. Therefore, potential loss of 1 SSTP is not considered substantial or significant.
- Four (4) coast live oaks were pruned of several live and dead limbs all under 3 inches in diameter at B1-2. Three (3) large burned and broken limbs on two (2) trees were pruned at AP/STP-1D and 1F, and two (2) 2-inch limbs were pruned from a tree overhanging the access route to AP/STP-1F. None of the pruning was significant enough to damage the health of the trees, and in some cases, may improve the health of these trees. All pruned limbs were side-cast into adjacent areas for addition to wildlife habitat. Shallow hand-excavation of topsoil measuring a maximum depth of 6 inches to 1 foot beneath the oak trees at B1-1, B1-2, and AP/STP-1A, 1D, and 1F was completed and jute netting was temporarily placed and soaked with water to protect any exposed roots. Clean backfill material was subsequently replaced beneath the oak trees, and the jute netting was replaced over the entire exposed slopes.
- Three (3) willows required removal, and one (1) willow required cutting to the ground level at the B1-2, but has since begun to sprout from its base. The remaining willow was protected in place.
- Mulefat plants located within the lower portion of B1-2 required removal to expose affected soils below. Removal activities included approximately 0.07 acres of mulefat thicket, or approximately 75 mulefat shrubs. Regeneration of several of these shrubs

from their bases was subsequently observed, and additional mulefat containerized plantings are planned at this location.

**Revegetation Plan Implementation.** According to the project's Revegetation Plan and Expert Panel Recommendations for Erosion Control Hydroseeding Methods, hydroseeding with a native seedmix and installation of containerized plantings were completed (and are ongoing) at appropriate locations within the ISRA Areas. As-built Revegetation Plans are currently being completed by WRA Environmental Consultants, documenting the final tally for total hydroseeded areas and total planting amounts and locations. In summary, hydroseeding materials included Flexterra High Performance-Flexible Growth Medium™ with a seed application of native grasses and shrubs known to commonly occur at SSFL on all exposed areas including chamise, black sage, bush mallow, purple sage (*Salvia leucophylla*), California brome (*Bromus carianthus*), California bush sunflower (*Encelia californica*), buckbrush (*Ceanothus cuneatus*), purple needlegrass (*Nassella pulchra*), deerweed, laurel sumac, and small fescue (*Vulpia microstachys*). Containerized plantings included approximately 159 mulefat, 328 coyote brush, 111 mugwort (*Artemisia douglasiana*), 450 creeping wild rye (*Leymus triticoides*), and 35 Mexican elderberry (*Sambucus mexicana*) plants, of which a majority of these plantings have been installed to date. The seedmix and container plants were chosen for their ability to provide both rapid colonization and sediment holding capacity, and for long-term shrubby cover. Ongoing monitoring of these planting areas are underway to ensure a high success rate, rapid recovery, and minimization of erosion, but are not required to obtain the success criteria described in the SAA based on their location outside of CDFG jurisdiction, and primary use only as an erosion control mechanism. Other Best Management Practices (BMPs) including straw wattles, earthen and gravel water bars, rock rip rap, silt fencing, and straw bales were also installed for erosion control purposes at appropriate locations.

#### **Follow-up Site Visits – November & December 2010, and February 2011**

Work activities for the each ISRA Area were completed at various times throughout the duration of the project, and follow-up site visits and inspections were subsequently conducted.

IEL-1. Follow-up survey activities were completed on November 2, 2010, subsequent to clean soil backfilled into the shallow excavation. Ornamental *Podocarpus* trees were preserved in place, and no sensitive issues were identified at this location.

AP/STP-1A, 1D, & 1E. Follow-up survey activities were completed on December 15, 2010. Notable observations included the following: hydroseeding was completed in all exposed areas, all oaks were preserved in place with evidence of the aforementioned pruning, and adjacent vegetated areas were intact. Wildlife observations at or near these sites included dark-eyed junco, western scrub jay, yellow-rumped warbler, red-tailed hawk, acorn woodpecker, black phoebe, California tree frog, and deer (tracks and scat).

CTL-1. Follow-up survey activities were completed on February 10, 2011, and included the following observations: The access road from Service Area Road was hydroseeded and a series of earthen and gravel waterbars designed to capture, filter and direct stormwater back into adjacent vegetated slopes were installed. Both CTL-1A and 1B were hydroseeded and a silt fence BMP was installed at its lower end. As stated above in the Revegetation Plan section, containerized plantings were installed throughout these ISRA Areas. A two-inch flexible hose

was installed, originating from the fire suppression water line along Service Area Road, and provides hand irrigation water. At the time of the survey, approximately 90 to 95 percent of the plantings appeared alive and supported new growth. A small amount of erosion was noted at its upper end with the creation of an 8-inch deep rill, which was later repaired with rock rip rap. As part of ongoing implementation of the Revegetation Plan and to further reduce any erosion potential, additional pinflags were placed to mark the locations of additional plants to be installed at this location.

B1. Follow-up survey activities were completed on February 17, 2011. Notable observations included the following: All SSTP were preserved in place; some of which were located on soil mounds with contoured edges. All of the areas were hydroseeded, and other BMPs included straw wattles, rock rip rap, silt fencing, in addition to a plastic-lined stormwater detention basin constructed in the flat, upper portion of B1-2. The basin's discharge pipe was placed between two oak trees, but in a location of fill material where no roots were expected or observed. Jute netting was also placed over the entire slopes along the lower slopes of B1-2. Pinflags were placed for future placement of containerized plants at both B1-1a and B1-2. Plummer's mariposa lily leaf sprouts were observed at their known locations, indicating that bulbs in the ground were left undisturbed and allowed to regenerate at several mounded locations. Numerous first year and adult white-crowned sparrows, dark-eyed juncos and California towhees were observed foraging in the hydroseeded areas.

Soil Borrow Area. Follow-up survey activities were completed on February 17, 2011. Notable observations included the following: Soil borrow activities were currently limited to approximately 70 percent of the entire borrow area, and it is anticipated that additional material will be excavated from this site upon initiation of future ISRA activities. The entire disturbed area was recontoured and hydroseeded for erosion control. Protective signage and flagging was still in place at the location of SSTP along the roadside. Species of note included deer (tracks), Bewick's wren, wrenit, California towhee, and white-crowned sparrow foraging at or near the borrow area.

### **Conservation Recommendations**

Conservation recommendations previously provided to Boeing in the June 2010 Study and August 2010 Addendum were followed to the extent feasible, resulting in little or no impacts to sensitive biological resources. Based on discussions and pre-emptive adjustments to certain activities in the field, the following measures were followed and are recommended for future activities (if applicable):

- In addition to protective fencing around each special-status plant (or group of plants), a "no-excavation" buffer of at least 1 foot wide outside the fenced area should be implemented to ensure that the fence posts do not fall over, and to further ensure the root zone of each plant is unaffected.
- Careful placement and securing of water hoses are necessary to ensure that the hoses are not inadvertently dragged across areas where special-status plants may occur. Workers need to continually view and/or adjust their intended path before moving a hose into place to ensure the path is clear of any protected resources.

- If encountered, sensitive wildlife species should be given sufficient space and time to exit the work area to ensure that mortality is avoided. A qualified biologist should be immediately contacted to correctly identify, photograph and relocate the species to a suitable nearby habitat area. As stated above, if a biologist is not immediately available, work activities should be directed elsewhere until the biologist arrives.
- If nesting birds are present within 300 feet of the proposed work area, work activities may require postponement until it is determined that the birds have fledged the nest.
- A qualified biologist or restoration specialist familiar with native plants and their care should participate in the restoration effort to ensure its success.

Should you have any questions regarding our survey and monitoring results, please contact me at (805) 644-2220, ext. 12.

Sincerely,

**PADRE ASSOCIATES, INC.**



Chris Dunn  
Project Manager/Biologist

Cc: Shelby Valenzuela, MWH Global

Attach: Appendix A. Photographic Documentation

## **APPENDIX A. PHOTOGRAPHIC DOCUMENTATION**



Figure 1. View of B1-1A prior to ISRA activities. Photograph is toward the north, taken on July 15, 2010. Orange construction fencing in place for Santa Susana tarplant protection.



Figure 2. View of B1-1A subsequent to ISRA activities. Photograph is toward the north, taken on February 17, 2011. Site is hydroseeded, Santa Susana tarplants are present (marked by pink flagging) and BMPs are placed on hillside.



Figure 3. View of lower portion of B1-2, prior to ISRA activities. Photograph is toward the northeast, taken on July 2, 2010.



Figure 4. View of lower portion of B1-2, subsequent to ISRA activities. Photograph is toward the northeast, taken on February 17, 2011. Slopes are covered in jute netting and are hydroseeded.



Figure 5. View of upper portion of B1-2, prior to ISRA activities. Photograph is toward the north, taken on July 15, 2010. Orange construction fencing in place for Santa Susana tarplant protection.



Figure 6. View of upper portion of B1-2, subsequent to ISRA activities. Photograph is toward the northeast, taken on February 17, 2011. Site is hydroseeded and Santa Susana tarplants are present (marked by pink flagging).



Figure 7. View of CTL-1, prior to ISRA activities. Photograph is toward the north, taken on July 1, 2010.



Figure 8. View of CTL-1, subsequent to ISRA activities, including installation of containerized plants (marked by pinflags, which were subsequently removed), but prior to hydroseeding. Photograph is toward the north, taken on January 27, 2011.



Figure 9. View of Soil Borrow Area, prior to ISRA activities. Photograph is toward the east, taken on August 27, 2010.



Figure 10. View of Soil Borrow Area, subsequent to ISRA activities, including hydroseeding. Photograph is toward the east, taken on February 17, 2011.



Figure 11. View of AP/STP-1A prior to ISRA activities. Photograph is toward the north, taken on October 11, 2010.



Figure 12. View of AP/STP-1A subsequent to ISRA activities. Photograph is toward the north, taken on December 15, 2010.



Figure 13. View of AP/STP-1D prior to ISRA activities. Photograph is toward the north, taken on September 28, 2010.



Figure 14. View of AP/STP-1D subsequent to ISRA activities. Photograph is toward the northwest, taken on December 15, 2010.



Figure 15. View of AP/STP-1F prior to ISRA activities. Photograph is toward the southwest, taken on September 28, 2010.



Figure 16. View of AP/STP-1F subsequent to ISRA activities. Photograph is toward the northeast, taken on December 15, 2010.

The Boeing Company  
Santa Susana Field Laboratory  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1143

Certified Mail

May 17, 2010

In reply refer to SHEA-109977



U. S. Army Corps of Engineers  
Ventura County Field Office-Regulatory Branch  
2151 Alessandro Dr., Suite 110  
Ventura, California 93001

Attention: Mr. Antal Szijj

Subject: U. S. Army Permit Application Submittal for NWP 38  
Continued Interim Source Removal Action - Outfall 009 Watershed  
Santa Susana Field Laboratory  
Ventura County, California

Dear Mr. Szijj:

Enclosed, please find the permit application form for a Nationwide Permit (NWP) 38 for the Outfall 009 Watershed continuing Interim Source Removal Action (ISRA) Project, located at The Boeing Company (Boeing), Santa Susana Field Laboratory (SSFL) in Ventura County, California. The work being performed as outlined in this application form is to satisfy requirements of the California Environmental Protection Agency's Los Angeles Regional Water Quality Control Board (RWQCB).

On May 22, 2009, Boeing submitted a notification for proposed activities in the Outfall 009 Watershed and the US Army Corps of Engineers (USACE) informed Boeing that most of the proposed activities were not in ACOE geographic jurisdictional areas. Boeing performed those activities, and will now perform similar activities in both USACE jurisdictional and non-jurisdictional areas. This permit application is being submitted for those areas that are located within USACE jurisdictional geographies.

The work will be performed by Boeing and the National Aeronautics and Space Administration (NASA) pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by the RWQCB dated December 3, 2008. The CAO was issued by the RWQCB to enforce compliance with Waste Discharge Requirements (WDR) for Outfalls 008 and

Mr. A. Szijj, USACE (SHEA-109977)  
May 17, 2010  
Page 2



009 established in its National Pollutant Discharge Elimination System (NPDES) Permit, NPDES No. CA0001309 (NPDES Permit).

Based on sampling and analytical testing in the Outfall 009 watershed, soils, sediments, and/or bedrock have been identified to contain constituents of concern that could impact surface water and result in water quality objective exceedances. Boeing is undertaking this ISRA to remove these soils, sediments, bedrock and, if possible, the constituents of concern directly. Boeing is submitting the CWA Section 401 Water Quality Certification Application Form to the RWQCB and is awaiting certification. In addition, the California Department of Fish and Game has approved a Notification of Lake or Streambed Alteration (SAA) agreement that places conditions on the activities that will be performed as part of these continuing ISRA activities.

An Army Permit Application and supplemental information accompanies this cover letter. If you have any questions regarding this submittal, please contact Lori Blair at (818) 466-8741 or Glenn Jaffe of MWH at (626) 568-6329 with any questions you have.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Gallacher'.

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

LNB:bjc

Attachments:

Figures

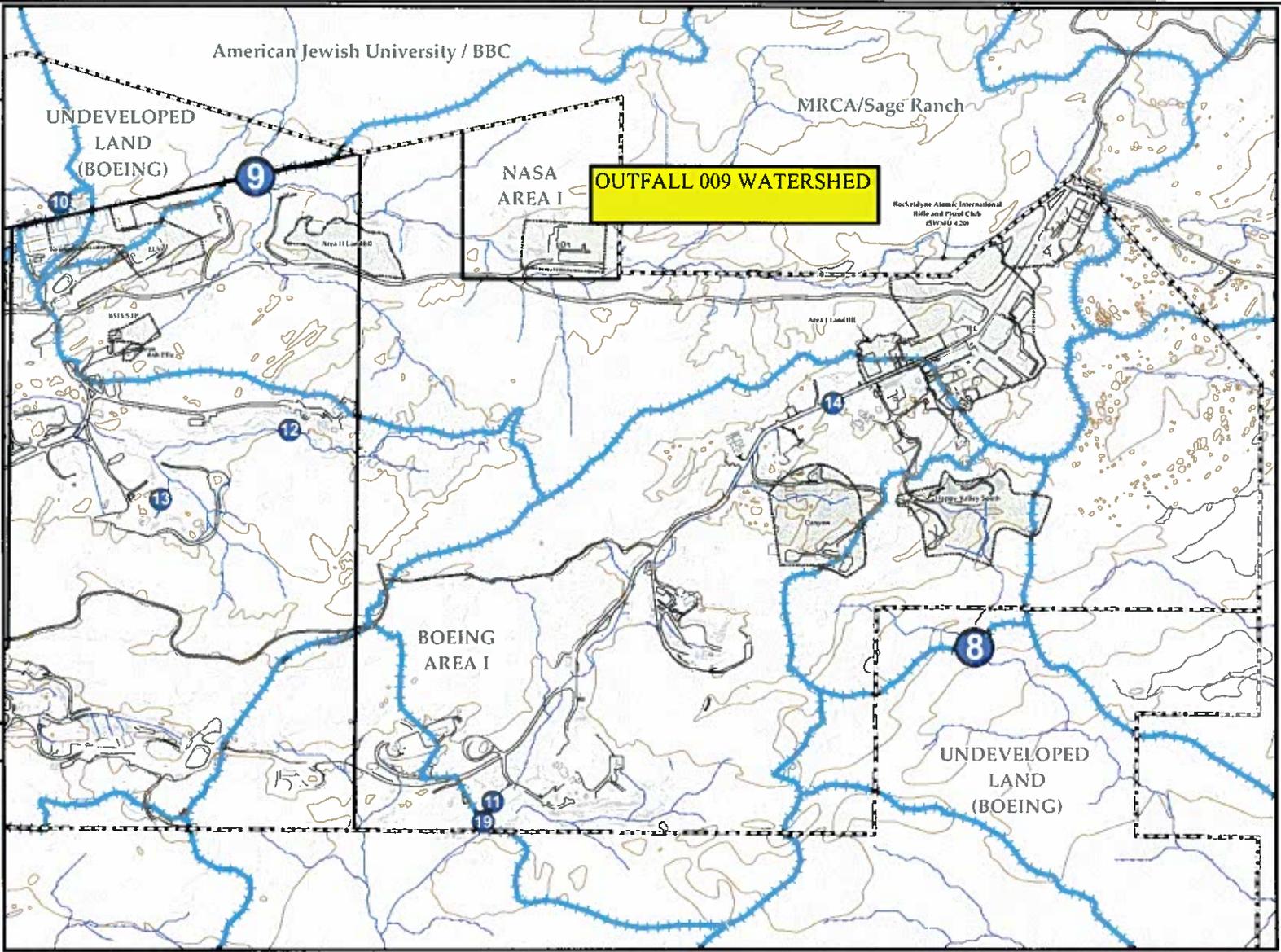
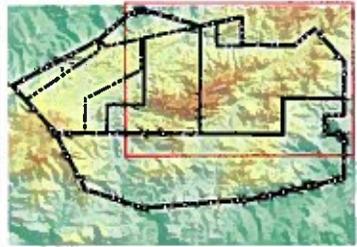
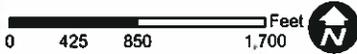
- Outfall 009 Watershed Location
- Figure West Northern Drainage-1
- Figure 4-2 AP/STP Refined ISRA PEAs and ISRA Areas (2 sheets)
- Supplemental Information
- Army Permit Application

cc: Dr. LB Nye, RWQCB  
Ms. Cassandra Owens, RWQCB  
Mr. Peter Raftery, RWQCB  
Mr. Buck King, DTSC  
Mr. Steve Slaten, NASA  
✓Mr. Glenn Jaffe, MWH

# OUTFALL 009 WATERSHED LOCATION

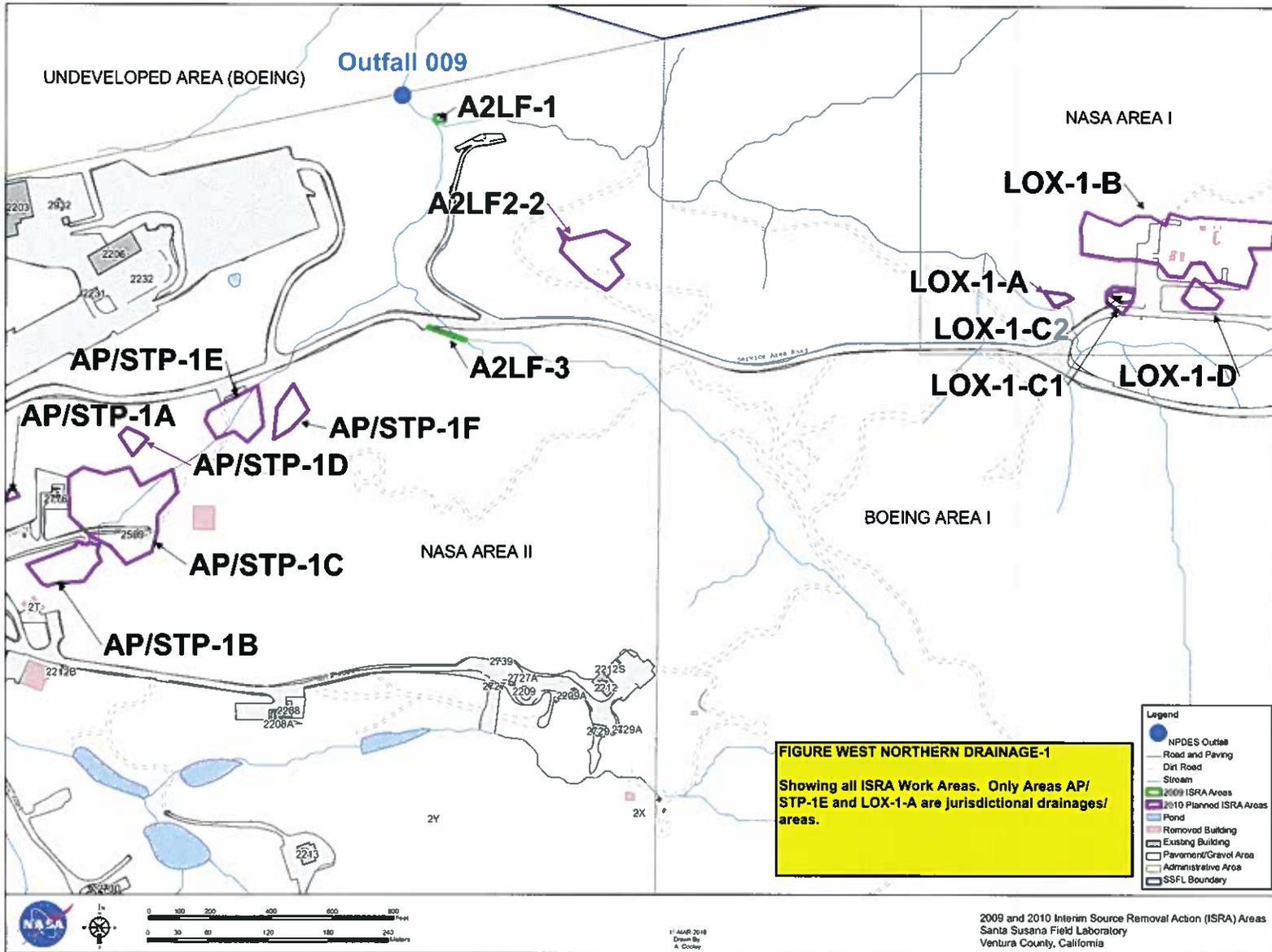
## Base Map Legend

-  Administrative Area Boundary
-  1 Historical Operations Areas (RFI Sites) Within Outfall 008 and 009
-  Surface Water Drainage
-  Surface Water Divide
-  NPDES Outfall
-  Existing Building or Structure
-  Paved Road
-  Elevation Contour
-  Bedrock Outcrop



S A N T A S U S A N A F I E L D L A B O R A T O R Y

 MWH FIGURE 1-4



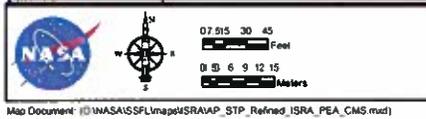
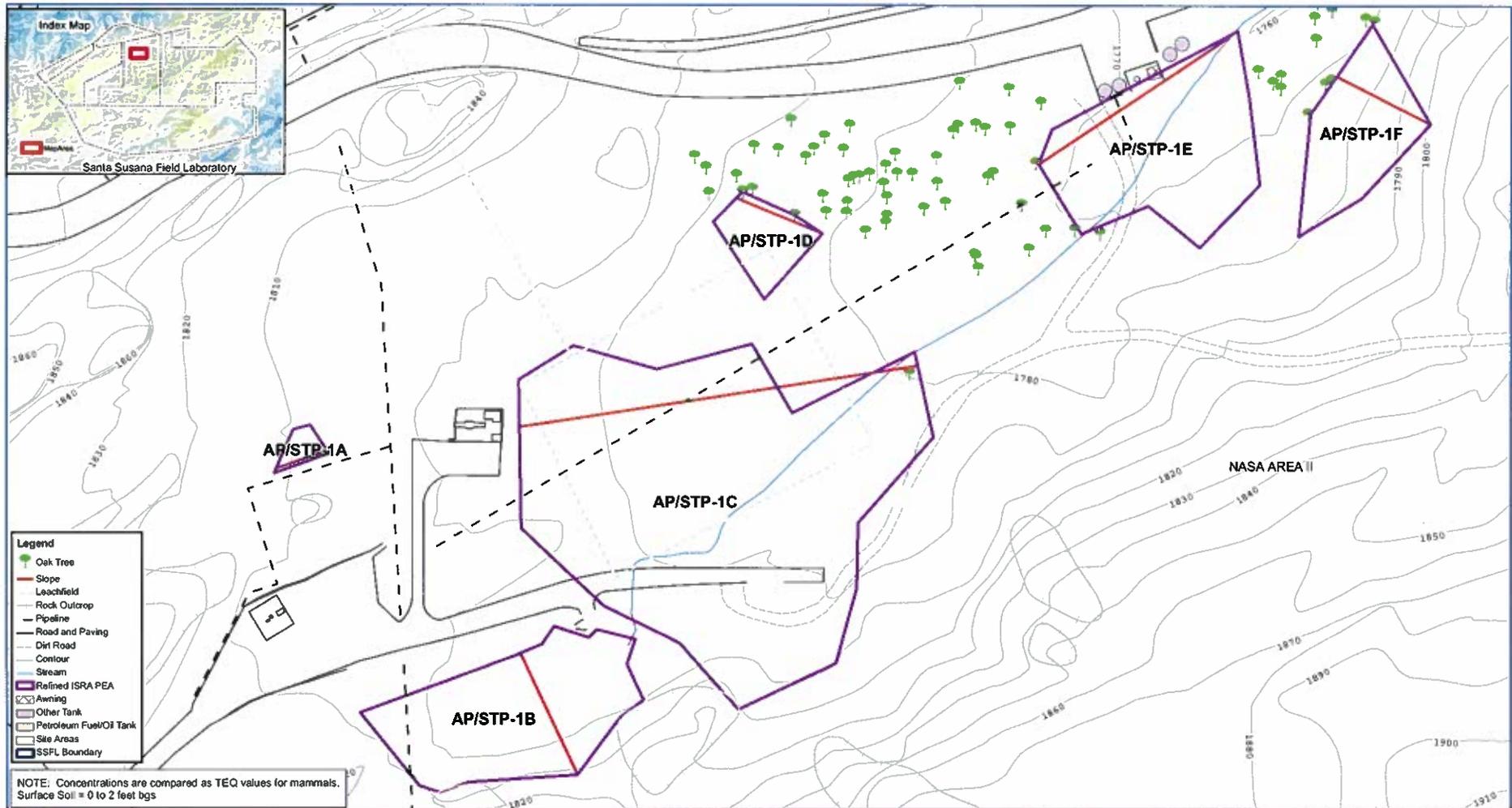
**FIGURE WEST NORTHERN DRAINAGE-1**  
 Showing all ISRA Work Areas. Only Areas AP/STP-1E and LOX-1-A are jurisdictional drainages/ areas.

- Legend**
- NPDES Outfall
  - Road and Paving
  - - - Dirt Road
  - Stream
  - 2009 ISRA Areas
  - 2010 Planned ISRA Areas
  - Pond
  - Removed Building
  - Existing Building
  - Pavement/Gravel Area
  - Administrative Area
  - SSFL Boundary



11 APR 2018  
 Drawn By  
 A. Cooley

2009 and 2010 Interim Source Removal Action (ISRA) Areas  
 Santa Susana Field Laboratory  
 Ventura County, California



05-APR-2010  
Drawn By:  
Alberta Cooley

**Figure 4-2**  
AP/STP Refined ISRA PEAs and ISRA Areas  
Santa Susana Field Laboratory



Figure 4-2  
 AP/STP Refined ISRA PEAs and ISRA Areas  
 Santa Susana Field Laboratory

**Supplemental Information**  
**Application for Department of the Army Permit (NWP 38)**  
**Interim Source Removal Action (ISRA)**  
**Northern Drainage (Outfall 009 Watershed)**

As part of the Application for Department of the Army Permit (Permit) for the above project, this information is being provided as a supplement to the Permit. The information is formatted to refer to the specific "Blocks" of the Permit. Main activities will consist of the removal of impacted sediment, soils, and/or bedrock. The activities are described herein.

**Block 16. Other Location Descriptions**

The attached figures show the SSFL location, the SSLF facility, and the proposed jurisdictional locations of the Project.

**Block 18. Nature of Activity**

**Project Description for ISRA**  
**Northern Drainage Watershed (Outfall 009)**  
**Boeing Santa Susana Field Laboratory**

The Interim Source Removal Action (ISRA) is the approach used to control the release of constituents of concern (COCs) to surface water within the Outfall 009 watershed at the SSFL. The work will be performed by The Boeing Company (Boeing) and the National Aeronautics and Space Administration (NASA) pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by the Los Angeles Regional Water Quality Control Board (RWQCB) dated December 3, 2008. The CAO was issued by the RWQCB to enforce compliance with Waste Discharge Requirements (WDR) for Outfalls 008 and 009 established in its National Pollutant Discharge Elimination System (NPDES) Permit, NPDES No. CA0001309 (NPDES Permit).

The objective of ISRA activities is to improve surface water quality within the Outfall 009 watershed by identifying, evaluating, and remediating areas of contaminated sediment, soil, and/or bedrock in order to eliminate the COCs that have resulted or could result in exceedances of NPDES permit limits and benchmarks. An evaluation of remediation alternatives identified excavation as the main and most effective remedial action for the ISRA project. ISRA excavation activities may include the use of the following adjacent to and within the Outfall 009 ephemeral drainages:

Vacuum trucks	Shovels
Bobcats	Backhoes
Excavators	Manual removal
Personal trucks	Roll-off bins
Transport trucks	Dump Trucks

As illustrated on the attached figures, excavation activities will take place in select areas of the SSFL based on soil and sediment sampling and analytical testing. The figures

indicate sample locations and the proposed source removal areas. As discussed above, the Project will consist of primarily using a vacuum truck(s) to recover impacted soil and sediment. When recovering impacted sediment, soil and/or bedrock from an ephemeral drainage, vacuum trucks will typically be staged outside the drainage with vacuum hoses being used to access drainage areas. In some locations, vacuum trucks may have to enter the drainage. The vacuum hoses will be manually manipulated in the drainage by a crew of workers. If required due to topography or encountering bedrock, an excavator or backhoe might be needed to access and remove soil, sediment, and/or bedrock from impacted areas. If used, the operators will be careful to minimize soil, sediment, and/or bedrock sloughing into the drainage. The removed materials will be placed in trucks and appropriately managed. Based on the Project scope, the following quantities of sediment, soil, and/or bedrock will be excavated/removed from jurisdictional areas:

**Western Northern Drainage Areas, see FIGURE WEST NORTHERN DRAINAGE-1 and Figures 4-2 (2 sheets), Area-1E, and Area LOX-1-A**

Excavation/removal in these areas will typically be up to two feet in depth, and will total not more than 2,000 cubic yards in Area 1E, and not more than 300 cubic yards in Area LOX-1-A. Please note this is total volume of material to be excavated. Only a portion of this material will be removed directly from jurisdictional drainage areas. That specific quantity is unknown at this time; however, it is significantly less than the totals presented here.

If necessary to minimize the potential for surface water to pond and accumulate after the ISRA is completed, surface grading will be performed and/or clean material will be placed. If fill material is needed to restore topographic grade to minimize the potential for surface water to pond or be diverted significantly from its original course, not more than 2,500 cubic yards of clean backfill may be placed in project locations. However, a significantly lesser quantity may be placed in jurisdictional areas (as discussed above, only a small portion of material will be removed directly from jurisdictional areas; therefore, only a small portion of material may be placed into jurisdictional areas).

In accordance with CDFG conditions as stipulated in the applicable SAA and its amendments, biological surveys will be performed to minimize potential impacts to flora and fauna in Project work areas. Initial biological surveys have been performed and sensitive species have not been identified. Just prior to starting field work, Project areas will be re-visited and surveyed by a biologist to verify pre-field activities' survey results, potentially relocate sensitive wildlife, and to evaluate current conditions. Upon field activities commencing in Project areas, a biologist will visit the areas as work is being performed to verify SAA conditions are being met, and to provide guidance to the field crews, if necessary.

**Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards**

Sediment, soil, gravel, and/or rock may be placed in and adjacent to the subject jurisdictional ephemeral drainage if topographic grade restoration is necessary. The type and quantity of these materials are not currently known because their use will be based on the quantity and location of excavated material. However, as discussed above, not more than 2,500 cubic yards of materials will be placed, with a significantly lesser quantity being placed in jurisdictional areas of the drainages.

**Block 22. Surface Area in Acres of Wetlands or Other Waters Filled**

Dredging will not be performed. Work areas do not contain or consist of wetlands; therefore, work will not be performed in wetlands. Fill material(s), as described above, may be placed in jurisdictional geographies. The fill will be placed with equipment such as backhoes, loaders, excavators, Bobcats, or other similar equipment, and/or with smaller equipment or manually

Excavation/removal areas are approximately 20,000 square feet (approximately 0.5 acres) in Area 1E, and 2,500 square feet (approximately 0.06 acres) in Area LOX-1-A. Based on the described Project, temporary impacts to jurisdictional drainages are insignificant, and it is anticipated jurisdictional drainages will essentially be restored to their pre-construction condition, with the exception that topographic grade may be slightly lower and/or sediment or erosion control features may be present.

**Block 24. Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Waterbody**

The SSFL is jointly owned by Boeing and the federal government. NASA administers the portion of the property owned by the federal government. The site is divided into four administrative areas (Areas I, II, III, and IV) and undeveloped land areas to both the north and south (Figure 1-1). Boeing owns Areas III and IV, and most of Area I. The federal government property administered by NASA includes a 42-acre portion of Area I and all of Area II. Ninety acres of Area IV were leased to the United States Department of Energy (DOE). The northern and southern undeveloped lands of the SSFL were not used for industrial activities and are owned by Boeing.

As discussed above, NASA administers property, on behalf of the federal government, that contains the Project areas described in this document.

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT  
(33 CFR 325)

OMB APPROVAL NO. 0710-0003  
Expires December 31, 2004

The public reporting burden for this collection of information is estimated to average 10 hours per response, although the majority of applications should require 5 hours or less. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies. Submission of requested information is voluntary, however, if information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED
--------------------	----------------------	------------------	-------------------------------

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME The Boeing Company/Mr. Thomas Gallacher	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) Glenn Jaffe/MWH Project Manager
6. APPLICANT'S ADDRESS 5800 Woolsey Canyon Road, MC 055-T487 Canoga Park, California 91304-1148	9. AGENT'S ADDRESS 168 Michillinda Ave., Suite 200 Arcadia, California 91007
7. APPLICANT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business 818-466-8161	10. AGENT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business 626-568-6329

11. STATEMENT OF AUTHORIZATION

I hereby authorize Glenn Jaffe and/or MWH to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

*Paul J. Galt*

5/17/10

APPLICANT'S SIGNATURE

DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)

Continuing Interim Source Removal Action (ISRA)--Outfall 009 Watershed

13. NAME OF WATERBODY, IF KNOWN (if applicable)

Northern Drainage/Unnamed ephemeral drainages

14. PROJECT STREET ADDRESS (if applicable)

5800 Woolsey Canyon Road, MC 055-T487  
Canoga Park, California 91304-1148

15. LOCATION OF PROJECT

Ventura  
COUNTY

California  
STATE

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

Unsectioned portion of Calabasas Quadrangle, T2N, R17W, Various locations, Santa Susana Field Laboratory Property (See attached figures)

17. DIRECTIONS TO THE SITE

From Highway 118, exit at Topanga Canyon Boulevard and proceed south to Roscoe Boulevard. Turn west (right) onto Roscoe and then turn north (right) onto Valley Circle Boulevard. At the 3-way stop, turn left onto Woolsey Canyon. Proceed to the top of the road and then turn left into the SSEI facility.

18. Nature of Activity (Description of project, include all features)

Perform Interim Source Removal Action of constituents of concern to attain surface water quality objectives. Activities will include soil, sediment, bedrock, and/or other material/debris removal from drainages and or land surfaces to minimize contact with surface water and to improve surface water quality (NWP 38); and install BMPs to minimize sediment transport into drainages and improve surface water quality. BMPs may consist of silt fencing, sand bags, straw wattles or bales, or other similar materials. The attached supplemental information provides more details about the Project.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

All work is being performed in response to the RWQCB CAO requiring improvements to surface water quality in the Outfall 009 drainage and watershed.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

If fill material consisting of soil, sediment, gravel, and/or rock is discharged to the Project areas, it will be placed to restore the drainages(s) to their pre-ISRA condition and to minimize soil erosion and potential transport. Dredging will not be performed. See attached Supplemental Information.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

The ISRA is more of a removal project than discharge project. See the attached Supplemental Information for additional details.

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Wetlands are not present and will not be filled. See the attached Supplemental Information for details.

23. Is Any Portion of the Work Already Complete? Yes \_\_\_\_\_ No  IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

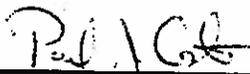
Work will be completed on site which is owned by The Boeing Company and/or the federal government and administered by NASA. See attached sheets for more information regarding working on property used by Boeing but owned by the United States.

25. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
RWQCB	CWA 401	Pending	Concurrently	Pending	
CDFG	SAA	1600-2003-5052-R5	August, 2003	October, 2003	

\*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.



SIGNATURE OF APPLICANT

5/17/03

DATE

SIGNATURE OF AGENT

DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States, knowingly and willfully falsifies, conceals, or covers up any trick scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or representations...

Instructions for Preparing a  
Department of the Army Permit Application

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**Blocks 1 through 4.** To be completed by Corps of Engineers.

**Block 5. Applicant's Name.** Enter the name of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked Block 5.

**Block 6. Address of Applicant.** Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked Block 6.

**Block 7. Applicant Telephone Number(s).** Please provide the number where you can usually be reached during normal business hours.

**Blocks 8 through 11.** To be completed, if you choose to have an agent.

**Block 8. Authorized Agent's Name and Title.** Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, or any other person or organization. Note: An agent is not required.

**Blocks 9 and 10. Agent's Address and Telephone Number.** Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

**Block 11. Statement of Authorization.** To be completed by applicant, if an agent is to be employed.

**Block 12. Proposed Project Name or Title.** Please provide name identifying the proposed project, *e.g.*, Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center.

**Block 13. Name of Waterbody.** Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

**Block 14. Proposed Project Street Address.** If the proposed project is located at a site having a street address (not a box number), please enter it here.

**Block 15. Location of Proposed Project.** Enter the county and state where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked Block 15.

**Block 16. Other Location Descriptions.** If available, provide the Section, Township, and Range of the site and / or the latitude and longitude. You may also provide description of the proposed project location, such as lot numbers, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed project site if known.

**Block 17. Directions to the Site.** Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site.

**Block 18. Nature of Activity.** Describe the overall activity or project. Give appropriate dimensions of structures such as wingwalls, dikes (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe in detail what you wish

**Block 19. Proposed Project Purpose.** Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

**Block 20. Reasons for Discharge.** If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

**Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards.** Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

**Block 22. Surface Areas of Wetlands or Other Waters Filled.** Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backho dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

**Block 23. Is Any Portion of the Work Already Complete?** Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identify the authorization, if possible.

**Block 24. Names and Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Project Site.** List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.

**Block 25. Information about Approvals or Denials by Other Agencies.** You may need the approval of other federal, state or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) on each application. You need not have obtained all other permits before applying for a Corps permit.

**Block 26. Signature of Applicant or Agent.** The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

## DRAWINGS AND ILLUSTRATIONS

### General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x 11 inch plain white paper (tracing paper or film may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.



## DEPARTMENT OF THE ARMY

Corps of Engineers, Los Angeles District  
Ventura Field Office  
2151 Alessandro Drive, Suite 110  
Ventura, CA 93001

June 21, 2010

REPLY TO  
ATTENTION OF:

Regulatory Division

### DEPARTMENT OF THE ARMY NATIONWIDE PERMIT AUTHORIZATION

Thomas Gallacher, Director  
The Boeing Company  
Santa Susana Field Lab  
5800 Woolsey Canyon Road, MC 055-T487  
Canoga Park, CA 91304-1148

Dear Mr. Gallacher:

This is in reply to your application (File No. SPL-2009-00412-AJS) dated May 17, 2010 for a Department of the Army Permit to discharge fill into waters of the U.S. in association with the continued Interim Source Removal Action – Outfall 009 Watershed. The proposed work would be conducted to comply with the December 3, 2008 Cleanup and Abatement Order issued by the Los Angeles Regional Water Quality Control Board, and would take place in two unnamed tributaries to Meier Creek, near the City of Simi Valley, Ventura County, California. A jurisdictional determination for the subject tributaries was previously issued to you in a letter dated April 27, 2010.

Based on the information you have provided, the Corps of Engineers has determined that your proposed activity complies with the enclosed terms and conditions of Nationwide Permit No. 38 *Cleanup of Hazardous and Toxic Waste*, as described in enclosure 1.

Specifically, you are authorized to:

1. Excavate up to 2,000 cubic yards of soil in "Area 1-E", temporarily impacting up to 0.02 acre of Meier Creek tributary 1, using a vacuum truck and/or excavator.
2. Excavate up to 300 cubic yards of soil in "Area LOX-1-A", temporarily impacting up to 0.01 acre of Meier Creek tributary 2, using a vacuum truck and/or excavator.
3. Conduct grading and recontouring, including the placement of up to 2,500 cubic

yards of clean backfill material (in uplands and waters) to restore pre-project contours within Meier Creek tributaries 1 and 2.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2012. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit.

A nationwide permit does not grant any property rights or exclusive privileges. Also, it does not authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project. Furthermore, it does not obviate the need to obtain other Federal, state, or local authorizations required by law.

Thank you for participating in our regulatory program. If you have any questions, please contact me at 805-585-2147 or via e-mail at [Antal.J.Szija@usace.army.mil](mailto:Antal.J.Szija@usace.army.mil).

Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at: <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,



Antal Szija  
Senior Project Manager  
North Coast Branch

Enclosure

CF: Glenn Jaffe, MWH  
L. B. Nye, LARWQCB

**The Boeing Company**  
Santa Susana Field Laboratory  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

**Certified Mail**

May 17, 2010  
In reply refer to SHEA-109978



Regional Water Quality Control Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

Attention: Mr. Dana Cole, 401 Certification Unit

Subject: Pre-Certified 401 Notification  
Continuing Interim Source Removal Action-Outfall 009 Watershed  
The Boeing Company, Santa Susana Field Laboratory  
Ventura County, California

Dear Mr. Cole:

The Boeing Company (Boeing) is submitting this notification to the California State Water Resources Control Board (SWRCB) and the Los Angeles Regional Water Quality Control Board (RWQCB) as required under Clean Water Act (CWA) Section 401, and as promulgated by the Water Quality Certification (WQC) of certain U. S. Army Corps of Engineers (USACE) Nationwide Permits (NWP's).

This notification is for the Continuing Interim Source Removal Action (ISRA) to control the release of constituents of concern (COCs) to surface water within the Outfall 009 Watershed at the SSFL. The work will be performed by The Boeing Company (Boeing) and the National Aeronautics and Space Administration (NASA) pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by the Los Angeles Regional Water Quality Control Board (RWQCB) dated December 3, 2008. The CAO was issued by the RWQCB to enforce compliance with Waste Discharge Requirements (WDR) for Outfalls 008 and 009 established in its National Pollutant Discharge Elimination System (NPDES) Permit, NPDES No. CA0001309 (NPDES Permit)..

The objective of the ISRA RWQCB CAO is to improve surface water quality within the Outfall 009 Watershed by identifying, evaluating, and remediating areas of contaminated soil in order to eliminate the COCs that have resulted in exceedances of NPDES permit limits and benchmarks. Based on the work

Mr. D. Cole, RWQCB (SHEA-109978)

May 17, 2010

Page 2

scope, the Project will be performed under a Nationwide Permit (NWP) 38-Cleanup of Hazardous and Toxic Waste. Based on this category of NWP, this Project is pre-certified by the SWRCB under the CWA Section 401 program. Therefore, Boeing is providing this notification, and not a complete Section 401 certification application. This is consistent with the May 11, 2007 SWRCB memorandum that identifies specific Section 401 activities which are pre-certified and only require appropriate notification.



**Pre-Certified Notification Information**

**1. Name, address, and telephone number of the:**

**a. Applicant**

The Boeing Company  
Mr. Thomas Gallacher  
5800 Woolsey Canyon Road, MC 055-T487  
Canoga Park, California 91304-1148  
Phone: 818-466-8877 or 818-466-8778  
Fax: 818-466-8730

**b. Applicant's Agent**

MWH Americas, Inc.  
Mr. Glenn Jaffe  
618 Michillinda Avenue, Suite 200  
Arcadia, California 91007  
Phone: 818-391-4243  
Fax: 626-568-6515  
Email: glenn.jaffe@mwhglobal.com

**2. Identification of Federal permits and licenses for proposed project activities**

United States Army Corps of Engineers (USACE), Ventura Branch  
CWA Section 404 Nationwide Permit 38

A copy of the Army Permit Application form is attached. The application serves as the USACE pre-construction notification for the NWP 38.

Note: The California Department of Fish and Game previously approved a Notification of Lake or Streambed Alteration and issued Streambed Alteration Agreement (SAA) 1600-2003-5052-R5. This SAA has been amended and extended, and is an active SAA. In accordance with CDFG conditions stipulated in the SAA and its amendments, biological studies will be performed to minimize potential impacts to flora and fauna in Project work areas. Biological surveys of the Project areas have been performed and no sensitive species or other issues were identified. The biologist will again visit the



Project areas prior to equipment being mobilized and field work commencing. This pre-field activities' survey is performed so that potential concerns can be addressed without affecting field work schedules. At the start of field work, Project areas will be re-visited and surveyed by a biologist to verify the pre-field activities' survey results, potentially transplant sensitive wildlife, and to evaluate current conditions. Upon field activities commencing in Project areas, a biologist will visit the areas as work is being performed to verify SAA conditions are being met, and to provide guidance to the field crews, if necessary.

### 3. Project Description

**a. Purpose and Final Goal:** The objective of ISRA activities is to improve surface water quality within the Outfall 009 watershed by identifying, evaluating, and remediating areas of contaminated sediment, soil, and/or bedrock in order to eliminate the COCs that have resulted or could result in exceedances of NPDES permit limits and benchmarks. An evaluation of remediation alternatives identified excavation as the main and most effective remedial action for the ISRA project. ISRA excavation activities may include the use of the following adjacent to and within the Outfall 009 ephemeral drainages:

Vacuum trucks	Shovels
Bobcats	Backhoes
Excavators	Manual removal
Personal trucks	Roll-off bins
Transport trucks	Dump Trucks

As illustrated on the attached figures, excavation activities will take place in select areas of the SSFL based on soil and sediment sampling and analytical testing. The figures indicate sample locations and the proposed source removal areas. As discussed above, the Project will consist of primarily using a vacuum truck(s) to recover impacted soil and sediment. When recovering impacted sediment, soil and/or bedrock from an ephemeral drainage, vacuum trucks will typically be staged outside the drainage with vacuum hoses being used to access drainage areas. In some locations, vacuum trucks may have to enter the drainage. The vacuum hoses will be manually manipulated in the drainage by a crew of workers. If required due to topography or encountering bedrock, an excavator or backhoe might be needed to access and remove soil, sediment, and/or bedrock from impacted areas. If used, the operators will be careful to minimize soil, sediment, and/or bedrock sloughing into the drainage.



The removed materials will be placed in trucks and appropriately managed. Based on the Project scope, the following quantities of sediment, soil, and/or bedrock will be excavated/removed from jurisdictional areas:

**Western Northern Drainage Areas, see Figure West Northern Drainage 1 and Figures 4-2 (2 sheets), Area-1E, and Area LOX-1-A**

Excavation/removal in these areas will typically be up to two feet in depth, and will total not more than 2,000 cubic yards in Area 1E, and not more than 300 cubic yards in Area LOX-1-A. Please note this is total volume of material to be excavated. Only a portion of this material will be removed directly from jurisdictional drainage areas. That specific quantity is unknown at this time; however, it is significantly less than the totals presented here.

If necessary to minimize the potential for surface water to pond and accumulate after the ISRA is completed, surface grading will be performed and/or clean material will be placed. If fill material is needed to restore topographic grade to minimize the potential for surface water to pond or be diverted significantly from its original course, not more than 2,500 cubic yards of clean backfill may be placed in project locations. However, a significantly lesser quantity may be placed in jurisdictional areas (as discussed above, only a small portion of material will be removed directly from jurisdictional areas; therefore, only a small portion of material may be placed into jurisdictional areas).

In accordance with CDFG conditions as stipulated in the applicable SAA and its amendments, biological surveys will be performed to minimize potential impacts to flora and fauna in Project work areas. Initial biological surveys have been performed and sensitive species have not been identified. Just prior to starting field work, Project areas will be re-visited and surveyed by a biologist to verify pre-field activities' survey results, potentially relocate sensitive wildlife, and to evaluate current conditions. Upon field activities commencing in Project areas, a biologist will visit the areas as work is being performed to verify SAA conditions are being met, and to provide guidance to the field crews, if necessary.

**b. Address including city and county, assessor's parcel number, and latitude and longitude:** The Boeing Company, Santa Susana Field Laboratory, 5800 Woolsey Canyon Road, Simi Hills, Ventura County; Longitude 118°40.690'W and Latitude 34°14'N.



**c. Receiving water bodies:** Surface water that flows in the Outfall 009 Watershed flows through a natural unlined drainage on-site and eventually flows into Arroyo Simi, then into Calleguas Creek, and eventually into the Pacific Ocean.

**d. Types of receiving water bodies:** See 3c.

**e. For each water body type reported in 3c, the total quantity of waters and types of discharge material that may temporarily or permanently impact waters of the State:** The Continuing ISRA Project will not negatively affect the quantity of water flowing in these watersheds and will not result in waters being introduced into the drainage. As described above, impacted soil, sediment, and/or bedrock will be removed from the watersheds and drainages.

Sediment, soil, gravel, and/or rock may be placed in and adjacent to the subject jurisdictional ephemeral drainage if topographic grade restoration is necessary. The type and quantity of these materials are not currently known because their use will be based on the quantity and location of excavated material. However, as discussed above, not more than 2,500 cubic yards of materials will be placed, with a significantly lesser quantity being placed in jurisdictional areas of the drainages.

**f. The attached figures show project locations and work areas:** The attached table indicates Project area coordinates. The attached USACE information provides additional project details.

A check in the amount of \$77 made payable to the State Water Resources Control Board, is included.

This notification, in accordance with current regulations, provides the SWRCB and RWQCB with required project information. Since this project requires a NWP 38 from the USACE, and NWP 38 is pre-certified by the SWRCB, the project does not require further SWRCB or RWQCB approval. Therefore, after the 30-day notification period expires (30 days from the date of submittal of this document), Boeing may begin field activities in jurisdictional locations and proceed with the Continuing ISRA Project if no comments are received.

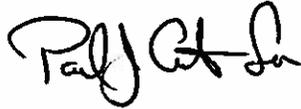
Mr. D. Cole, RWQCB (SHEA-109978)

May 17, 2010

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I certify that to the best of my knowledge, the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. If you have any questions or comments on this submittal, please do not hesitate to contact Ms. Lori Blair at 818-466-8741 or Glenn Jaffe of MWH at 818-391-4243.

Very truly yours,



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

LNB:bjc

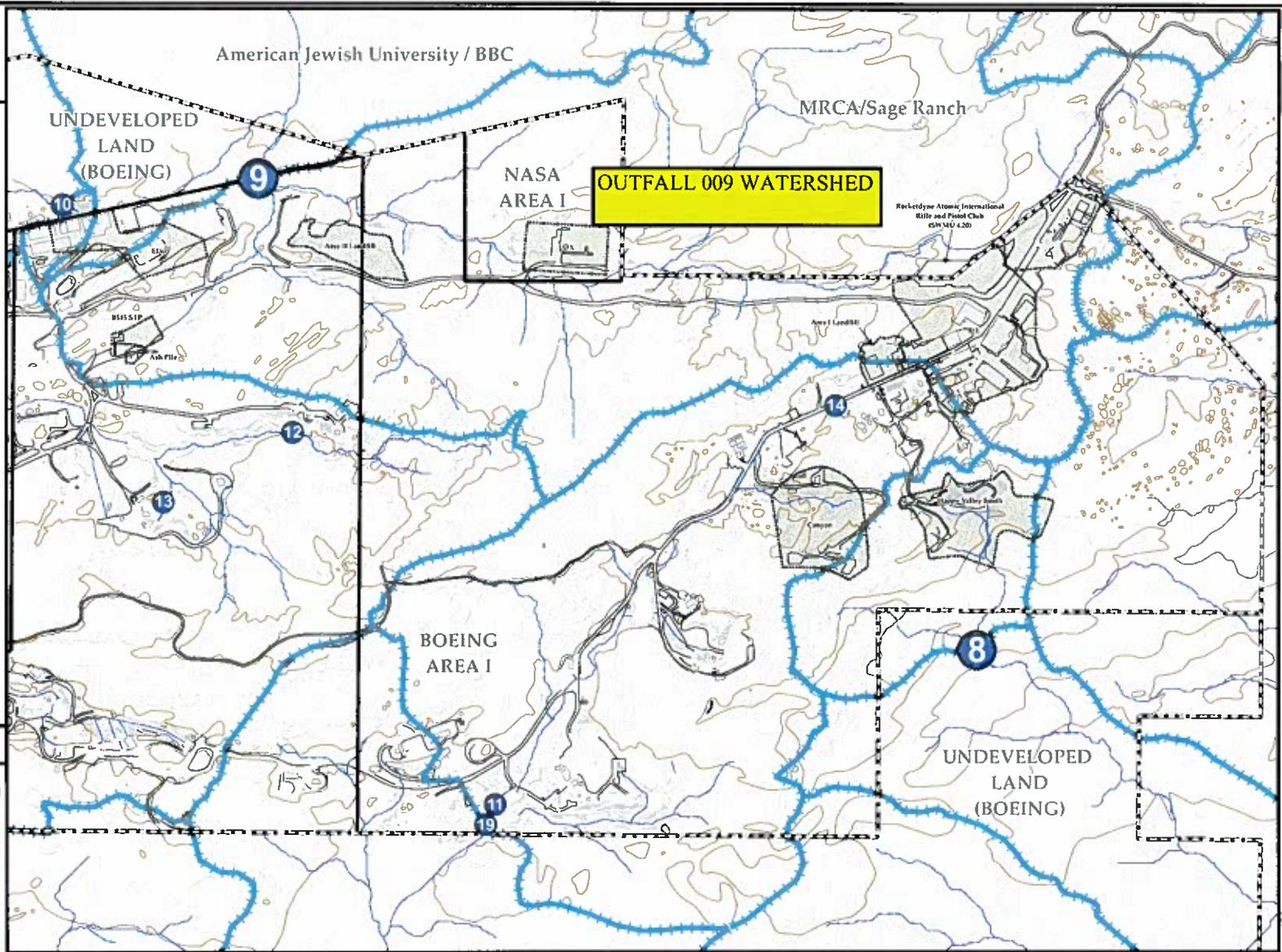
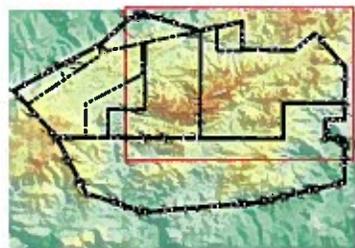
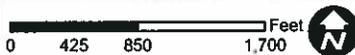
Attachments:           Check for \$77 to SWRCB  
                              Figure 1-4 Outfall 009 Watershed Location  
                              Figure West Northern Drainage-1  
                              Figure 4-2 AP/STP Refined ISRA PEAs and ISRA Areas (2 sheets)  
                              Table with Project area coordinates  
                              USACE Army Permit (NWP 38)

cc:                   Mr. Oscar Balaguer, SWRCB  
                          Mr. Antal Szijj, USACE  
                          Dr. L. B. Nye, RWQCB  
                          Ms. Cassandra Owens, RWQCB  
                          Mr. Peter Raftery, RWQCB  
                          Mr. Buck King, DTSC  
                          Mr. Glenn Jaffe, MWH

# OUTFALL 009 WATERSHED LOCATION

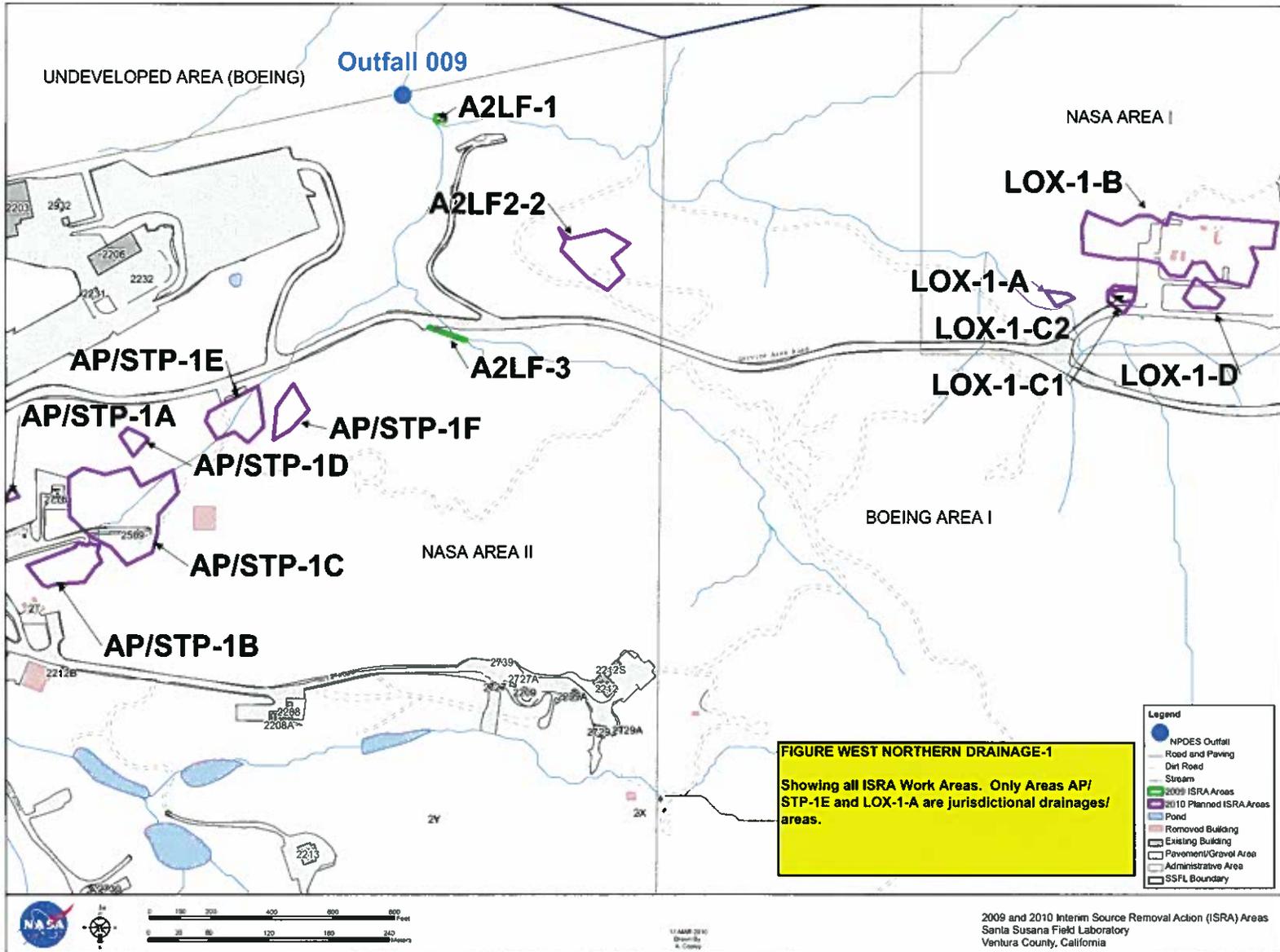
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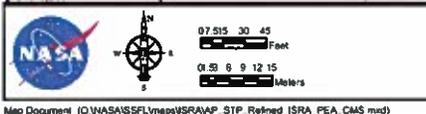
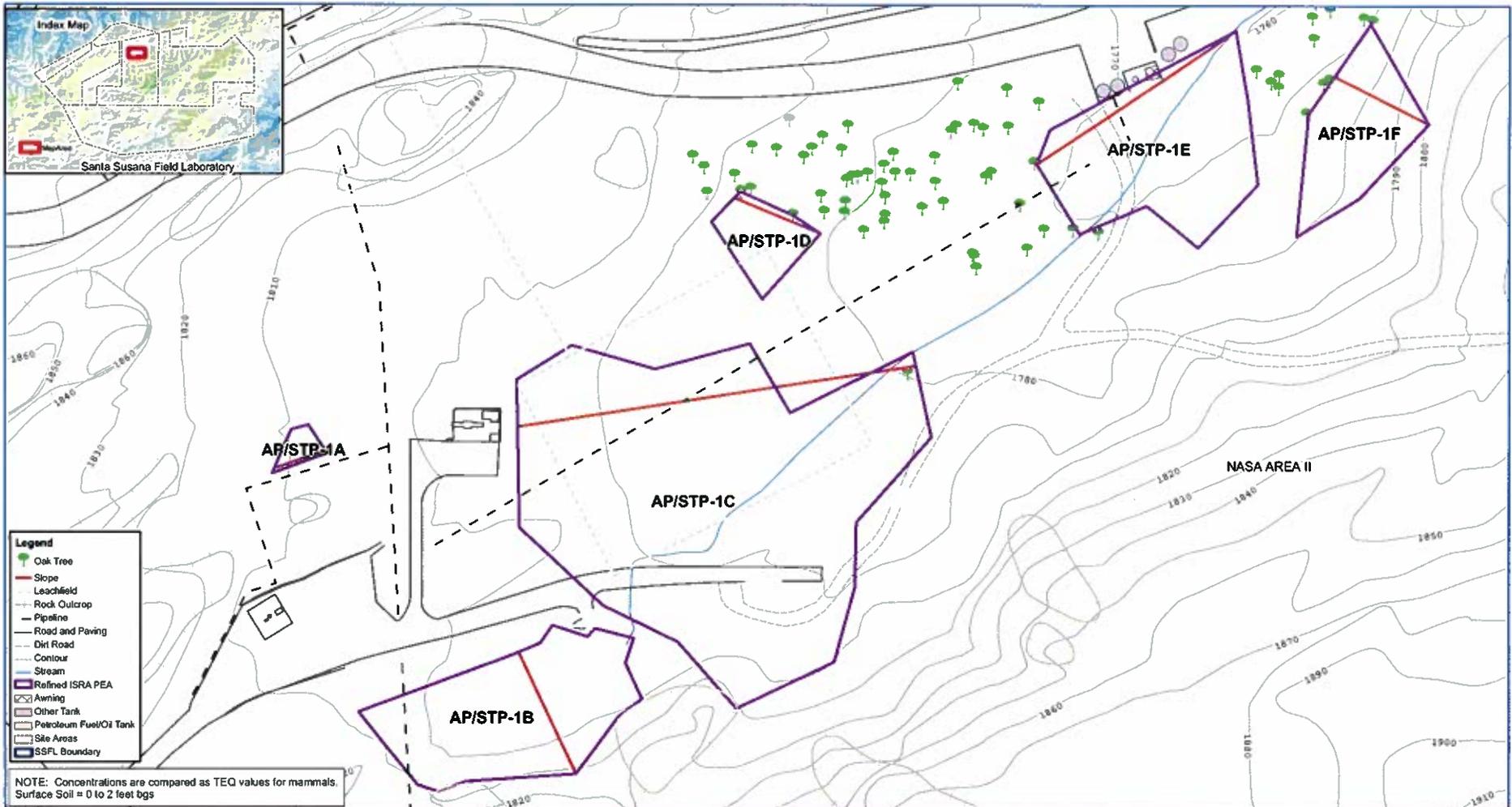
-  Administrative Area Boundary
-  Historical Operations Areas (RFI Sites) Within Outfall 008 and 009
-  Surface Water Drainage
-  Surface Water Divide
-  NPDES Outfall
-  Existing Building or Structure
-  Paved Road
-  Elevation Contour
-  Bedrock Outcrop



SANTA SUSANA FIELD LABORATORY

 **MWH** FIGURE 1-4





05-APR-2010  
Drawn By:  
Aberia Cooley

**Figure 4-2**  
AP/STP Refined ISRA PEAs and ISRA Areas  
Santa Susana Field Laboratory



05-APR-2010  
 Drawn By:  
 Alberta Cooley

Figure 4-2  
 AP/STP Refined ISRA PEAs and ISRA Areas  
 Santa Susana Field Laboratory

**The Boeing Company, SSFL, Ventura County, California  
Approximate Coordinates of the OF009 Continuing ISRA Project Locations**

**RWQCB CWA Section 401 Certification Form, Section 6b.**

<b>Outfall 009 Watershed</b>	<b><u>Longitude</u></b>	<b><u>Latitude</u></b>
<b>AP/STP-Area-1E</b>	<b>118.6971</b>	<b>34.2357</b>
	<b>118.6971</b>	<b>34.2359</b>
	<b>118.6966</b>	<b>34.2361</b>
	<b>118.6967</b>	<b>34.2359</b>
<b>LOX-1-A Area</b>	<b>118.6880</b>	<b>34.2373</b>
	<b>118.6882</b>	<b>34.2372</b>
	<b>118.6882</b>	<b>34.2370</b>
	<b>118.6879</b>	<b>34.2370</b>

The Boeing Company  
Santa Susana Field Laboratory  
5800 Wooldsey Canyon Road  
Canoga Park, CA 91304-1143

Certified Mail

May 17, 2010

In reply refer to SHEA-109977



U. S. Army Corps of Engineers  
Ventura County Field Office-Regulatory Branch  
2151 Alessandro Dr., Suite 110  
Ventura, California 93001

Attention: Mr. Antal Szijj

Subject: U. S. Army Permit Application Submittal for NWP 38  
Continued Interim Source Removal Action - Outfall 009 Watershed  
Santa Susana Field Laboratory  
Ventura County, California

Dear Mr. Szijj:

Enclosed, please find the permit application form for a Nationwide Permit (NWP) 38 for the Outfall 009 Watershed continuing Interim Source Removal Action (ISRA) Project, located at The Boeing Company (Boeing), Santa Susana Field Laboratory (SSFL) in Ventura County, California. The work being performed as outlined in this application form is to satisfy requirements of the California Environmental Protection Agency's Los Angeles Regional Water Quality Control Board (RWQCB).

On May 22, 2009, Boeing submitted a notification for proposed activities in the Outfall 009 Watershed and the US Army Corps of Engineers (USACE) informed Boeing that most of the proposed activities were not in ACOE geographic jurisdictional areas. Boeing performed those activities, and will now perform similar activities in both USACE jurisdictional and non-jurisdictional areas. This permit application is being submitted for those areas that are located within USACE jurisdictional geographies.

The work will be performed by Boeing and the National Aeronautics and Space Administration (NASA) pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by the RWQCB dated December 3, 2008. The CAO was issued by the RWQCB to enforce compliance with Waste Discharge Requirements (WDR) for Outfalls 008 and

Mr. A. Szijj, USACE (SHEA-109977)  
May 17, 2010  
Page 2



009 established in its National Pollutant Discharge Elimination System (NPDES) Permit, NPDES No. CA0001309 (NPDES Permit).

Based on sampling and analytical testing in the Outfall 009 watershed, soils, sediments, and/or bedrock have been identified to contain constituents of concern that could impact surface water and result in water quality objective exceedances. Boeing is undertaking this ISRA to remove these soils, sediments, bedrock and, if possible, the constituents of concern directly. Boeing is submitting the CWA Section 401 Water Quality Certification Application Form to the RWQCB and is awaiting certification. In addition, the California Department of Fish and Game has approved a Notification of Lake or Streambed Alteration (SAA) agreement that places conditions on the activities that will be performed as part of these continuing ISRA activities.

An Army Permit Application and supplemental information accompanies this cover letter. If you have any questions regarding this submittal, please contact Lori Blair at (818) 466-8741 or Glenn Jaffe of MWH at (626) 568-6329 with any questions you have.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom D. Gallacher'.

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

LNB:bjc

Attachments:

Figures

Outfall 009 Watershed Location  
Figure West Northern Drainage-1  
Figure 4-2 AP/STP Refined ISRA PEAs and ISRA Areas (2 sheets)  
Supplemental Information  
Army Permit Application

cc: Dr. LB Nye, RWQCB  
Ms. Cassandra Owens, RWQCB  
Mr. Peter Raftery, RWQCB  
Mr. Buck King, DTSC  
Mr. Steve Slaten, NASA  
Mr. Glenn Jaffe, MWH

**Supplemental Information**  
**Application for Department of the Army Permit (NWP 38)**  
**Interim Source Removal Action (ISRA)**  
**Northern Drainage (Outfall 009 Watershed)**

As part of the Application for Department of the Army Permit (Permit) for the above project, this information is being provided as a supplement to the Permit. The information is formatted to refer to the specific "Blocks" of the Permit. Main activities will consist of the removal of impacted sediment, soils, and/or bedrock. The activities are described herein.

**Block 16. Other Location Descriptions**

The attached figures show the SSFL location, the SSLF facility, and the proposed jurisdictional locations of the Project.

**Block 18. Nature of Activity**

**Project Description for ISRA**  
**Northern Drainage Watershed (Outfall 009)**  
**Boeing Santa Susana Field Laboratory**

The Interim Source Removal Action (ISRA) is the approach used to control the release of constituents of concern (COCs) to surface water within the Outfall 009 watershed at the SSFL. The work will be performed by The Boeing Company (Boeing) and the National Aeronautics and Space Administration (NASA) pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by the Los Angeles Regional Water Quality Control Board (RWQCB) dated December 3, 2008. The CAO was issued by the RWQCB to enforce compliance with Waste Discharge Requirements (WDR) for Outfalls 008 and 009 established in its National Pollutant Discharge Elimination System (NPDES) Permit, NPDES No. CA0001309 (NPDES Permit).

The objective of ISRA activities is to improve surface water quality within the Outfall 009 watershed by identifying, evaluating, and remediating areas of contaminated sediment, soil, and/or bedrock in order to eliminate the COCs that have resulted or could result in exceedances of NPDES permit limits and benchmarks. An evaluation of remediation alternatives identified excavation as the main and most effective remedial action for the ISRA project. ISRA excavation activities may include the use of the following adjacent to and within the Outfall 009 ephemeral drainages:

Vacuum trucks	Shovels
Bobcats	Backhoes
Excavators	Manual removal
Personal trucks	Roll-off bins
Transport trucks	Dump Trucks

As illustrated on the attached figures, excavation activities will take place in select areas of the SSFL based on soil and sediment sampling and analytical testing. The figures

indicate sample locations and the proposed source removal areas. As discussed above, the Project will consist of primarily using a vacuum truck(s) to recover impacted soil and sediment. When recovering impacted sediment, soil and/or bedrock from an ephemeral drainage, vacuum trucks will typically be staged outside the drainage with vacuum hoses being used to access drainage areas. In some locations, vacuum trucks may have to enter the drainage. The vacuum hoses will be manually manipulated in the drainage by a crew of workers. If required due to topography or encountering bedrock, an excavator or backhoe might be needed to access and remove soil, sediment, and/or bedrock from impacted areas. If used, the operators will be careful to minimize soil, sediment, and/or bedrock sloughing into the drainage. The removed materials will be placed in trucks and appropriately managed. Based on the Project scope, the following quantities of sediment, soil, and/or bedrock will be excavated/removed from jurisdictional areas:

**Western Northern Drainage Areas, see FIGURE WEST NORTHERN DRAINAGE-1 and Figures 4-2 (2 sheets), Area-1E, and Area LOX-1-A**

Excavation/removal in these areas will typically be up to two feet in depth, and will total not more than 2,000 cubic yards in Area 1E, and not more than 300 cubic yards in Area LOX-1-A. Please note this is total volume of material to be excavated. Only a portion of this material will be removed directly from jurisdictional drainage areas. That specific quantity is unknown at this time; however, it is significantly less than the totals presented here.

If necessary to minimize the potential for surface water to pond and accumulate after the ISRA is completed, surface grading will be performed and/or clean material will be placed. If fill material is needed to restore topographic grade to minimize the potential for surface water to pond or be diverted significantly from its original course, not more than 2,500 cubic yards of clean backfill may be placed in project locations. However, a significantly lesser quantity may be placed in jurisdictional areas (as discussed above, only a small portion of material will be removed directly from jurisdictional areas; therefore, only a small portion of material may be placed into jurisdictional areas).

In accordance with CDFG conditions as stipulated in the applicable SAA and its amendments, biological surveys will be performed to minimize potential impacts to flora and fauna in Project work areas. Initial biological surveys have been performed and sensitive species have not been identified. Just prior to starting field work, Project areas will be re-visited and surveyed by a biologist to verify pre-field activities' survey results, potentially relocate sensitive wildlife, and to evaluate current conditions. Upon field activities commencing in Project areas, a biologist will visit the areas as work is being performed to verify SAA conditions are being met, and to provide guidance to the field crews, if necessary.

**Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards**

Sediment, soil, gravel, and/or rock may be placed in and adjacent to the subject jurisdictional ephemeral drainage if topographic grade restoration is necessary. The type and quantity of these materials are not currently known because their use will be based on the quantity and location of excavated material. However, as discussed above, not more than 2,500 cubic yards of materials will be placed, with a significantly lesser quantity being placed in jurisdictional areas of the drainages.

**Block 22. Surface Area in Acres of Wetlands or Other Waters Filled**

Dredging will not be performed. Work areas do not contain or consist of wetlands; therefore, work will not be performed in wetlands. Fill material(s), as described above, may be placed in jurisdictional geographies. The fill will be placed with equipment such as backhoes, loaders, excavators, Bobcats, or other similar equipment, and/or with smaller equipment or manually

Excavation/removal areas are approximately 20,000 square feet (approximately 0.5 acres) in Area 1E, and 2,500 square feet (approximately 0.06 acres) in Area LOX-1-A. Based on the described Project, temporary impacts to jurisdictional drainages are insignificant, and it is anticipated jurisdictional drainages will essentially be restored to their pre-construction condition, with the exception that topographic grade may be slightly lower and/or sediment or erosion control features may be present.

**Block 24. Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Waterbody**

The SSFL is jointly owned by Boeing and the federal government. NASA administers the portion of the property owned by the federal government. The site is divided into four administrative areas (Areas I, II, III, and IV) and undeveloped land areas to both the north and south (Figure 1-1). Boeing owns Areas III and IV, and most of Area I. The federal government property administered by NASA includes a 42-acre portion of Area I and all of Area II. Ninety acres of Area IV were leased to the United States Department of Energy (DOE). The northern and southern undeveloped lands of the SSFL were not used for industrial activities and are owned by Boeing.

As discussed above, NASA administers property, on behalf of the federal government, that contains the Project areas described in this document.

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT  
(33 CFR 325)

OMB APPROVAL NO. 0710-0003  
Expires December 31, 2004

The public reporting burden for this collection of information is estimated to average 10 hours per response, although the majority of applications should require 5 hours or less. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413. Principal Purpose: information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies. Submission of requested information is voluntary, however, if information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED
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(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME The Boeing Company/Mr. Thomas Gallacher	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) Glenn Jaffe/MWH Project Manager
6. APPLICANT'S ADDRESS 5800 Woolsey Canyon Road, MC 055-T487 Canoga Park, California 91304-1148	9. AGENT'S ADDRESS 168 Michillinda Ave., Suite 200 Arcadia, California 91007
7. APPLICANT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business 818-466-8161	10. AGENT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business 626-568-6329

11. STATEMENT OF AUTHORIZATION

I hereby authorize Glenn Jaffe and/or MWH to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

*Paul J. Galt*

5/17/10

APPLICANT'S SIGNATURE

DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) Continuing Interim Source Removal Action (ISRA)--Outfall 009 Watershed	
13. NAME OF WATERBODY, IF KNOWN (if applicable) Northern Drainage/Unnamed ephemeral drainages	14. PROJECT STREET ADDRESS (if applicable) 5800 Woolsey Canyon Road, MC 055-T487 Canoga Park, California 91304-1148
15. LOCATION OF PROJECT Ventura COUNTY California STATE	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) Unsectioned portion of Calabasas Quadrangle, T2N, R17W, Various locations, Santa Susana Field Laboratory Property (See attached figures)	

17. DIRECTIONS TO THE SITE

From Highway 118, exit at Topanga Canyon Boulevard and proceed south to Roscoe Boulevard. Turn west (right) onto Roscoe and then turn north (right) onto Valley Circle Boulevard. At the 3-way stop, turn left onto Woolsey Canyon. Proceed to the top of the road and then turn left into the SSEL facility.

18. Nature of Activity (Description of project, include all features)

Perform Interim Source Removal Action of constituents of concern to attain surface water quality objectives. Activities will include soil, sediment, bedrock, and/or other material/debris removal from drainages and or land surfaces to minimize contact with surface water and to improve surface water quality (NWP 38); and install BMPs to minimize sediment transport into drainages and improve surface water quality. BMPs may consist of silt fencing, sand bags, straw wattles or bales, or other similar materials. The attached supplemental information provides more details about the Project.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

All work is being performed in response to the RWQCB CAO requiring improvements to surface water quality in the Outfall 009 drainage and watershed.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

If fill material consisting of soil, sediment, gravel, and/or rock is discharged to the Project areas, it will be placed to restore the drainages(s) to their pre-ISRA condition and to minimize soil erosion and potential transport. Dredging will not be performed. See attached Supplemental Information.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

The ISRA is more of a removal project than discharge project. See the attached Supplemental Information for additional details.

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Wetlands are not present and will not be filled. See the attached Supplemental Information for details.

23. Is Any Portion of the Work Already Complete? Yes \_\_\_\_\_ No  IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

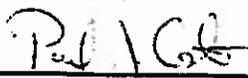
Work will be completed on site which is owned by The Boeing Company and/or the federal government and administered by NASA. See attached sheets for more information regarding working on property used by Boeing but owned by the United States.

25. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
RWQCB	CWA 401	Pending	Concurrently	Pending	
CDFG	SAA	1600-2003-5052-R5	August, 2003	October, 2003	

\*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.



SIGNATURE OF APPLICANT

5/17/03

DATE

SIGNATURE OF AGENT

DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States, knowingly and willfully falsifies, conceals, or covers up any trick scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing the contents are false and such statement or writing or document is made or used in the application of any law...

Instructions for Preparing a  
Department of the Army Permit Application

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**Blocks 1 through 4.** To be completed by Corps of Engineers.

**Block 5. Applicant's Name.** Enter the name of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked Block 5.

**Block 6. Address of Applicant.** Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked Block 6.

**Block 7. Applicant Telephone Number(s).** Please provide the number where you can usually be reached during normal business hours.

**Blocks 8 through 11.** To be completed, if you choose to have an agent.

**Block 8. Authorized Agent's Name and Title.** Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, or any other person or organization. Note: An agent is not required.

**Blocks 9 and 10. Agent's Address and Telephone Number.** Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

**Block 11. Statement of Authorization.** To be completed by applicant, if an agent is to be employed.

**Block 12. Proposed Project Name or Title.** Please provide name identifying the proposed project, *e.g.*, Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center.

**Block 13. Name of Waterbody.** Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

**Block 14. Proposed Project Street Address.** If the proposed project is located at a site having a street address (not a box number), please enter it here.

**Block 15. Location of Proposed Project.** Enter the county and state where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked Block 15.

**Block 16. Other Location Descriptions.** If available, provide the Section, Township, and Range of the site and / or the latitude and longitude. You may also provide description of the proposed project location, such as lot numbers, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed project site if known.

**Block 17. Directions to the Site.** Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site.

**Block 18. Nature of Activity.** Describe the overall activity or project. Give appropriate dimensions of structures such as wingwalls, dikes (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe in detail what you wish

**Block 19. Proposed Project Purpose.** Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

**Block 20. Reasons for Discharge.** If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

**Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards.** Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

**Block 22. Surface Areas of Wetlands or Other Waters Filled.** Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

**Block 23. Is Any Portion of the Work Already Complete?** Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identify the authorization, if possible.

**Block 24. Names and Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Project Site.** List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

**Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.**

**Block 25. Information about Approvals or Denials by Other Agencies.** You may need the approval of other federal, state or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) on each application. You need not have obtained all other permits before applying for a Corps permit.

**Block 26. Signature of Applicant or Agent.** The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

## DRAWINGS AND ILLUSTRATIONS

### General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x 11 inch plain white paper (tracing paper or film may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.