

**Prepared for**

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

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**Storm Water Pollution Prevention Plan  
Interim Source Removal Action (ISRA)  
Santa Susana Field Laboratory  
Ventura County, California**

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June 17, 2009



# **STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

**For**

**Interim Source Removal Action  
Santa Susana Field Laboratory  
Ventura County, California**

**Prepared for:**

The Boeing Company  
National Aeronautics and Space Administration  
5800 Woolsey Canyon Road  
Canoga Park, California 91304

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**SWPPP Preparation Date:**

June 17, 2009

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Appendix B	Notice of Termination
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Appendix D	Computation Sheet for Determining Runoff Coefficients
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# Section 100

## SWPPP Certifications and Approval

### 100.1 Initial SWPPP Certification

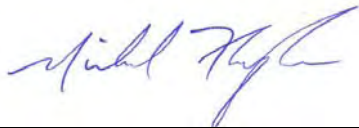
Project Name: Interim Source Removal Action (ISRA)

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*To be completed by SWPPP Preparer*

“I certify that this document and all attachments thereto were prepared under my direction or supervision. I further certify that the information contained herein is true and accurate to the best of my knowledge.”



Preparer's Signature

June 17, 2009

Date

Michael Flaughter, P.G. / Geologist  
Preparer's Name and Title

(714) 646-2007  
Telephone Number

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*To be completed by Contractor*

“I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Contractor's Signature

Date

Contractor's Name and Title

Telephone Number

## 100.2 SWPPP Approval

*For The Boeing Company (Boeing) Use Only*  
*Boeing's Approval and*  
*Certification of the SWPPP*

Project Name: Interim Source Removal Action (ISRA)

“I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

\_\_\_\_\_  
Boeing Manager's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Boeing Manager's Name

\_\_\_\_\_  
Telephone Number

## 100.3 Notice of Intent (NOI) and Notice of Termination (NOT)

A Notice of Intent (NOI) was submitted to the SWRCB on behalf of the Santa Susana Field Laboratory (SSFL) to obtain coverage under the General Permit for construction activities (Appendix A). Field activities shall not begin until the NOI has been approved and a Waste Discharge Identification Number (WDID) has been assigned. The NOI is presented in Appendix A.

The Notice of Termination (NOT) will be submitted when the project is complete and the requirements in Section A.7 has been satisfied. The NOT is presented in Appendix B.

## 100.4 Annual Compliance Certification

By July 1 of each year, the Contractor shall submit an Annual Certification of Compliance to Boeing stating compliance with the terms and conditions of the Permits and the SWPPP covering the preceding dates of July 1 to June 30. The annual certification of compliance form is included in Appendix C. Completed forms will also be located in Appendix C.

## **Section 200**

### **SWPPP Amendments**

#### **200.1 SWPPP Amendment Certification and Approval**

This SWPPP shall be amended:

- Whenever there is a change in construction or operations which may affect the discharge of pollutants to surface waters, groundwaters, or a municipal separate storm sewer system (MS4); or
- If any condition of the Permits is violated or the general objective of reducing or eliminating pollutants in storm water discharges has not been achieved. If the RWQCB determines that a Permit violation has occurred, the SWPPP shall be amended and implemented within 14-calendar days after notification by the RWQCB;
- When deemed necessary by Boeing personnel.

The following items will be included in each amendment:

- Who requested the amendment.
- The location of proposed change.
- The reason for change.
- The original BMP proposed, if any.
- The new BMP proposed.

The amendments for this SWPPP, along with the Contractor's Certification and Boeing's Approval form are provided in the following pages. Amendments are listed in the Amendment Log in Section 200.2.

**SWPPP Amendment Certification**  
**Amendment No. \_\_\_\_\_**

Project Name: Interim Source Removal Action (ISRA)

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*To Be completed by Contractor*

“I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

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Contractor’s Signature

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Date

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Contractor’s Name and Title

---

Telephone Number

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*For Boeing Use Only*  
*Boeing’s Approval and*  
*Certification of the*  
*Storm Water Pollution Prevention Plan Amendment*

“I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

---

Boeing Manager’s Signature

---

Date

---

Boeing Manager’s Name

---

Telephone Number



## 200.2 Amendment Log

Project Name: Interim Source Removal Action (ISRA)

<b>Amendment No.</b>	<b>Date</b>	<b>Brief Description of Amendment</b>	<b>Prepared By</b>

## **Section 300**

### **Introduction and Project Description**

#### **300.1 Introduction and Project Description**

The project is located at the Santa Susana Field Laboratory (SSFL) in Canoga Park, Ventura County, California (Figure 1). The Interim Source Removal Action (ISRA) project began in response to a corrective action order (CAO) issued by the RWQCB to Boeing on December 3, 2008. The CAO requires the sources that are discharging the constituents that exceeded NPDES permit limits and benchmarks within the Outfall 008 and 009 watersheds to be addressed. These constituents for which there have been NPDES permit limit and benchmark exceedances at Outfall 008 and Outfall 009 between 2004 and March 2008 include lead at Outfall 008; and copper, lead, dioxins, pH, and oil and grease at Outfall 009. The objective of the ISRA RWQCB CAO is to improve surface water quality within the Outfall 008 and 009 watersheds 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 benchmark limits. The CAO also requires that methods be used to minimize impacts to the streambed adjacent to habitat during cleanup activities, protect the water quality during and after cleanup activities, and restore the streambed and surrounding habitat following cleanup activities.

Outfall 008 was established in August 2004 as the NPDES Permit monitoring location for the Happy Valley watershed, which is located in the eastern portion of Area I of the SSFL (Figure 2). There are seven areas identified for excavation for Outfall 008, for a total surface area of approximately 1.3 acres total. Six of these areas are located in inactive areas that were demolished in 2003 or earlier. The seventh area is located within a natural drainage south of the Happy Valley area.

Outfall 009 was established in August 2004 as the NPDES Permit monitoring location in the Northern Drainage watershed (Figure 4). There are two areas identified for excavation spanning a total area of approximately 0.5 acres. The areas being excavated (an swale and catchment pond) are located just south of the paved ELV area.

The project will be completed in two phases. Phase I implementation is scheduled for 2009 and includes the Outfall 008 area and a portion of the Outfall 009 watershed. Phase II implementation would occur in 2010/2011, with completion of the project prior to the Fall 2012 rainy season.

Removed soil from the excavations will be placed into haul trucks and driven to a staging area, where it will be stockpiled and characterized for offsite disposal. The location of the staging area are shown of Figures 2 and 3. Once characterized, stockpiled soil will be transported to a California-certified disposal facility..

#### **300.2 Unique Site Features**

The Outfall 008 ISRA excavation areas are located at the Happy Valley site, Canyon site, and within a natural drainage. Five of the areas are located at the Happy Valley site. This part of SSFL consists of a gently sloping area bordered by steep relief in all directions. The area slopes gently towards a natural drainage in the center of the valley, which flows east, then south to Outfall 008. Stormwater flows offsite towards Bell Creek and the Los Angeles River.

One of the areas is located in the Canyon area, which is a generally flat area that slopes toward a natural drainage to the south. The last excavation area is located in that natural drainage. This drainage flows to the east to Outfall 008, and offsite towards Bell Creek and the Los Angeles River.

The Outfall 009 ISRA excavation areas are located at the ELV area. The ELV area is a generally flat and asphalt-lined area bordered by bedrock outcrops to the north, west, and south. The excavations are located just south of the flat, paved area of ELV, which slopes to the south and east. Stormwater flows east and then north into the Northern Drainage, which flows offsite. Five of the areas are located at the Happy Valley site. This part of SSFL consists of a gently sloping bordered by steep relief in all directions. The area slopes gently towards a natural drainage in the center of the valley, which flows east, then south to Outfall 008. Stormwater flows offsite towards Bell Creek and the Los Angeles River.

One of the areas is located in the Canyon area, which is a generally flat area that slopes toward a natural drainage to the south. The last excavation area is located in that natural drainage. This drainage flows to the east to Outfall 008, then flows northward through predominantly undeveloped land in an unnamed intermittent drainage tributary to Meier Canyon and subsequently to the Arroyo Simi (in the Simi Valley community), Arroyo Las Posas, and Calleguas Creek.

### **300.3 Construction Site Estimates**

The following are estimates of the construction site:

Construction site area:	<u>1.85</u> Acres
Percentage impervious area before demolition:	<u>0</u> %
Runoff coefficient before demolition <sup>(1)</sup> :	<u>0.40</u>
Percentage impervious area after demolition:	<u>0</u> %
Runoff coefficient after demolition <sup>(1)</sup> :	<u>0.40</u>
Anticipated storm water flow onto the construction site <sup>(2)</sup> :	<u>0.00041</u> cfs

<sup>(1)</sup> Calculations are shown in Appendix D

<sup>(2)</sup> Calculations are shown in Appendix E

### **300.4 Project Schedule/Water Pollution Control Schedule**

<u>Date</u>	<u>Activity/Event</u>
08/10/09	Phase I Estimated Project Start. Start mobilization of equipment and materials. Start excavation activities. Begin implementing non-storm water and waste management BMPs.
10/15/09	2009-10 Rainy season begins. Start implementation of temporary soil stabilization and sediment control BMPs and maintain throughout the rainy season.
12/23/09	Phase I Estimated project completion.
04/15/10	2009-10 Rainy season ends. Continue implementing non-storm water and waste management BMPs, if needed.
06/15/10	Phase II Estimated Project Start. Start mobilization of equipment and materials. Start demolition excavation activities. Start implementation of temporary soil stabilization and sediment control BMPs and maintain throughout the rainy season.
07/01/10	SWPPP Annual Certification due.
09/01/10	Complete Phase II activities.
10/15/10	2010-11 Rainy season begins.
04/15/11	2010-11 Rainy season ends. Continue implementing non-storm water and waste management BMPs, if needed.

## **300.5 Contact Information/List of Responsible Parties**

The Storm Water Pollution Prevention Manager (SWPPM) assigned to this project is:

SWPPM's Name	Ben Stewart
SWPPM's Telephone/Cell Number	818-266-0305
Company Name	MWH Americas
Address 1	3050 Saturn St # 205
City, State Zip	Brea, CA 92831
Telephone	714-646-2020

The SWPPM shall have primary responsibility and significant authority for the implementation, maintenance, inspection and amendments to the approved SWPPP. The SWPPM will be available at all times throughout duration of the project. Duties of the Contractor's SWPPM include but are not limited to:

- Ensuring full compliance with the SWPPP and the Permit
- Implementing all elements of the SWPPP, including but not limited to:
  - Implementation of prompt and effective erosion and sediment control measures
  - Implementing all non-storm water management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than storm water are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems; etc.
- Pre-storm inspections
- Post-storm inspections
- Storm event inspections
- Preparing annual compliance certification
- Ensuring elimination of all unauthorized discharges
- The Contractor's SWPPM shall be assigned authority by the Contractor to mobilize crews in order to make immediate repairs to the control measures
- Coordinate with Boeing to assure all of the necessary corrections/repairs are made immediately, and that the project complies with the SWPPP, the Permit and approved plans at all times.
- Submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges

## **Section 400**

### **References**

The following documents are made a part of this SWPPP by reference:

- State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System General Permit (NPDES) No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity, August 1999 (Statewide Construction Permit).
- State Water Resources Control Board (SWRCB) Resolution No. 2001-046, Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction Activity (General Permit), adopted by the SWRCB on April 26, 2001.
- Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction Activity (General Permit) to Include Small Construction Activity (One to Five Acres), adopted by the SWRCB on December 2, 2002.
- California Stormwater Quality Association Stormwater Best Management Practices Handbook, January, 2003 (CASQA BMPs Manual).

## **Section 500**

### **Body of SWPPP**

#### **500.1 Objectives**

This SWPPP has four main objectives:

- Identify all pollutant sources, including sources of sediment, that may affect the quality of storm water discharges associated with demolition activity (storm water discharges) from the construction site, and
- Identify non-storm water discharges.
- Identify, construct, implement in accordance with a time schedule, and maintain BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during demolition, and
- Develop a maintenance schedule for BMPs installed during demolition that are designed to reduce or eliminate pollutants after demolition is completed (post-demolition BMPs).

This SWPPP conforms with the required elements of the Statewide Construction Permit and the Modifications to the Statewide Construction Permit. The Contractor shall amend the SWPPP whenever there is a change in construction or operations which may affect the discharge of pollutants from the construction site to surface waters, groundwaters, or a MS4. The SWPPP shall also be amended if the Contractor violates any condition of the NPDES permits referenced in Section 400, or has not achieved the general objective of reducing or eliminating pollutants in storm water discharges.

The SWPPP shall be readily available on site for the duration of the project.

#### **500.2 Vicinity Map**

Figures 2, 3, and 4 show the vicinity around ISRA areas and stockpile staging areas, which includes the following features:

- Approximate excavation areas
- General topography and geographic features
- Major roadways
- Adjacent surface water bodies – (Arroyo Simi drainages).

#### **500.3 Pollutant Source Identification and BMP Selection**

##### **500.3.1 Inventory of Materials and Activities That May Pollute Storm Water**

This section lists activities that will be performed that will have the potential to contribute pollutants, including sediment, to storm water runoff.

Materials that have the potential to contribute pollutants other than sediment to storm water runoff include:

- Vehicle fluids, including oil, grease, petroleum, battery acid, and coolants
- Metals: cadmium, copper, lead, and mercury
- Dioxins

Activities that have the potential to contribute sediment to storm water runoff include:

- Excavation activities

Activity and material storage locations and BMP implementation strategies to control the discharge of these potential pollutants into storm water are identified on Figure 5, 6, and 7. Narrative descriptions of BMPs to be used during the project are listed by category in Sections 500.3.4 through 500.3.9. BMP fact sheets are located in Appendix F.

### **500.3.2 Existing (Pre-Demolition) Control Measures**

The following are existing (pre-demolition) control measures located within the project site:

- Impervious surfaces (concrete or asphalt)
- Minor vegetation

### **500.3.3 Nature of Fill Material and Existing Data Describing the Soil**

Imported fill material is not expected to be used on this project. Existing soils consist of fine-grained silty sands, most likely weathered products of the Chatsworth Formation interbedded sandstone, siltstone, and shale bedrock.

### **500.3.4 Soil Stabilization (Erosion Control)**

Soil stabilization, also referred to as erosion control, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in storm water runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding soil particles. This project will incorporate minimum temporary soil stabilization requirements, temporary soil stabilization measures required by the contract documents, and other measures selected by the contractor. This project will implement the following practices for effective temporary and final soil stabilization during demolition:

- 1) Preserve existing vegetation where required and when feasible.
- 2) Apply temporary soil stabilization (erosion control) to remaining active and non-active areas as required by the Construction Site BMPs Manual and the Special Provisions. Reapply as necessary to maintain effectiveness.
- 3) Implement temporary soil stabilization measures at regular intervals throughout the defined rainy season to achieve and maintain the contract's disturbed soil area requirements. When the project's Special Provisions require it, temporary soil stabilization will be implemented 20 days prior to the defined rainy season.
- 4) Stabilize non-active areas within 14 days of cessation of activities.
- 5) Control erosion in concentrated flow paths by applying erosion control blankets, check dams, erosion control seeding, and lining swales as required in the special provisions.
- 6) Apply seed to areas deemed substantially complete by the Engineer during the defined rainy season.

- 7) At completion of the project, apply permanent erosion control to all remaining disturbed soil areas as required in the special provisions.

Sufficient soil stabilization materials for temporary and permanent erosion control measures listed above will be maintained on-site to allow implementation in conformance with Boeing requirements and described in this SWPPP.

Implementation and locations of temporary soil stabilization BMPs are described in this section that will be implemented to control erosion on the construction site (work areas shown on Figures 5 and 7); these are:

<b>EROSION CONTROL BMP SUMMARY:</b>	
✓	EC-1 Scheduling
✓	EC-2 Preservation of Existing Vegetation

■ EC-1 Scheduling

The Contractor shall reduce the discharge of pollutants to storm drain facilities or watercourses caused by demolition activities by scheduling said activities in a manner that will limit exposure of disturbed soil to wind, rain, and storm water run-on and runoff.

■ EC-2 Preservation of Existing Vegetation

The Contractor shall protect and preserve existing vegetation in work areas as long as practicable before disturbing them. The Contractor shall also preserve and protect existing vegetation adjacent to work areas. The protection and preservation of such vegetation will serve to control erosion and filter out sediment.

### **500.3.5 Sediment Control**

Sediment controls are structural measures that are intended to complement and enhance the selected soil stabilization (erosion control) measures and reduce sediment discharges from construction site areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate minimum temporary sediment control requirements, temporary sediment control measures required by the contract documents, and other measures selected by the contractor.

Temporary sediment control materials will be maintained on-site throughout the duration of the project, to allow implementation of temporary sediment controls in the event of predicted rain, and for rapid response to failures or emergencies, in conformance with other Boeing requirements and as described in this SWPPP. This includes implementation requirements for active areas and non-active areas before the onset of rain.

Implementation and locations of temporary sediment control BMPs are shown on Figure 5, 6, and 7 and/or described in this section that will be implemented to control sediment on the construction site; these are:

<b>SEDIMENT CONTROL BMP SUMMARY:</b>	
✓	SE-1 Silt Fence
✓	SE-6 Gravel Bag Berm
✓	SE-7 Street Sweeping and Vacuuming
✓	SE-9 Straw Bale Barrier



■ SE-1 Silt Fence

The installation of silt fence as linear barriers will serve as sediment control for exposed soil areas. Silt fence will be installed along the perimeter for perimeter protection and to prevent silt from discharging off the field areas of excavation and around the downslope side of stockpiles, if any.

■ SE-6 Gravel Bag Berm

The installation of gravel bag berms as linear barriers will serve as sediment control and for redirecting run-on storm water flow from the area where wastes are stockpiled, if any.

■ SE-7 Street Sweeping and Vacuuming

Street sweeping will be conducted, when necessary, to minimize the amount of sediment tracking leaving each area.

■ SE-9 Straw Bale Barrier

During the rainy season, straw bales will be placed immediately upstream and downstream of the excavated areas in the streams to filter sediments flowing onto the project area in the ephemeral stream.

### 500.3.6 Tracking Control

The following BMPs have been selected to reduce sediment tracking from the construction site onto private or public roads:

<b>TRACKING CONTROL BMP SUMMARY:</b> ✓ TC-1 Stabilized Construction Entrance/Exit
--

■ TC-1-Stabilized Construction Entrance/Exit

Stabilized construction entrances/exits will be constructed at various locations throughout the project, as necessary.

### 500.3.7 Wind Erosion Control

The following BMPs have been selected to control dust from the construction site:

<b>WIND EROSION CONTROL BMP SUMMARY:</b> ✓ WE-1 Wind Erosion Control
---

■ WE-1 Dust Control

This BMP will be implemented as necessary to alleviate dust nuisance. Covering small soil stockpiles or areas is an alternative to applying water to these areas.

### 500.3.8 Non-Storm Water Management

An inventory of demolition activities and materials with the potential to pollute non-storm water discharges is provided in Section 500.3.1. The following list identify the BMPs that will be implemented to control non-storm water pollution on the construction site. The implementation of these BMPs will be year-round. Locations of some non-storm water control BMPs are shown on Figures 5 and 7. A narrative description of each BMP follows.

<b>NON-STORM WATER MANAGEMENT BMP SUMMARY:</b>	
✓	NS-1 Water Conservation Practices
✓	NS-8 Vehicle and Equipment Cleaning
✓	NS-9 Vehicle and Equipment Fueling
✓	NS-10 Vehicle and Equipment Maintenance

■ **NS-1 Water Conservation Practices**

The Contractor shall use water in a manner which will not cause erosion or transport pollutants off site.

■ **NS-8 Vehicle and Equipment Cleaning**

Vehicles and equipment cleaning operations will not occur on the project site. All vehicles/equipments that regularly enter and leave the construction site will be cleaned offsite.

■ **NS-9 Vehicle and Equipment Fueling and NS-10 Vehicle and Equipment Maintenance**

Several types of vehicles and equipment will be used on site throughout the project. The practices described below will be implemented to prevent discharges of fuel and other vehicle fluids to storm water discharges.

- Vehicles and equipment will be stored and serviced on an impervious surface at the on-site Contractor's equipment storage area in an area protected from storm water run-on. Spill kits will be stored near this area for immediate use.
- Oversized equipment and vehicles that are impractical to return to the vehicle storage and service area will be stored and serviced in the area that the equipment is being used.
- Mobile fueling and maintenance operations will not occur during storm events. Mobile fueling rigs will be equipped with drip pans, plastic sheeting and/or absorbent materials to be implemented by fueling personnel as appropriate.
- All spills and trash generated by the fueling or maintenance operation will be picked up before fueling personnel leave the area. Collected waste shall be disposed of properly.

### 500.3.9 Waste Management and Materials Pollution Control

An inventory of construction activities, materials, and wastes is provided in Section 500.3.1. The following list indicate the BMPs that will be implemented to handle materials and control construction site wastes. A narrative description of each BMP follows.

<b>WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMP SUMMARY:</b>	
✓	WM-3 Stockpile Management
✓	WM-4 Spill Prevention and Control
✓	WM-5 Solid Waste Management
✓	WM-6 Hazardous Waste Management
✓	WM-9 Sanitary/Septic Waste Management

■ WM-3 Stockpile Management

Stockpiles will be placed in available areas of the project site for a short duration and disposed of properly. Stockpiles will be protected from sediment and pollution discharges as follows:

- Stockpiles will be located away from concentrated flows of storm water, drainage courses, and drain inlets.
- Stockpiles require proper wind erosion control. See WE-1-Wind Erosion Control for specifics of this BMP.
- Year-round, all stockpiles shall be covered or protected with perimeter sediment control prior to the onset of precipitation.

■ WM-4 Spill Prevention and Control

The Contractor will implement spill prevention and control practices as follows:

- Spills will be contained to minimize spreading. Spilled materials will be recovered. The contaminated area will be cleaned and contaminated materials will be disposed of properly.
- Absorbent materials will be used to clean up spills. Spills will never be washed with water or buried.
- Water overflow or minor water spillage shall be contained and not be allowed to discharge into drainage facilities.
- Material and waste storage areas shall be kept clean, well organized, and stocked with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners shall be repaired or replaced as needed to maintain proper function.
- Used cleanup materials, contaminated materials, and recovered spill materials shall be disposed of properly in conformance with applicable requirements.
- Spills of oil, petroleum products, substances listed under 40 CFR parts 11, 117, and 302, and sanitary and septic wastes shall be contained and cleaned up immediately.

■ WM-5 Solid Waste Management

The following practices will be implemented to minimize storm water contact with waste materials and prevent waste discharges:

- Littering by Contractor employees shall be prohibited.
- Drainage systems shall be free of solid wastes and remain functional during periods of rain.
- Dumpster(s) with appropriate storage capacity shall be provided to contain the solid wastes generated by the project.
- When practicable, solid wastes will be loaded directly into trucks for off-site disposal. When on-site storage is necessary, solid wastes will be stored in watertight dumpsters in the general storage area of the Contractor's yard. Dumpsters are to be located away from drainage systems or watercourses.

- Storm water run-on shall be prevented from contacting stored solid wastes by using berms, dikes, or other temporary diversion structures.
- Full dumpsters shall be removed from the project site and the contents shall be disposed of.
- Toxic wastes are not to be disposed of in dumpsters designated for general construction debris.
- Solid waste will be removed and disposed of offsite.

■ **WM-6 Hazardous Waste Management**

The following practices will be implemented to minimize storm water contact with hazardous wastes.

- Employees and subcontractors will be properly educated on hazardous waste storage and disposal procedures.
- Hazardous wastes shall be stored, transported, and disposed of as required in Title 22 CCR, Division 4.5 and 49 CFR Parts 172, 173, 178, and 179.
- Hazardous waste containers shall be stored in secondary containment facilities that shall conform with the following requirements:
  - Chemically incompatible materials shall not be stored in the same secondary containment facility.
  - Throughout the rainy season, secondary containment facilities shall be covered during non-working days. Year-round these materials shall be covered prior to rain events.
  - Secondary containment facilities shall be maintained free of accumulated rainwater and spills.
- Drums shall not be overfilled and wastes shall not be mixed.
- Adequate hazardous waste storage volume shall be available.
- Hazardous waste storage areas shall be located away from storm drains and watercourses and away from moving vehicles and equipment.
- Hazardous waste containers shall be labeled with the waste contained within and the date generated.
- Wastes shall be disposed of outside the highway right-of-way within 90 days of being generated or as directed by the Engineer. In no case shall hazardous waste storage exceed requirements in Title 22 CCR, Section 66262.34.
- Toxic liquid wastes (used oils, solvents, paints, etc.) and chemicals (acids, pesticides, additives, etc.) shall not be disposed of in dumpsters designated for solid waste construction debris.
- Accumulated rainwater that has mixed with hazardous wastes shall be disposed of properly.

■ **WM-9 Sanitary/Septic Waste Management**

This BMP is applicable to temporary and portable sanitary/septic systems on construction sites and associated areas. The Contractor shall minimize or eliminate the discharge of construction sanitary/septic wastes by implementing the following practices and procedures.

- Employees and subcontractors shall be educated on the sanitary/septic waste storage and disposal procedures outlined in this section.

- No direct connections to the sanitary sewer system will be employed nor will an on-site septic system be constructed.
- Temporary sanitary facilities shall be located away from drainage facilities, watercourses, and moving equipment and public traffic.
- When sanitary facilities are subjected to high winds, the facilities will be secured to prevent overturning.
- Wastewater shall not be buried within the project site.

## **500.4 Water Pollution Control Drawing (WPCD)**

The WPCD is provided as Figures 5 and 7 showing discharge locations and BMP locations.

## **500.5 Construction BMP Maintenance, Inspection and Repair**

Inspections will be conducted as follows:

- Prior to a forecast storm
- After a rain event that causes runoff from the construction site
- At 24-hour intervals during extended rain events
- Weekly during the rainy season
- Every 2 weeks during the non-rainy season
- At any other time(s) or intervals of time specified in the project Special Provisions.

Completed inspection checklists will be submitted to Boeing within 24 hours of inspection. Copies of the completed checklists will be kept with the SWPPP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs. A program for Maintenance, Inspection and Repair of BMPs is shown in Appendix G. The inspection form can be found in Appendix K.

## **500.6 Post-Construction Storm Water Management**

### **500.6.1 Post-Construction Control Practices**

Post-construction control practices are not required since the construction area will be returned back to pre-construction conditions following permanent erosion control measures.

## **500.7 Training**

Section 300.5 shows the name of the Contractor's Storm Water Pollution Prevention Manager (SWPPM). This person has received the following training.

- Storm water pollution prevention training module (Boeing 9CCMICON).

The training log showing formal and informal training of various personnel is shown in Appendix H.

This SWPPP was prepared by MWH under the direction of Michael Flaughter. The storm water training that Mr. Flaughter has completed is as follows:

- How to Select, Install, and Inspect Construction Site Erosion and Sediment Control BMPs for NPDES Storm Water Permit Compliance (2001) 8 hours
- Water Pollution Control on Construction Sites for Resident Engineers (2002) 8 hours
- Inspection for Construction Site BMPs (as Facilitator, 2001, 2006, 2007) 4 hour courses
- Sampling and Analysis Plan Review for SWPPPs (as Facilitator, 2001) 2 hour course
- Management of Construction Site Dewatering Activities (as Facilitator, 2002-2003) 8 hour courses
- Storm Water Pollution Prevention, Industrial (Facilitator, 2006, 2007) 2 hour courses

## **500.8 List of Subcontractors**

All contractors and subcontractors will be notified of the requirement for storm water management measures during the project. A list of subcontractors will be maintained and included in the SWPPP. If subcontractors change during the project, the list will be updated accordingly. A sample subcontractor notification letter and notification log is included in the SWPPP as Appendix I.

## **500.9 Permits/Other Plans**

Appendix J includes copies of other local, state, and federal plans and permits.

Following is a list of the plans and permits included in Appendix J:

- Current version of the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity, August 1999. Including Resolution No. 2001-046, “Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Permit)”, adopted by the SWRCB on April 26, 2001.

# Section 600

## Monitoring and Reporting Program

### 600.1 Site Inspections

The contractor will inspect the site prior to a forecast storm, after a rain event that causes runoff from the construction site, at 24-hour intervals during extended rain events, and as specified in the contract documents. The results of all inspections and assessments will be documented, a copy shall be provided to Boeing within 24 hours of the inspection, and copies of the completed inspection checklists will be maintained with the SWPPP. Site inspections conducted for monitoring purposes will be performed using the inspection checklist shown in Appendix L.

The name(s) and contact number(s) of the assigned inspection personnel are listed below:

Assigned inspector: \_\_\_\_\_ Contact phone number: \_\_\_\_\_

Assigned inspector: \_\_\_\_\_ Contact phone number: \_\_\_\_\_

### 600.2 Discharge Reporting

If a discharge occurs or if the project receives a written notice or order from any regulatory agency, the contractor will immediately notify Boeing, and will file a written report to the Boeing within 7 days of the discharge event, notice, or order. Corrective measures will be implemented immediately following the completion of the Notice of Discharge, Written Notice or Order Form (Appendix L). All discharges shall be documented on a Discharge Reporting Log, provided in Appendix M.

Discharges requiring reporting include:

- Storm water from a DSA discharged to a waterway without treatment by a temporary construction BMP;
- Non-storm water, except conditionally exempted discharges, discharged to a waterway or a storm drain system, without treatment by an approved control measure (BMP);
- Storm water discharged to a waterway or a storm drain system where the control measures (BMPs) have been overwhelmed or not properly maintained or installed;
- Storm water runoff containing hazardous substances from spills discharged to a waterway or storm drain system;
- Other discharge reporting as directed by Boeing.

The report to Boeing will contain the following items:

- The date, time, location, nature of operation, and type of unauthorized discharge, including the cause or nature of the notice or order,
- The control measures (BMPs) deployed before the discharge event, or prior to receiving notice or order,

- The date of deployment and type of control measures (BMPs) deployed after the discharge event, or after receiving the notice or order, including additional measures installed or planned to reduce or prevent re-occurrence, and
- An implementation and maintenance schedule for any affected BMPs

### **600.3 Record Keeping and Reports**

Records shall be retained for a minimum of three years for the following items:

- Site inspections
- Compliance certifications
- Discharge reports
- Approved SWPPP document and amendments

### **600.4 Sampling and Analysis Plan for Sediment**

This project does not have the potential to discharge directly to a water body listed as impaired due to Sedimentation/Siltation and/or Turbidity pursuant to Clean Water Act, Section 303(d). Sediment sampling is not required for this project.

### **600.5 Sampling and Analysis Plan for Non-Visible Pollutants**

This Sampling and Analysis Plan (SAP) for Non-Visible Pollutants describes the sampling and analysis strategy and schedule for monitoring non-visible pollutants in storm water discharges from the project site and offsite activities directly related to the project in accordance with the requirements of Section B of the General Permit, including SWRCB Resolution 2001-046.

#### **600.5.1 Scope of Monitoring Activities**

The following construction materials, wastes or activities, as identified in Section 500.3.1, are potential sources of non-visible pollutants to storm water discharges from the project. Storage, use, and operational locations are shown on the WPCD on Figures 5, 6, and and 7.

- Battery acid
- The ISRA Outfall 008 and 009 Areas have soils with detected concentrations of metals (cadmium, copper, lead, and mercury) and dioxins.

Section 500.3.4 through 500.3.9 discuss BMPs for visible pollutants (sediment and petroleum products).

Use of soil amendments/stabilizers that have the potential to alter pH or have unacceptable concentrations of non-visible pollutants will be minimized on the project. However, if such products must be used because no other soil amendments/stabilizers products are available, Boeing will be notified as to the application locations and the product will be assessed as to the potential to contribute to non-visible pollutants to storm water discharges.



Sampling for non-visible pollutants will be conducted when (1) a breach, leakage, malfunction, or spill is observed; and (2) the leak or spill has not been cleaned up prior to the rain event; and (3) there is the potential for discharge of non-visible pollutants to surface waters or drainage system.

## **600.5.2 Monitoring Strategy**

### **Sampling Schedule**

Samples for the applicable non-visible pollutant(s) and a sufficiently large uncontaminated background sample shall be collected during the first two hours of discharge from rain events that result in a sufficient discharge for sample collection. Samples shall be collected during daylight hours (sunrise to sunset) and shall be collected regardless of the time of year, status of the construction site, or day of the week.

In conformance with the U.S. Environmental Protection Agency definition, a minimum of 72 hours of dry weather will be used to distinguish between separate rain events.

Collection of discharge samples for non-visible pollutant monitoring will be triggered when any of the following conditions are observed during the required inspections conducted before or during rain events:

- Materials or wastes containing potential non-visible pollutants are not stored under watertight conditions. Watertight conditions are defined as (1) storage in a watertight container, (2) storage under a watertight roof or within a building, or (3) protected by temporary cover and containment that prevents storm water contact and runoff from the storage area.
- Materials or wastes containing potential non-visible pollutants are stored under watertight conditions, but (1) a breach, malfunction, leakage, or spill is observed, (2) the leak or spill is not cleaned up prior to the rain event, and (3) there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.
- An operational activity, including but not limited to those in Section 600.5.1, with the potential to contribute non-visible pollutants (1) was occurring during or within 24 hours prior to the rain event, (2) applicable BMPs were observed to be breached, malfunctioning, or improperly implemented, and (3) there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.
- Soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied, and there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.
- Storm water runoff from an area contaminated by historical usage of the site has been observed to combine with storm water runoff from the site, and there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.

### **Sampling Locations**

Sampling locations are based on proximity to planned non-visible pollutant storage, occurrence or use; accessibility for sampling, personnel safety; and other factors. No known sampling locations have been located. However, if a storm water inspection before or during a rain event identifies the presence of a material storage, waste storage, or operations area with spills or the potential for the discharge of non-visible

pollutants to surface waters or the drainage system that was an unplanned location, and has not been identified on the WPCDs, sampling locations will be selected at that time.

Due to the scope of work of this project, it is not feasible to predetermine the exact sample locations. Sample locations will be determined at time of sampling activities.

If an operational activity or storm water inspection conducted 24 hours prior to or during a rain event identifies the presence of a material storage, waste storage, or operations area with spills or the potential for the discharge of non-visible pollutants to surface waters or a storm sewer system that was an unplanned location and has not been identified on the WPCDs, sampling locations will be selected using the same rationale as that used to identify planned locations.

### **600.5.3 Monitoring Preparation**

Samples on the project site will be collected by the contractor sampling personnel to be determined.

Prior to the rainy season, all sampling personnel and alternates will review the SAP (Sections 600.4 and 600.5). Qualifications of designated contractor personnel describing environmental sampling training and experience are provided in Appendix H.

An adequate stock of monitoring supplies and equipment for monitoring non-visible pollutants will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool-temperature environment that will not come into contact with rain or direct sunlight. Sampling personnel will be available to collect samples in accordance with the sampling schedule. Supplies maintained at the project site will include, but are not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, Sampling Activity Log forms, and Chain of Custody (COC) forms.

### **600.5.4 Analytical Constituents**

#### **Identification of Non-Visible Pollutants**

The following table lists the specific sources and types of potential non-visible pollutants on the project site and the applicable water quality indicator constituent(s) for that pollutant.

<b>Pollutant Source</b>	<b>Pollutant</b>	<b>Water Quality Indicator Constituent</b>
COPCs - Metals	Cadmium, Copper, Lead, and Mercury	Cadmium, Copper, Lead, and Mercury
COPCs - Dioxins	Dioxins	Dioxins
Lead/Acid Batteries	Sulfuric acid, lead, and pH	pH

**Note:** Vehicle fluids, oil, grease, coolant, paint, PCC, and plating products are considered visible pollutants and therefore are not monitored.

### **600.5.5 Sample Collection and Handling**

#### **Sample Collection Procedures**

Samples of discharge will be collected at locations where observed breaches, malfunctions, leakages, spills, operational areas, soil amendment application areas, and historical site usage areas have that triggered the sampling event.

Grab samples will be collected and preserved in accordance with the methods identified in Table 600-3, “Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants” table provided in Section 600.5.6. Only personnel trained in proper water quality sampling will collect samples.

Samples will be collected by placing a separate lab-provided sample container directly into a stream of water downgradient and within close proximity to the potential non-visible pollutant discharge location. This separate lab-provided sample container will be used to collect water, which will be transferred to sample bottles for laboratory analysis. The upgradient and uncontaminated background samples shall be collected first prior to collecting the downgradient to minimize cross-contamination. The sampling personnel will collect the water upgradient of where they are standing. Once the separate lab-provided sample container is filled, the water sample will be poured directly into sample bottles provided by the laboratory for the analyte(s) being monitored.

To maintain sample integrity and prevent cross-contamination, sampling collection personnel will:

- Wear a clean pair of surgical gloves prior to the collection and handling of each sample at each location.
- Not contaminate the inside of the sample bottle by not allowing it to come into contact with any material other than the water sample.
- Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection.
- Not leave the cooler lid open for an extended period of time once samples are placed inside.
- Not sample near a running vehicle where exhaust fumes may impact the sample.
- Not touch the exposed end of a sampling tube, if applicable.
- Avoid allowing rainwater to drip from rain gear or other surfaces into sample bottles.
- Not eat, smoke, or drink during sample collection.
- Not sneeze or cough in the direction of an open sample bottle.
- Minimize the exposure of the samples to direct sunlight, as sunlight may cause biochemical transformation of the sample to take place.
- Decontaminate sampling equipment prior to sample collection using a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water.
- Dispose of decontamination water/soaps appropriately; i.e., not discharge to the storm drain system or receiving water.

### **Sample Handling Procedures**

Immediately following collection, sample bottles for laboratory analytical testing will be capped, labeled, documented on a Chain of Custody form provided by the analytical laboratory, sealed in a re-sealable storage bag, placed in an ice-chilled cooler, at as near to 4 degrees Celsius as practicable, and delivered within 24 hours to the a California state-certified laboratory.

Laboratory Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Point of Contact: \_\_\_\_\_

### **Sample Documentation Procedures**

All original data documented on sample bottle identification labels, Chain of Custody forms, Sampling Activity Logs, and Inspection Checklists will be recorded using waterproof ink. These will be considered accountable documents. If an error is made on an accountable document, the individual will make corrections by lining through the error and entering the correct information. The erroneous information will not be obliterated. All corrections will be initialed and dated. Copies of the Sampling Activity Log are provided in Appendix N.

Sampling and field analysis activities will be documented using the following:

- **Sample Bottle Identification Labels:** Sampling personnel will attach an identification label to each sample bottle. At a minimum, the following information will be recorded on the label, as appropriate:
  - Project name
  - Project number
  - Unique sample identification number and location.Quality assurance/quality control (QA/QC) samples shall be identified similarly using a unique sample number or designation  
Unique Duplicate RFI sample ID number and location
  - Collection date/time (No time applied to QA/QC samples)
  - Analysis constituent
  
- **Sampling Activity Logs:** A log of sampling events will identify:
  - Sampling date
  - Separate times for collected samples and QA/QC samples recorded to the nearest minute
  - Unique sample identification number and location
  - Analysis constituent
  - Names of sampling personnel
  - Weather conditions (including precipitation amount)
  - Field analysis results
  - Other pertinent data
  
- **Chain of Custody (COC) forms:** All samples to be analyzed by a laboratory will be accompanied by a COC form provided by the laboratory. Only the sample collectors will sign the COC form over to the lab. COC procedures will be strictly adhered to for QA/QC purposes.
  
- **Storm Water Quality Construction Inspection Checklists:** When applicable, the contractor's storm water inspector will document on the checklist that samples for non-visible pollutants were taken during a rain event.

### **600.5.6 Sample Analysis**

Samples will be analyzed for the applicable constituents using the analytical methods identified in Table 600-3, “Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants” table in this section.

Constituent	Analytical Method	Minimum Sample Volume	Sample Bottle	Sample Preservation	Reporting Limit	Maximum Holding Time
TOTAL Arsenic TOTAL Cadmium TOTAL Copper TOTAL Lead TOTAL Zinc	EPA 6010B	1 x 250 mL	Polypropylene	HNO <sub>3</sub>	0.01 mg/L 0.005 mg/L 0.005 mg/L 0.01 mg/L 0.01 mg/L	180 days
TOTAL Mercury	EPA 7470A				0.000017917 mg/L	28 days
Dioxins	EPA 8280	1 x 1L	Amber	Unpreserved	Less than or equal to 250 pg/L	30 days
pH	EPA 150.1	1 x 100 mL	Polypropylene	Store at 4° C	unitless	Immediate
<b>Notes:</b>						
°C	-	Degrees Celsius				
EPA	-	U.S. Environmental Protection Agency	L	-	Liter	
HNO <sub>3</sub>	-	Nitric Acid	pg/L	-	Picograms per Liter	
mL	-	Milliliter				

### **600.5.7 Quality Assurance/Quality Control**

For an initial verification of laboratory or field analysis, duplicate samples will be collected at a rate of 10 percent or 1 duplicate per sampling event. The duplicate sample will be collected, handled, and analyzed using the same protocols as primary samples. A duplicate sample will be collected at each location immediately after the primary sample has been collected. Duplicates will be collected where contamination is likely, not on the background sample. Duplicate samples will not influence any evaluations or conclusions; however, they will be used as a check on laboratory quality assurance.

### **600.5.8 Data Management and Reporting**

A copy of all water quality analytical results and QA/QC data will be submitted to Boeing within 5 days of sampling (for field analyses) and within 30 days (for laboratory analyses).

Lab reports and COCs will be reviewed for consistency between lab methods, sample identifications, dates, and times for both primary samples and QA/QC samples. All data, including COC forms, Sampling Activity Logs, and Sampling Data Reporting Forms shall be kept with the SWPPP in Appendix O.

### **600.5.9 Data Evaluation**

An evaluation of the water quality sample analytical results, including figures with sample locations, will be submitted to the Resident Engineer with the water quality analytical results and the QA/QC data.

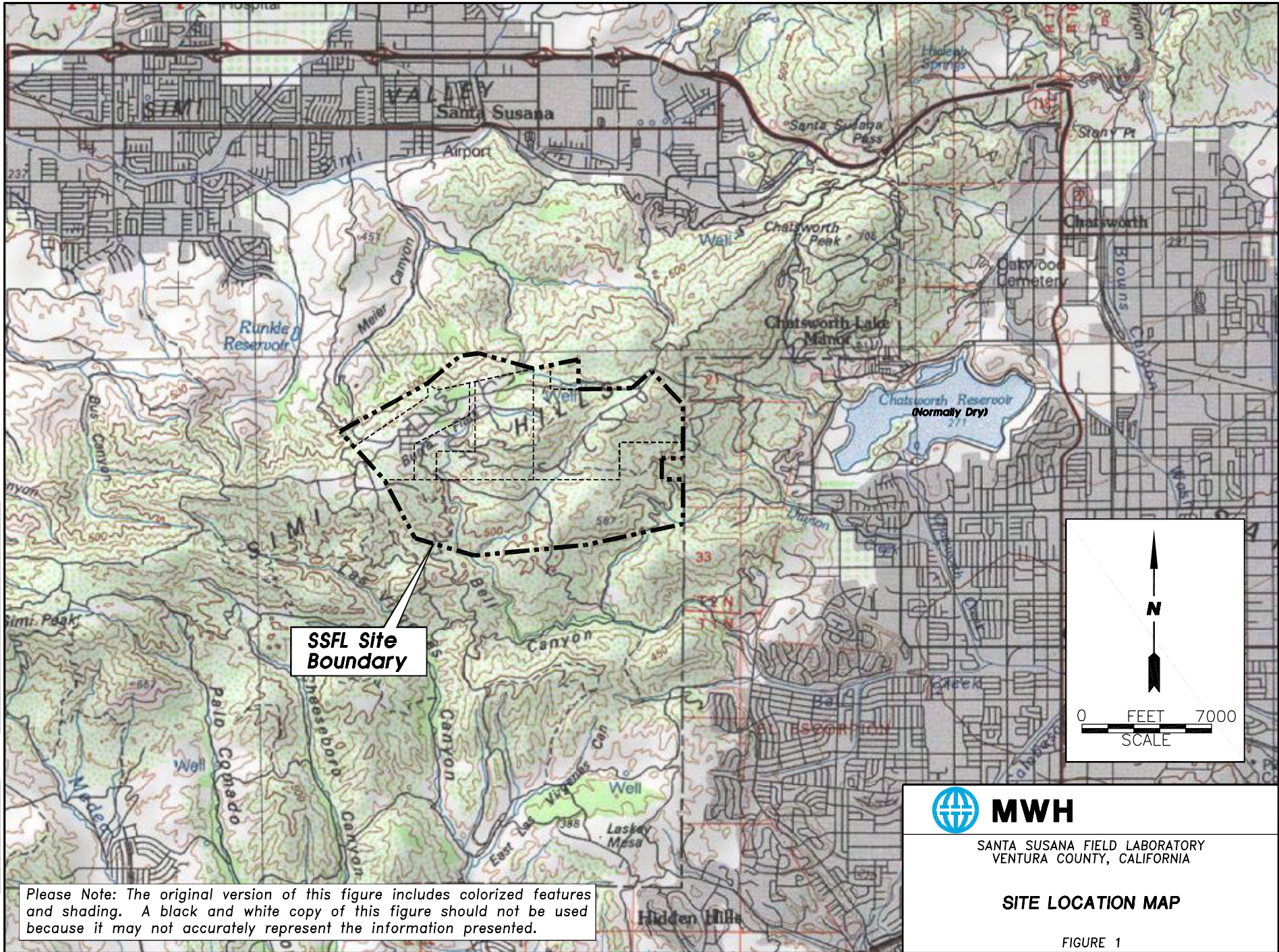
Should the runoff/downgradient sample show an increased level of the tested analyte relative to the background sample, the BMPs, site conditions, and surrounding influences will be assessed to determine the probable cause for the increase. As determined by the site and data evaluation, appropriate BMPs will be repaired or modified to mitigate discharges of non-visual pollutant concentrations. Any revisions to the BMPs will be recorded as an amendment to the SWPPP.

### **600.5.10 Change of Conditions**

Whenever SWPPP monitoring, pursuant to Section B of the General Permit, indicates a change in site conditions that might affect the appropriateness of sampling locations or introduce additional non-visible pollutants of concern, testing protocols will be revised accordingly. All such revisions will be recorded as amendments to the SWPPP.

## FIGURES





Please Note: The original version of this figure includes colorized features and shading. A black and white copy of this figure should not be used because it may not accurately represent the information presented.



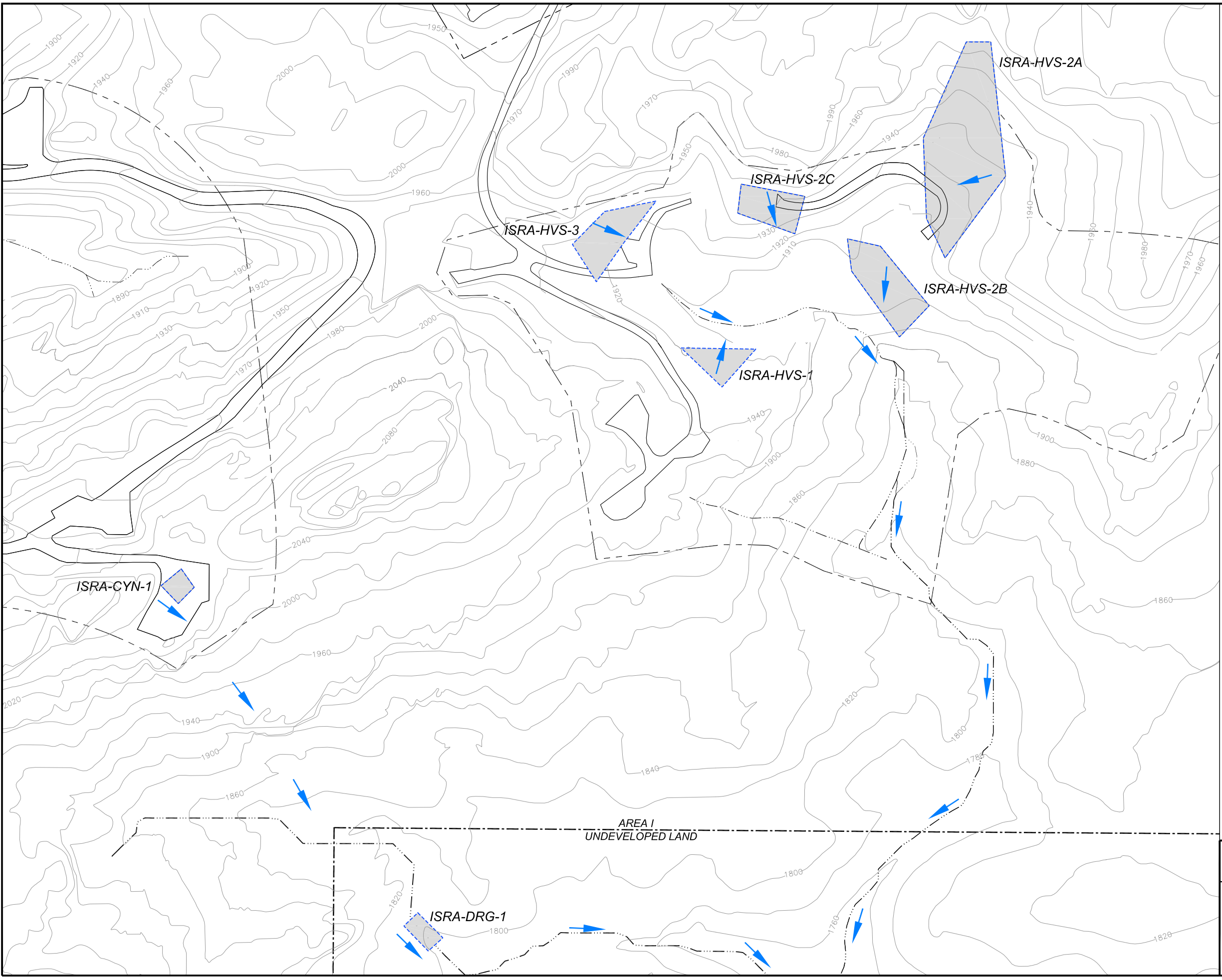
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**SITE LOCATION MAP**

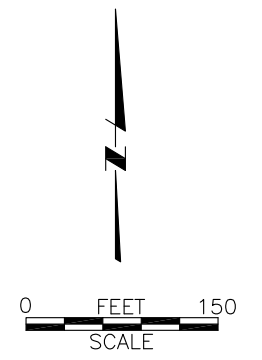
FIGURE 1




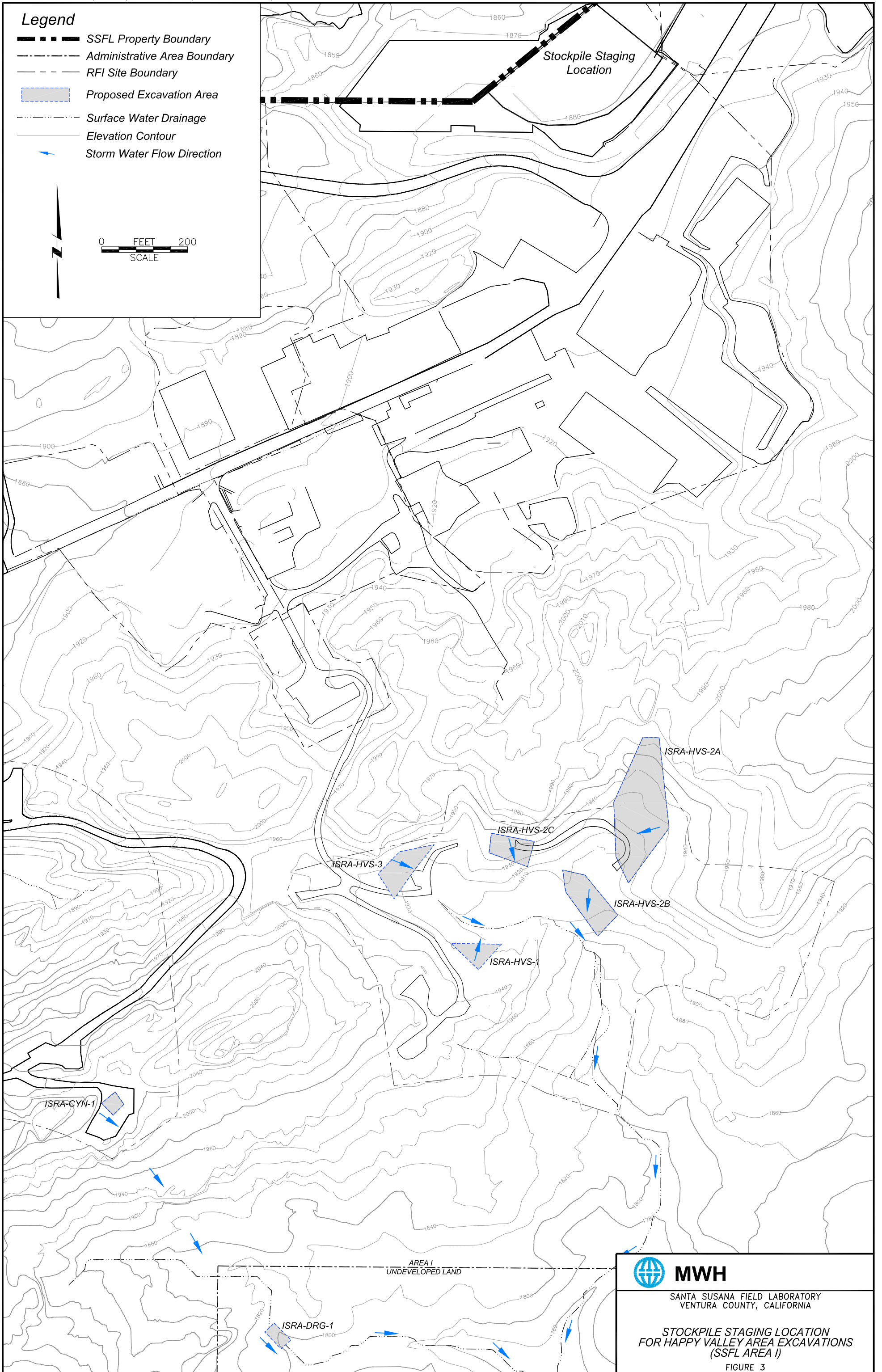
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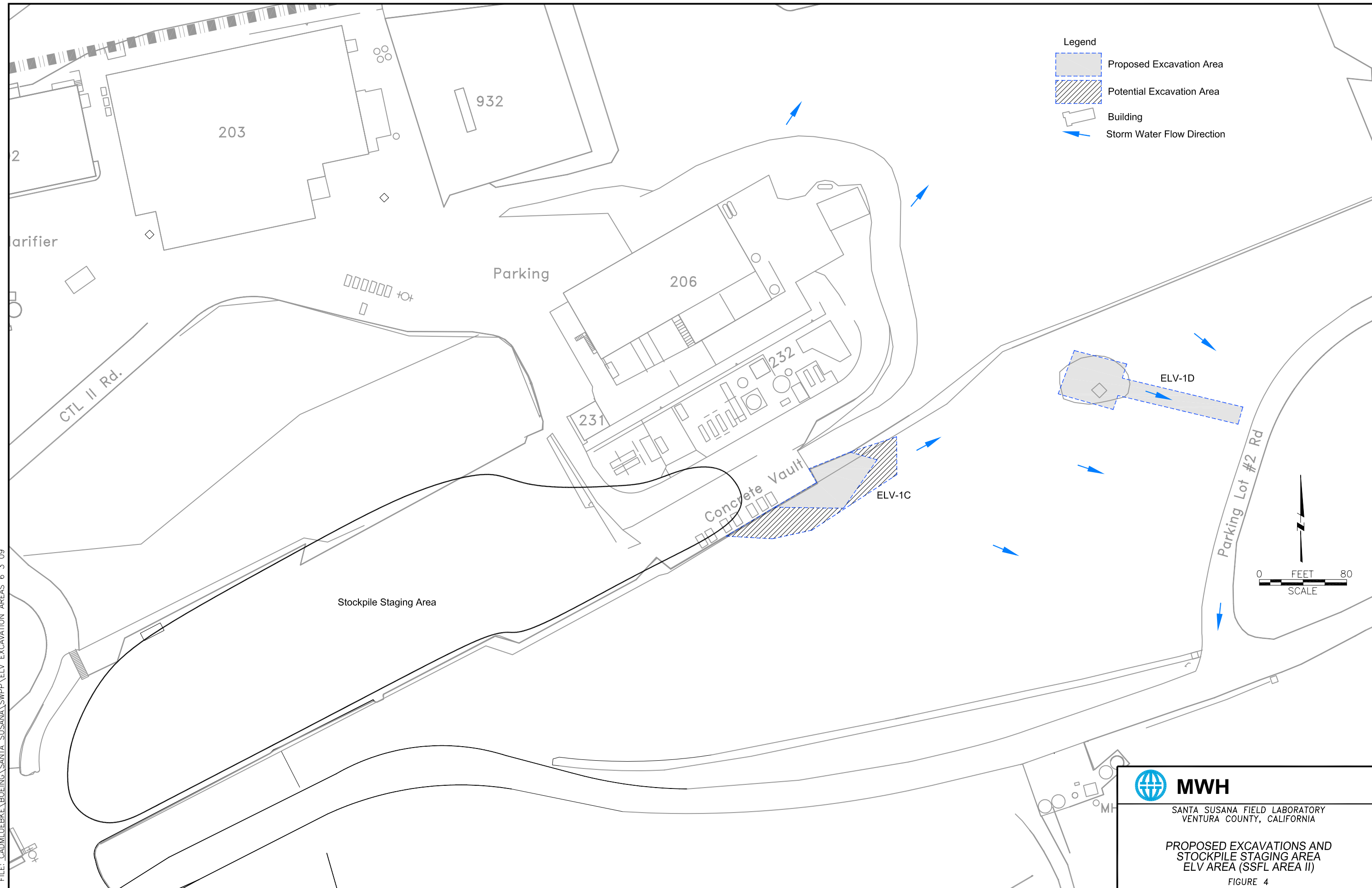
- Legend**
- Administrative Area Boundary
  - RFI Site Boundary
  - Proposed Excavation Area
  - Surface Water Drainage
  - Elevation Contour
  - Storm Water Flow Direction



 **MWH**  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA  
**PROPOSED EXCAVATIONS  
 HAPPY VALLEY AREA  
 (SSFL AREA I)**  
 FIGURE 2



FILE: CAD\MILLER\BOEING\SANTA\_SUSANA\_SWPP\ELV\_EXCAVATION AREAS 6 3 09



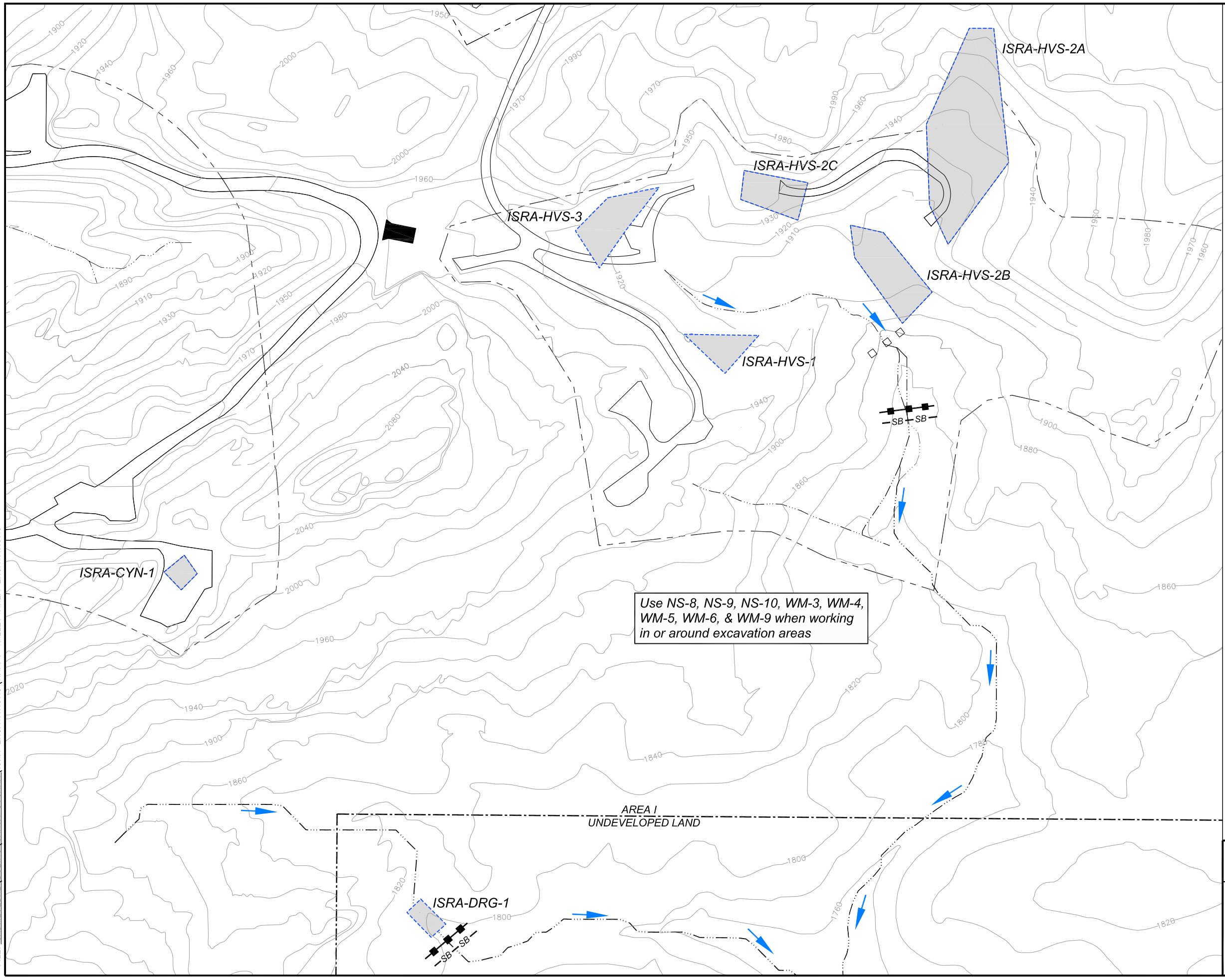
**MWH**  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

PROPOSED EXCAVATIONS AND  
 STOCKPILE STAGING AREA  
 ELV AREA (SSFL AREA II)

FIGURE 4



FILE: CAD\MUEBKE\BOEING\ SANTA SUSANA\ISRA EXCAVATIONS\HAPPY VALLEY AREA EXCAVATIONS



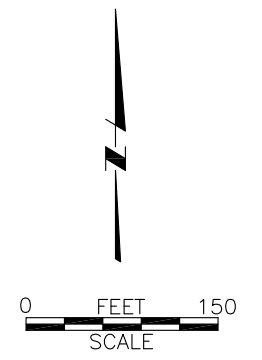
Use NS-8, NS-9, NS-10, WM-3, WM-4, WM-5, WM-6, & WM-9 when working in or around excavation areas

**Legend**

- Administrative Area Boundary
- RFI Site Boundary
- Proposed Excavation Area
- Surface Water Drainage
- Elevation Contour
- Ephemeral Stream Flow Direction
- SE-1 Silt Fence
- SE-9 Straw Bale Barrier
- TC-1 Stabilized Construction Entrance

**Note:**  
If stockpiling occurs at or near excavation areas, place siltfence or gravel bags downgradient and upgradient of stockpile to minimize run-off and run-on respectively.

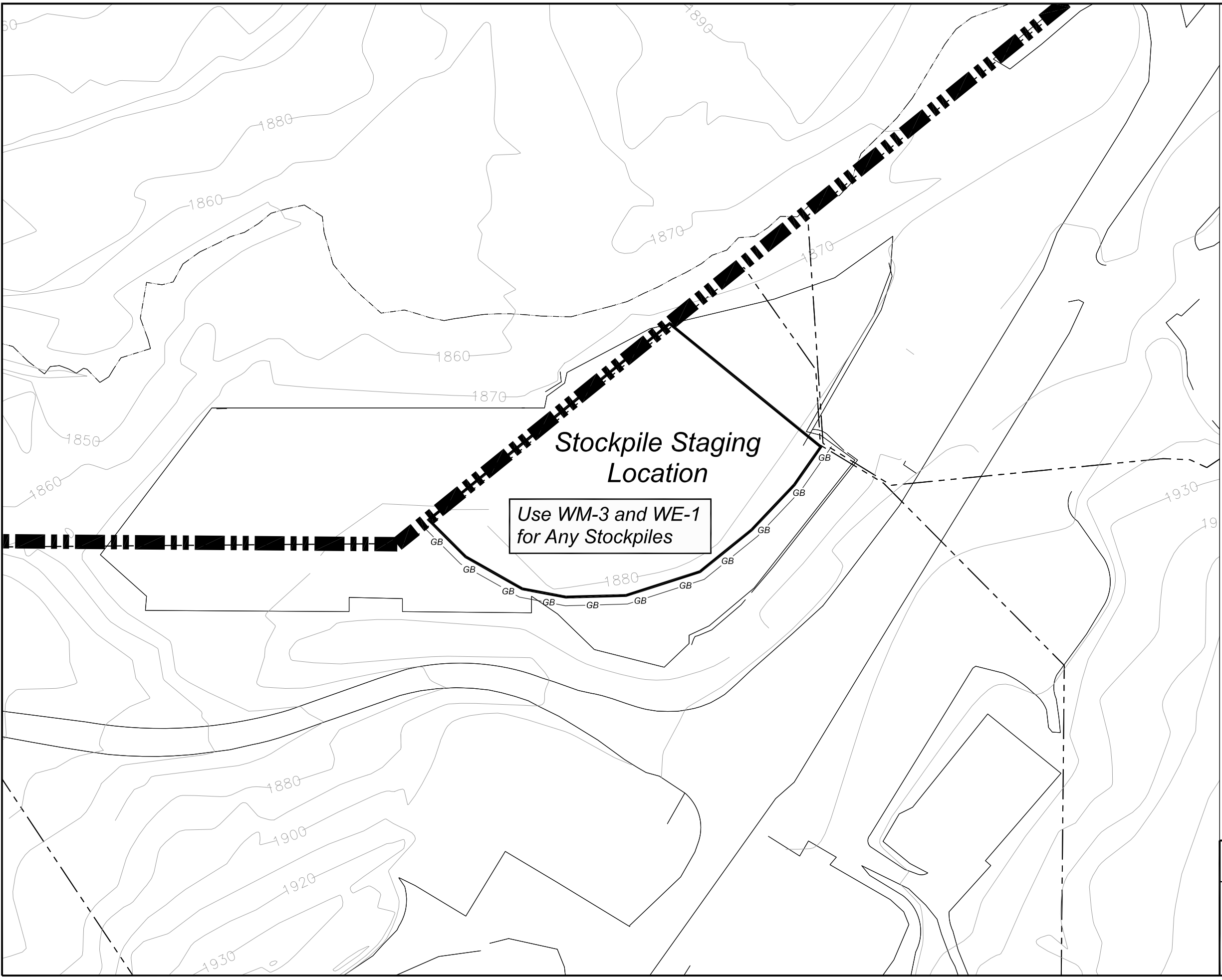
Area ID	Detections in Subsurface Soils
ISRA-CYN-1	Lead
ISRA-DRG-1	Dioxins
ISRA-HVS-1	Dioxins, Lead
ISRA-HVS-2A	Lead
ISRA-HVS-2B	Copper, Lead
ISRA-HVS-2C	Lead
ISRA-HVS-3	Dioxins







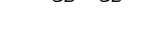
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**BMP PLAN**  
**HAPPY VALLEY AREA**  
**(SSFL AREA I)**

FILE: CAD\MUEBKE\BOEING\ SANTA\_SUSANA\ISRA\_EXCAVATIONS\HAPPY\_VALLEY\_AREA\_EXCAVATIONS



### Legend

-  SSFL Property Boundary
-  RFI Site Boundary
-  Surface Water Drainage
-  Elevation Contour
-  Gravel Berm Bags



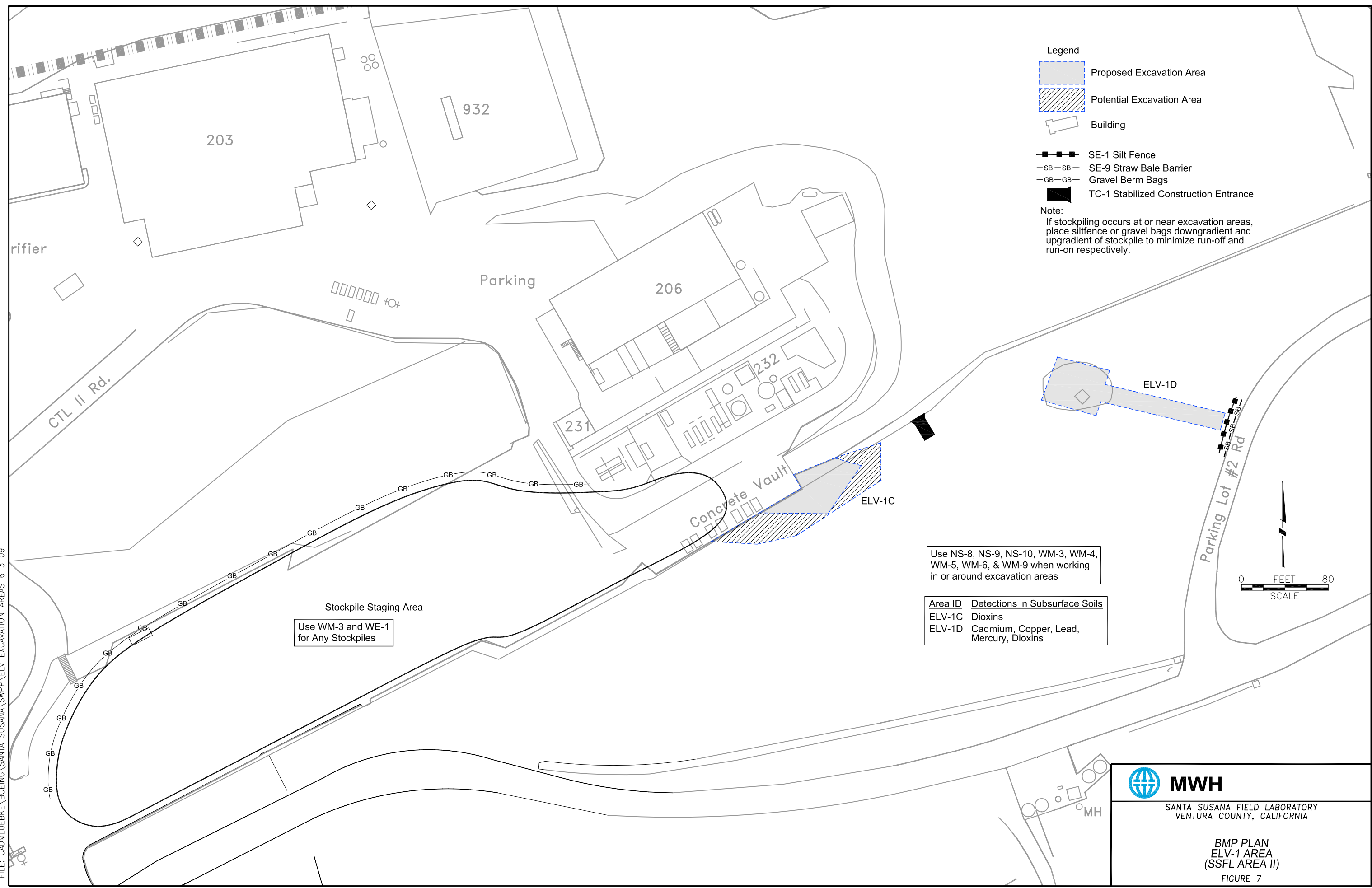
**MWH**

SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**BMP PLAN**  
**HAPPY VALLEY AREA STOCKPILES**  
**(SSFL AREA I)**

FIGURE 6

FILE: CAD\MILLER\BOEING\ANTA\_SUSANA\_SWPP\ELV\_EXCAVATION AREAS 6 3 09



Stockpile Staging Area  
Use WM-3 and WE-1 for Any Stockpiles

Use NS-8, NS-9, NS-10, WM-3, WM-4, WM-5, WM-6, & WM-9 when working in or around excavation areas

Area ID	Detections in Subsurface Soils
ELV-1C	Dioxins
ELV-1D	Cadmium, Copper, Lead, Mercury, Dioxins

 **MWH**  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

BMP PLAN  
ELV-1 AREA  
(SSFL AREA II)  
FIGURE 7

APPENDIX A

NOTICE OF INTENT (NOI)



NOI to be included upon completion.

APPENDIX B

NOTICE OF TERMINATION



**Linda S. Adams**  
Secretary for  
Environmental Protection

# State Water Resources Control Board

## Division of Water Quality

1001 I Street • Sacramento, California 95814 • (916) 341-5537  
Mailing Address: P.O. Box 1977 • Sacramento, California • 95812-1977  
FAX (916) 341-5543 • Internet Address: <http://www.waterboards.ca.gov/stormwtr/index.html>



**Arnold Schwarzenegger**  
Governor

To: Storm Water Permit Holder

RE: NOTICE OF TERMINATION OF COVERAGE UNDER THE GENERAL  
CONSTRUCTION STORM WATER PERMIT (GENERAL PERMIT)

In order for us to terminate your coverage under the General Permit, please complete and submit the enclosed Notice of Termination (NOT) your local Regional Water Quality Control Board (RWQCB). Refer to the last page of the NOT packet for RWQCB locations.

Submittal of a NOT does not guarantee termination and outstanding invoices are still valid. If your NOT is denied, you will be required to continue complying with the requirements of the General Permit and all outstanding invoice(s) are due. You will be notified of your NOT status by the RWQCB or State Water Resources Control Board. Approval of your Notice of Termination does not relieve you from paying any applicable outstanding invoices.

Should you have any questions regarding this matter, please contact your local RWQCB at the number listed on the back page of the NOT package, or the Storm Water Unit at (916) 341-5537.

Sincerely,

Storm Water Unit  
Division of Water Quality

Enclosure

# SEND TO YOUR LOCAL RWQCB FOR APPROVAL

State of California  
State Water Resources Control Board

## NOTICE OF TERMINATION

OF COVERAGE UNDER THE NPDES GENERAL PERMIT NO. CAS000002  
FOR DISCHARGES OF STORM WATER  
ASSOCIATED WITH CONSTRUCTION ACTIVITY

Submission of this Notice of Termination constitutes notice that the owner (and his/her agent) of the site identified on this form is no longer authorized to discharge storm water associated with construction activity by NPDES General Permit No. CAS000002.

### I. WDID NO.

### II. OWNER

COMPANY NAME \_\_\_\_\_ CONTACT PERSON \_\_\_\_\_  
STREET ADDRESS \_\_\_\_\_ TITLE \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ PHONE \_\_\_\_\_

### III. CONSTRUCTION SITE INFORMATION

A. DEVELOPER NAME \_\_\_\_\_ CONTACT PERSON \_\_\_\_\_  
STREET ADDRESS \_\_\_\_\_ TITLE \_\_\_\_\_  
CITY \_\_\_\_\_ CA \_\_\_\_\_ ZIP \_\_\_\_\_ PHONE \_\_\_\_\_

B. SITE ADDRESS \_\_\_\_\_ COUNTY \_\_\_\_\_  
CITY \_\_\_\_\_ CA \_\_\_\_\_ ZIP \_\_\_\_\_ PHONE \_\_\_\_\_

### IV. BASIS OF TERMINATION

- \_\_\_\_\_ 1. The construction project is complete and the following conditions have been met.
- All elements of the Storm Water Pollution Prevention Plan have been completed.
  - Construction materials and waste have been disposed of properly.
  - The site is in compliance with all local storm water management requirements.
  - A post-construction storm water operation and management plan is in place.
- Date of project completion \_\_\_\_\_
- \_\_\_\_\_ 2. Construction activities have been suspended, either temporarily \_\_\_\_\_ or indefinitely \_\_\_\_\_ and the following conditions have been met.
- All elements of the Storm Water Pollution Prevention Plan have been completed.
  - Construction materials and waste have been disposed of properly.
  - All denuded areas and other areas of potential erosion are stabilized.
  - An operation and maintenance plan for erosion and sediment control is in place.
  - The site is in compliance with all local storm water management requirements.
- Date of suspension \_\_\_\_\_ Expected start up date \_\_\_\_\_
- \_\_\_\_\_ 3. Site can not discharge storm water to waters of the United States (check one).

SEND TO YOUR LOCAL RWQCB FOR APPROVAL

\_\_\_\_\_ All storm water is retained on site.

\_\_\_\_\_ All storm water is discharged to evaporation or percolation ponds offsite.

\_\_\_\_\_ 4. Discharge of storm water from the site is now subject to another NPDES general permit or an individual NPDES permit.

NPDES Permit No. \_\_\_\_\_ Date coverage began \_\_\_\_\_

\_\_\_\_\_ 5. There is a new owner of the identified site. Date of owner transfer \_\_\_\_\_

Was the new owner notified of the General Permit requirements? YES \_\_\_\_\_ NO \_\_\_\_\_

NEW OWNER INFORMATION

COMPANY NAME \_\_\_\_\_ CONTACT PERSON \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_ TITLE \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ PHONE \_\_\_\_\_

V. **EXPLANATION OF BASIS OF TERMINATION** (Attach site photographs - see instructions).

VI. **CERTIFICATION:**

I certify under penalty of law that all storm water discharges associated with construction activity from the identified site that are authorized by NPDES General Permit No. CAS000002 have been eliminated or that I am no longer the owner of the site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with construction activity under the general permit, and that discharging pollutants in storm water associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an owner from liability for any violations of the general permit or the Clean Water Act.

PRINTED NAME \_\_\_\_\_ TITLE \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE \_\_\_\_\_

**REGIONAL WATER BOARD USE ONLY**

This Notice of Termination has been reviewed, and I recommend termination of coverage under the subject NPDES general permit.

Printed Name \_\_\_\_\_ Region No. \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

NOT effective date:
Date: ____/____/____

**INSTRUCTIONS FOR COMPLETING  
NOTICE OF TERMINATION  
FOR CONSTRUCTION ACTIVITY**

Who May File

Dischargers who are presently covered under NPDES General Permit No. CAS000002 for discharge of storm water associated with construction activity may submit a Notice of Termination when they meet one of the following criteria.

1. The construction project has been completed and the following conditions have been met: all elements of the Stormwater Pollution Prevention Plan have been completed; construction materials and equipment maintenance waste have been disposed of properly; the site is in compliance with all local storm water management requirements including erosion/sediment control requirements and the appropriate use permits have been obtained; and a post-construction storm water operation and management plan is in place.
2. Construction activities have been suspended, either temporarily or indefinitely and the following conditions have been: all elements of the Stormwater Pollution Prevention Plan have been completed; construction materials and equipment maintenance waste have been disposed of properly; all denuded areas and other areas of potential erosion are stabilized; an operation and maintenance plan for erosion and sediment control is in place; and the site is in compliance with all local storm water management requirements including erosion/sediment control requirements.  
The date construction activities were suspended, and the expected date construction activities will start up again should be provided.
3. Construction site can not discharge storm water to waters of the United States. Please indicate if all storm water is retained on site or if storm water is collected offsite.
4. Discharge of construction storm water from the site is now subject to another NPDES general permit or an individual NPDES permit. The general permit or individual permit NPDES number and date coverage began should be provided.
5. There is a new owner of the identified site. If ownership or operation of the facility has been transferred then the previous owner must submit a Notice of Termination and the new owner must submit a Notice of Intent for coverage under the general permit. The date of transfer and information on the new owner should be provided. Note that the previous owner may be liable for discharge from the site until the new owner files a Notice of Intent for coverage under the general permit.

Where to File

Submit the Notice of Termination to the Executive Officer of the Regional Water Quality Control Board responsible for the area in which the facility is located. See attached. Submittal of a NOT does not guarantee termination and outstanding invoices are still valid. If the Executive Officer, or his designated staff, agrees with the basis of termination, the Notice of Termination will be transmitted to the State Water Board for processing at which time it will be determined if any outstanding invoices are still valid. Approval of your Notice of Termination does not relieve you from paying any applicable outstanding invoices. If the Executive Officer, or his designated staff, does not agree with the basis of termination, the Notice of Termination will be returned. The Regional Water Board may also inspect your site prior to accepting the basis of termination.

## **LINE-BY-LINE INSTRUCTIONS**

All necessary information must be provided on the form. Type or print in the appropriate areas only. Submit additional information, if necessary, on a separate sheet of paper.

### **SECTION I--WDID NO.**

The WDID No. is a number assigned to each discharger covered under the General Permit. If you do not know your WDID No., please call the State Water Board or Regional Water Board and request it prior to submittal of the Notice of Termination.

### **SECTION II--OWNER**

Enter the owner of the construction site's official or legal name (This should correspond with the name on the Notice of Intent submitted for the site), address of the owner, contact person, and contact person's title and telephone number.

### **SECTION III--CONSTRUCTION SITE INFORMATION**

In Part A, enter the name of the developer (or general contractor), address, contact person, and contact person's title and telephone number. The contact person should be the construction site manager completely familiar with the construction site and charged with compliance and oversight of the general permit. This information should correspond with information on the Notice of Intent submitted for the site.

In Part B, enter the address, county, and telephone number (if any) of the construction site. Construction sites that do not have a street address must attach a legal description of the site.

### **SECTION IV--BASIS OF TERMINATION**

Check the category which best defines the basis of your termination request. See the discussion of the criteria in the Who May File section of these instructions. Provide dates and other information requested. Use the space under Explanation of Basis of Termination heading.

### **SECTION V--EXPLANATION OF BASIS OF TERMINATION**

Please explain the basis or reasons why you believe your construction site is not required to comply with the General Permit. To support your explanation, provide a site map and photograph of your site.

### **SECTION VI--CERTIFICATION**

This section must be completed by the owner of the site.

The Notice of Termination must be signed by:

For a Corporation: a responsible corporate officer

For a Partnership or Sole Proprietorship: a general partner or the proprietor, respectively.

For a Municipality, State, or other Non-Federal Public Agency: either a principal executive officer or ranking elected official.

For a Federal Agency: either the chief or senior executive officer of the agency.

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

## NORTH COAST REGION (1)

5550 Skylane Blvd, Ste. A  
 Santa Rose, CA 95403  
 (707) 576-2220 FAX: (707)523-0135  
<http://www.waterboards.ca.gov/rwqcb1>

## SAN FRANCISCO BAY REGION (2)

1515 Clay Street, Ste. 1400  
 Oakland, CA 94612  
 (510) 622-2300 FAX: (510) 622-2640  
<http://www.waterboards.ca.gov/rwqcb2>

## CENTRAL COAST REGION (3)

895 Aerovista Place, Ste 101  
 San Luis Obispo, CA 93401  
 (805) 549-3147 FAX: (805) 543-0397  
<http://www.waterboards.ca.gov/rwqcb3>

## LOS ANGELES REGION (4)

320 W. 4<sup>th</sup> Street, Ste. 200  
 Los Angeles, CA 90013  
 (213) 576-6600 FAX: (213) 576-6640  
<http://www.waterboards.ca.gov/rwqcb4>

## LAHONTAN REGION (6 SLT)

2501 Lake Tahoe Blvd.  
 South Lake Tahoe, CA 96150  
 (530) 542-5400 FAX: (530) 544-2271  
<http://www.waterboards.ca.gov/rwqcb6>

## VICTORVILLE OFFICE (6V)

14440 Civic Drive, Ste. 200  
 Victorville, CA 92392  
 (760) 241-6583 FAX: (760) 241-7308  
<http://www.waterboards.ca.gov/rwqcb6>

## CENTRAL VALLEY REGION (5S)

11020 Sun Center Dr., #200  
 Rancho Cordova, CA 95670-6114  
 (916) 464-3291 FAX: (916) 464-4645  
<http://www.waterboards.ca.gov/rwqcb5>

## COLORADO RIVER BASIN REGION (7)

73-720 Fred Waring Dr., Ste. 100  
 Palm Desert, CA 92260  
 (760) 346-7491 FAX: (760) 341-6820  
<http://www.waterboards.ca.gov/rwqcb7>

## FRESNO BRANCH OFFICE (5F)

1685 E St.  
 Fresno, CA 93706  
 (559) 445-5116 FAX: (559) 445-5910  
<http://www.waterboards.ca.gov/rwqcb5>

## SANTA ANA REGION (8)

California Tower  
 3737 Main Street, Ste. 500  
 Riverside, CA 92501-3339  
<http://www.waterboards.ca.gov/rwqcb8>

## REDDING BRANCH OFFICE (5R)

415 Knollcrest Drive, Ste. 100  
 Redding, CA 96002  
 (530) 224-4845 FAX: (530) 224-4857  
<http://www.waterboards.ca.gov/rwqcb5>

## SAN DIEGO REGION (9)

9174 Sky Park Court, Ste. 100  
 San Diego, CA 92123-4340  
 (858) 467-2952 FAX: (858) 571-6972  
<http://www.waterboards.ca.gov/rwqcb9>

## STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

## CALIFORNIA ENVIRONMENTAL

PROTECTION AGENCY

Terry Tamminen, Secretary

## STATE WATER RESOURCES

CONTROL BOARD

Arthur Baggett Jr., Chairman





APPENDIX C

ANNUAL CERTIFICATION OF COMPLIANCE FORMS

# Annual Certification of Compliance Form

**Project Name:** \_\_\_\_\_

**Contractor Company Name:** \_\_\_\_\_

**Contractor Address:** \_\_\_\_\_

**Construction Start Date:** \_\_\_\_\_ **Completion Date:** \_\_\_\_\_

**Description of Work:**

**Work Now in Progress:**

**Work Planned for Next 12 Months:**

“I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

\_\_\_\_\_  
Owner/Developer/Contractor Signature

\_\_\_\_\_  
Date

APPENDIX D

COMPUTATION SHEET FOR DETERMINING RUNOFF  
COEFFICIENTS

## Computation Sheet for Determining Runoff Coefficients

$$\text{Total Site Area} = \underline{\quad 1.85 \quad} \quad (\text{A})$$

### Existing Site Conditions

$$\text{Impervious Site Area}^1 = \underline{\quad 0.00 \quad} \quad (\text{B})$$

$$\text{Impervious Site Area Runoff Coefficient}^2 = \underline{\quad 0.95 \quad} \quad (\text{C})$$

$$\text{Pervious Site Area}^3 = \underline{\quad 1.85 \quad} \quad (\text{D})$$

$$\text{Pervious Site Area Runoff Coefficient} = \underline{\quad 0.40 \quad} \quad (\text{E})$$

$$\text{Existing Site Area Runoff Coefficient} \frac{(\text{B} \times \text{C}) + (\text{D} \times \text{E})}{(\text{A})} = \underline{\quad 0.40 \quad} \quad (\text{F})$$

### Proposed Site Conditions (after demolition)

$$\text{Impervious Site Area}^1 = \underline{\quad 0.00 \quad} \quad (\text{G})$$

$$\text{Impervious Site Area Runoff Coefficient}^2 = \underline{\quad 0.95 \quad} \quad (\text{H})$$

$$\text{Pervious Site Area}^3 = \underline{\quad 1.85 \quad} \quad (\text{I})$$

$$\text{Pervious Site Area Runoff Coefficient} = \underline{\quad 0.40 \quad} \quad (\text{J})$$

$$\text{Proposed Site Area Runoff Coefficient} \frac{(\text{G} \times \text{H}) + (\text{I} \times \text{J})}{(\text{A})} = \underline{\quad 0.40 \quad} \quad (\text{K})$$

1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
2. Use 0.95 unless lower or higher runoff coefficient can be verified.
3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
4. Reference: "Los Angeles County Department of Public Works Hydrology Manual", December 1990.

APPENDIX E

COMPUTATION SHEET FOR DETERMINING RUN-ON DISCHARGES

## Computation Sheet for Determining Run-on Discharges

### Existing Site Conditions

Area Runoff Coefficient	=	<u>0.40</u>	(A)
Area Rainfall Intensity	=	<u>0.002</u>	(B)
Drainage Area	=	<u>1.85</u>	(C)
Site Area Run-on Discharge	$0.28 \times (A) \times (B) \times (C)$	=	<u>0.00041</u> (D)