

Sacramento, Sacramento, California

# Industrial Activities Stormwater Pollution Prevention Plan

June 2015



# Industrial Activities Stormwater Pollution Prevention Plan

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## Sacramento

11501 Florin Road  
Sacramento, California 95830

*Prepared for*

Cesar Aranda  
Vulcan Materials Company  
500 N. Brand Boulevard, #500  
Glendale, California 91203

June 6, 2015

Waste Discharge Identification (WDID): 5S34I014344  
Exceedance Response Action (ERA) Status: Baseline  
Legally Responsible Person (LRP): Vulcan Materials Company  
500 North Brand Boulevard  
Glendale, CA 91203  
Cesar Aranda  
(559) 434-1202  
Duly Authorized Representative: Tom Ferrell  
(559) 434-1202

*Prepared by:*

Brown and Caldwell  
9665 Chesapeake Drive  
San Diego, California 92123

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## Legally Responsible Person (Section II.A)

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### Approval and Certification of the Stormwater Pollution Prevention Plan

Facility Name: Sacramento

Waste Discharge Identification (WDID): 5S34I014344

"I certify under penalty of law that this document and all Attachments were prepared under my direction or supervision in accordance with a system designed to assure 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."

Cesar Aranda

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Legally Responsible Person



Signature of Legally Responsible Person

June 25, 2015

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Date

# Duly Authorized Representative (DAR) and Site Manager

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## Approval of the Stormwater Pollution Prevention Plan

Facility Name: Sacramento  
Waste Discharge Identification (WDID): 5S34I014344

Tom Ferrell

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Duly Authorized Representative

(559) 434-1202

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Phone Number

Signature of Duly Authorized Representative

Date

Glen Phillips

---

Site Manager

(916) 682-0850

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Phone Number

Signature of the Site Manager

Date



# Amendment Log (Section X.A.10)

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Facility Name: Sacramento

Waste Discharge Identification (WDID): 5S34I014344

Amendment No.	Date	Page and Section No.	Requested By	Brief Description of Amendment (include reason for change, site location, and BMP modifications)	Prepared and Approved By

# Temporary Suspension of Industrial Activities (TSIA)

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Date Facility is Stabilized	Date TSIA uploaded to SMARTS	Additional facility stabilization BMPs	Requested By	Justification of monitoring infeasibility during TSIA	Date Facility activity expected to Resume

# ERA Status per Monitoring Year

Facility Name: Sacramento

Waste Discharge Identification (WDID): 5S34I014344

Constituent*	Annual NAL	Instantaneous NAL	2015-16 Monitoring Year	2016-17 Monitoring Year	2017-18 Monitoring Year	2018-19 Monitoring Year
Total Suspended Solids (TSS)	100 mg/L	400 mg/L	Baseline			
pH	N/A	Less than 6.0 pH Greater than 9.0 pH	Baseline			
Oil and Grease (O&G)	15 mg/L	25 mg/L	Baseline			
Nitrate + Nitrite	0.68 mg/L	N/A	Baseline			

\*At any time a constituent reaches Level I ERA status, contact \_\_\_\_\_ in order to take steps to reach baseline status next year. Each constituent that reaches Level I ERA will need to create a Level 1 ERA Evaluation and Level I ERA Report as per Section \_\_\_\_\_. Failure to do so by the set time frame is an instant fine and NOV.

At any time a constituent reaches Level II ERA status, check the appropriate box on the cover page and highlight in this table. If a constituent is at baseline and has a historical Level II ERA status, it must skip Level 1 ERA status and go directly to Level II ERA status. Each constituent that reaches Level II ERA will need to create a Level 2 ERA Action Plan and a Level 2 ERA Technical Report as per Section \_\_\_\_\_. Failure to do so by the set time frame is an instant fine and NOV.

# Historical ERA Level II Status

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Facility Name: Sacramento

Waste Discharge Identification (WDID): 5S34I014344

Has the following Constituent	Ever reached an ERA Level II Status? <sup>1</sup>	If YES, during which Monitoring Year?
Total Suspended Solids (TSS)	YES <input type="checkbox"/> QISP:	
pH	YES <input type="checkbox"/> QISP:	
Oil and Grease (O&G)	YES <input type="checkbox"/> QISP:	
Nitrate + Nitrite	YES <input type="checkbox"/> QISP:	

<sup>1</sup> A constituent is assumed to have reached ERA Level II status unless otherwise indicated in table above. Refer to Section \_\_\_\_ for the historical status per each monitoring year. A constituent reaching Level II ERA status creates a precedent that does not expire for the facility NOI.

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## Section 1:

# SWPPP Requirements (Section X.A)



## 1.1 Introduction

The Sacramento site comprises approximately 386 acres and is located at 11501 Florin Road Sacramento, CA 95830. The property is owned by Vulcan Materials Company and is being operated by Vulcan. The facility location is shown on the Site Map(s) in Appendix A.

This Stormwater Pollution Prevention Plan (SWPPP) is designed to comply with California's General Permit for Stormwater Discharges Associated with Industrial Activities (General Permit) Order No. 2014-0057-DWQ (NPDES No. CAS000001) issued by the State Water Resources Control Board (State Water Board). This SWPPP has been prepared by following the SWPPP Template provided on the California Stormwater Quality Association Stormwater *Best Management Practice Handbook Portal: Industrial and Commercial* (CASQA 2014). In accordance with the General Permit, Section X.A, this SWPPP contains the following required elements:

- Facility Name and Contact Information;
- Site Map;
- List of Significant Industrial Materials;
- Description of Potential Pollution Sources;
- Assessment of Potential Pollutant Sources;
- Minimum best management practices (BMPs);
- Advanced BMPs, if applicable;
- Monitoring Implementation Plan;
- Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation); and,
- Date that SWPPP was Initially Prepared and the Date of Each SWPPP Amendment, if Applicable.

## 1.2 Permit Registration Documents

Required Permit Registration Documents (PRDs) were submitted to the State Water Board via the Stormwater Multi Application and Report Tracking System (SMARTS) by the Legally Responsible Person (LRP), or authorized personnel (i.e., Approved Signatory) under the direction of the LRP. The project-specific PRDs include:

1. Notice of Intent (NOI);
2. Signed Certification Statement (LRP Certification is provided electronically with SMARTS PRD submittal);
3. Site Map(s);
4. SWPPP; and
5. Annual Fee.

The Site Map(s) can be found in Appendix A. A copy of the submitted PRDs are also kept in Appendix B of the SWPPP along with the Waste Discharge Identification (WDID) confirmation.

The SWPPP uploaded into SMARTS should not include a copy of the General Permit.

In the event of future significant changes to the facility layout, the Discharger will certify and submit new PRDs via SMARTS.

### 1.3 SWPPP Availability and Implementation

The SWPPP is available on-site to all employees during all hours of operation (see Section 2.5 for the Operations Schedule), and will be made available upon request by a State or Municipal inspector. The SWPPP will be implemented by July 1, 2015.

### 1.4 Pollution Prevention Team (Section X.D.2)

Facility staff that have been designated as Pollution Prevention Team members are listed below in Table 1.1., along with their responsibilities and duties. A list of alternate team members is also provided, and these personnel will perform SWPPP activities when regular members of the Pollution Prevention Team are absent or unavailable. This table will be updated as needed when there are changes to staff and staff responsibilities. All team members will be trained to perform the duties assigned to them. Employee training logs are provided in Appendix C.

A QISP is required when the Facility enters Level 1 Status. The QISP(s) identified for the project are identified in Appendix D. The QISP will have primary responsibility for providing training to the appropriate team members assigned to perform the activities required in this SWPPP.

**Table 1.1: Pollution Prevention Team**

Name	Title	Phone Number	Responsibilities and Duties
Glen Phillips	Assistant Manager - Plant	(916) 682-0850	SWPPP implementation and revisions, employee training, record keeping
Rob Hostettler	Plant Supervisor	(916) 531-5436	SWPPP revisions, BMP implementation, BMP effectiveness evaluation, monitoring/visual observations, sampling, record keeping
Chris Villarreal	QC Tech	(916) 682-2850	Monitoring/visual observations, sampling

### 1.5 Duly Authorized Representatives

Duly Authorized Representative who are responsible for SWPPP implementation and have authority to sign PRDs is listed below in Table 1.2. Written authorizations from the LRP for these individuals are provided in Appendix D.

**Table 1.2: Duly Authorized Representatives**

Name	Title	Phone Number
Tom Ferrell	Environmental Manager	(559) 434-1202

**Table 1.2: Duly Authorized Representatives**

Name	Title	Phone Number

## 1.6 Permits and Governing Documents

In addition to the General Permit, the following documents have been taken into account while preparing this SWPPP:

- Regional Water Board requirements;
- Basin Plan requirements; and
- TMDL Requirements

## 1.7 SWPPP Amendments

This SWPPP will be amended or revised as needed. A list of amendments (Amendment Log) is included in the front of this SWPPP (page 7), and amendment certifications are included in Appendix E. The Amendment Log will include the date of initial preparation and the date of each amendment. The SWPPP should be revised when:

- There is a General Permit violation;
- There is a reduction or increase in the total industrial area exposed to stormwater;
- BMPs do not meet the objectives of reducing or eliminating pollutants in stormwater discharges;
- There is a change in industrial operations which may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4);
- There is a change to the parties responsible for implementing the SWPPP; or
- Otherwise deemed necessary by the QISP.

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(s) proposed, if any; and
- The new BMP(s) proposed.

Amendments will be logged at the front of the SWPPP and certification kept in Appendix E. The SWPPP text will be revised replaced, and/or hand annotated as necessary to properly convey the amendment. SWPPP amendments must be certified and submitted by the LRP or their designated Duly Authorized Representative via SMARTS within 30 days whenever the SWPPP contains significant revisions. With the exception of significant revisions, SWPPP changes will be certified and uploaded to SMARTS once every three (3) months in the reporting year.

## 1.8 Retention of Records

Paper or electronic records of documents required by this SWPPP will be retained for a minimum of five (5) years from the date generated or date submitted, whichever is later, for the following items:

- Employee Training Records;
- BMP Implementation Records;
- Spill and Clean-up Related Records;
- Records of Sampling and Analysis Information
  - The date, exact location, and time of sampling or measurement;
  - The date(s) analyses were performed;
  - The individual(s) that performed the analyses;
  - The analytical techniques or methods used; and
  - The results of such analyses;
- Records of Visual Observations
  - The date
  - The industrial areas/drainage areas of the facility observed during the inspection (Location);
  - The approximate time of the observation;
  - Presence and probable source of observed pollutants; and
  - Name of the individual(s) that conducted the observations;
- Response to the observations including identification of SWPPP revisions if needed.
- Level 1 ERA Reports;
- Level 2 ERA Action Plan;
- Level 2 ERA Technical Report; and
- Annual Reports from SMARTS (checklist and any explanations).

Copies of these records will be available for review by the Water Board's staff at the facility during scheduled facility operating hours. Upon written request by U.S. EPA or the local MS4, Dischargers will provide paper or electronic copies of requested records to the Water Boards, U.S. EPA, or local MS4 within ten (10) working days from receipt of the request.

## 1.9 Exceedance Response Actions (ERAs)

If a General Permit NAL exceedance occurs in a given reporting year, a Level 1 ERA Evaluation and a Level 1 ERA Report will be required in the following year, or, if in a subsequent year, a Level 2 ERA Action Plan and a Level 2 ERA Report will be required in accordance with the General Permit. The results of either of the ERA reports may require that the SWPPP be amended.



## **1.10 Annual Comprehensive Facility Compliance Evaluation (Section XV.A-G)**

The General Permit (Section XV) requires the Discharger to conduct one Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation) for each reporting year (July 1 to June 30). Annual Evaluations will be conducted at least eight (8) months and not more than sixteen (16) months after the previous Annual Evaluation. The planned window for conducting the Annual Evaluation is between April and June of each year. The SWPPP will be revised, as appropriate based on the results of the Annual Evaluation, and the revisions will be implemented within 90 days of the Annual Evaluation.

At a minimum, Annual Evaluations will consist of:

- A review of all sampling, visual observation, and inspection and monitoring records and sampling and analysis results conducted during the previous reporting year;
- A visual inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the stormwater conveyance system;
- A visual inspection of all drainage areas previously identified as having no exposure to industrial activities and materials in accordance with the definitions in Section XVII;
- A visual inspection of equipment needed to implement the BMPs;
- A visual inspection of any BMPs;
- A review and effectiveness assessment of all BMPs for each area of industrial activity and associated potential pollutant sources to determine if the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in industrial stormwater discharges and authorized NSWDS; and
- An assessment of any other factors needed to comply with the Annual Reporting requirements in General Permit Section XVI.B.

## **1.11 Annual Report**

The Annual Report will be prepared, certified, and electronically submitted no later than July 15<sup>th</sup> following each reporting year using the standardized format and checklists in SMARTS based on the reporting requirements identified in Section XVI of the General Permit. Annual reports will be submitted in SMARTS and in accordance with information required by the on-line forms.

## **1.12 Termination and Changes to general Permit Coverage**

When any of the following conditions occur, termination of coverage under the General Permit will be requested by certifying and submitting a Notice of Termination (NOT) via SMARTS:

- Operation of the facility has been transferred to another entity;
- The facility has ceased operations, completed closure activities, and removed all industrial related pollutant generating sources;
- The facility's operations have changed and are no longer subject to the General Permit.

The SWPPP and all of the provisions of the General Permit will be complied with until a valid NOT is received and accepted by the Board.

If ownership changes, the new owner of the facility will be notified of the General Permit and regulatory requirements for permit coverage.

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## Section 2:

# Facility Information

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## 2.1 Facility Description

### 2.1.1 Facility Location

The Sacramento facility (Facility) comprises approximately 386 acres and is located at 11501 Florin Road, in Sacramento, California, 95830. The Facility is located in the City of Sacramento, bounded by Eagle's Nest Road on the west, Folsom Aqueduct on the east, and Highway 16 on the north. The Facility is split across Florin Road with open pit mining occurring south of Florin Road and the processing occurring north of Florin Road. The facility is located at 38°30'2.75"N and 121° 15'4.46"W is identified on the Site Map(s) in Appendix A.

The Facility discharges from one location along Florin Road and indirectly to Laguna Creek which eventually flows to the Sacramento River. Laguna Creek is not currently listed for any impairments, but the Sacramento River is listed on the 303(d) list as impaired between Knights Landing and the Delta (16 miles) for mercury and unknown toxicity (Central Valley RWQCB 2006).

### 2.1.2 Facility Operations (Section X.F)

Operations at the Sacramento Facility consist of the production, storage and distribution of construction aggregate, manufactured sand, natural sand, and the storage of aggregate products, and materials used in the production of asphalt and concrete. A list of specific industrial activities is provided below:

- Storage of processing of construction aggregate
- Storage and processing of natural sand and materials used in the production of asphalt and concrete
- General equipment and vehicle maintenance

Standard Industrial Classification Code (SIC) for the Sacramento Facility are:

1442 – Construction Sand & Gravel

### 2.1.3 Existing Conditions

The facility site consists of undeveloped open space used to mine, process, and store natural aggregate material. The total area of the facility encompasses approximately 386 acres. Approximately less than 1 percent of the facility consists of impervious surface area. Of the developed area, approximately 385 acres of industrial activities are directly exposed to precipitation and stormwater runoff. Existing BMPs at this facility are described in Section 3.

There are no known historic sources of contamination at the site.

## **2.1.4 Description of Drainage Areas and Existing Drainage (Section X.E.3.a)**

The facility is divided into 17 drainage areas as shown on the Site Maps in Appendix A. The Site Map(s) shows the area layout, including the general site topography, storm drainage system, drainage inlets, its respective drainage areas, and discharge locations.

The topography of the facility is generally flat. Surface water drains to a central drain and sump located at the south-east side of the facility, in a wetland where it is pumped through a 3-inch underground pipe to a clarifier located on the northeastern portion of the facility. Laguna Creek crosses the process facility along the east and flows southwest towards the Sacramento River.

Detailed descriptions of all drainage areas are provided below and presented on the Site Maps in Appendix A.

### **Drainage Area 1**

There are currently no industrial activities within this drainage area. This drainage area is located on the northwestern side of the property adjacent to several stockpiles. Stormwater is completely contained within this area.

### **Drainage Area 2**

This drainage area is located on the northern side of the property, is adjacent to the aggregate plant to the south and contains the plants process water storage ponds. Stormwater is completely contained within this area.

### **Drainage Area 3**

There are currently no industrial activities within this drainage area. This drainage area is relatively flat and is located on the northeastern side of the property. Laguna Creek flows through this drainage area and the creek is bermed on both banks to prevent stormwater flow into it. Stormwater is completely contained within this area.

### **Drainage Area 4**

Drainage area is the location of the aggregate plant and includes several stock piles. This area includes the office area and aggregate plant area which are impermeable. Stormwater discharges to Drainage Area 7 to the south and to the process water storage ponds in Drainage Area 2 to the east.

### **Drainage Area 5**

This drainage area follows Laguna Creek as it travels through the property. Discharge from this drainage area is directed to the southwest along the creek with a potential discharge point DP-1 on the southeastern edge next to Florin Road.

### **Drainage Area 6**

This drainage area is bounded with the Folsom Aqueduct to the east and Laguna creek along the north and west side. The drainage area is relatively flat with the topographic lowpoint near the southern end. Stormwater is completely contained within this area

#### Drainage Area 7

This drainage area is south of the aggregate plant. There are currently no industrial activities in this area. Stormwater enters this drainage area from Drainage Area 4. Stormwater is completely contained within this area.

#### Drainage Area 8

There are currently no industrial activities in this drainage area. This drainage area is relatively flat and is located on the eastern side of the property with Laguna Creek to the north and the Folsom Aqueduct to the west. Stormwater is completely contained within this area.

#### Drainage Area 9

This area is bounded to the southwest by the conveyer system. Stormwater is completely contained within this area.

#### Drainage Area 10

This area lies between Discharge Basins 6 and 9 and the Folsom Aqueduct. No current industrial activities are being conducted in the area except for vehicle movement. Stormwater is completely contained within this area.

#### Drainage Area 11

This drainage area contains the Detention Basin for the site. It is southwest of Drainage Basin 9 which shares the same depression but is separated by the conveyor belt which exits the transport tunnel under Florin road on the southeastern edge and travels along the eastern side to the northwestern corner. Stormwater is completely contained within this area.

#### Drainage Area 12

There is no current industrial activity in this area. This smaller drainage basin is south of Florin Road and east of the active mining area. Stormwater is completely contained within the area.

#### Drainage Area 13

This area contains service roads and is used for vehicle movement to access the conveyer belt tunnel under Florin Road. Stormwater is completely contained to this area.

#### Drainage Area 14

There is no current industrial activity in this area. This smaller drainage basin is south of Drainage Basin 12 and east of the active mining area. Stormwater is completely contained within the area.

#### Drainage Area 15

This area is adjacent to the active mining area. It is used for vehicle movement around the site and is relatively flat. Stormwater is completely contained within this area.

#### Drainage Area 16

This relatively flat area is comprised of open space and contains no current industrial activity. Stormwater is completely contained within the area.

## Drainage Area 17

This area is where active mining is occurring. The area contains stock piles, storage containers and the beginning of the conveyor belt system. A small amount of impervious surface is present around the conveyor belt system. Stormwater is completely contained within the area.

### **2.1.5 Stormwater Run-On from Offsite Areas (Section I.2.f)**

There is anticipated offsite run-on to this Site from surrounding areas to the north and east of the Site. Run-on to the site is generated by runoff from Highway 16 and is diverted into a drainage canal on the north end of the facility which travels along the north and east side of Drainage Area 2. Run-on can occur along the east side of the site by runoff from Sunrise Boulevard into Drainage Areas 3 and 8, no industrial activities are currently occurring in these areas.

The General Permit requires that BMPs be implemented to direct offsite and non-industrial run-on away from industrial areas and erodible surfaces. The BMPs have been implemented to meet this requirement. These BMPs are located in Drainage Area 2 as the drainage canal containing rip rap diverts stormwater run-on directly to Laguna Creek without touching any industrial used land. The off-site drainage run-on locations and associated stormwater conveyances and BMPs are shown on Site Map in Appendix A.

### **2.1.6 Geology and Groundwater**

The Site is located within the Sacramento Valley, which is part of the Great Central Valley of California. The valley is characterized by flat topography and Quaternary alluvial deposits dipping slightly westward. To the east are the Sierra Nevada Mountains which is characterized by Cenozoic volcanics, sedimentary and meta-sedimentary rocks along with Mesozoic volcanics and granitic rocks with north-south thrust faults running along the western edge. To the east are the coastal ranges made of predominately mélangé material. Coming out of the western edge of the Sierra Nevada onto the valley floor are large alluvial fan deposits extend westerly. The Quaternary alluvial deposits of the valley are wedge shaped, deepest along the western edge of the valley and pinching out towards the foothills to the east.

Geology in the vicinity of the Site is composed of the Riverbank Formation. The formation is characterized by alluvial fan deposits of gravels, sands, silts and minor clays which are predominantly arkosic with mafic igneous fragments (Helley and Harwood 1985). This formation is one of several waterbearing formations of the Sacramento Valley and is known to have variable hydraulic conductivity with high rates in old stream channels and lower rates outside of them.

The Site is located within the Department of Water Resources (DWR) defined South American Subbasin. The groundwater within the South American Subbasin is monitored by the Sacramento Central Groundwater Authority (SCGA) and is used for agriculture, industrial, municipal and private purposes.

Based on review of open cases in the California Department of Water Resources' CASGEM website, the depth to groundwater in the area is generally 120 feet (CASGEM 2015). Groundwater in the area generally flows west-southwest (SCGA 2006).

## 2.2 Operations Schedule (Section X.D.2.d)

The Sacramento facility operates 6 days a week from the hours of 6:00 am to 5:00 pm Monday through Saturday, with limited repair and maintenance activities from 6:00 am to 6:00pm.. The Site is not operating on Sundays. Industrial activities during this time period consist of the production, storage and distribution of construction aggregate, manufactured sand, natural sand, and the storage of aggregate products, and materials used in the production of asphalt and concrete. Variations in actual operating hours may occur as necessary and generally consist of equipment maintenance during late evenings with limited crew.

This SWPPP will be implemented, and a copy made available to all facility staff at all times. A copy will be available to regulatory agency personnel upon request.

This Site has not filed to temporarily suspend industrial activity. If so add the following, and describe the BMPs in Section 4.3

## 2.3 Pollutant Source Assessment (Section X.F,G)

This section presents a list of all industrial materials and potential pollutant sources at the Sacramento facility. It identifies specific pollutants associated with these sources and pollutant sources that are most susceptible to stormwater exposure. A summary of significant spill and leaks that have occurred onsite is also provided.

### 2.3.1 Description of Potential Pollutant Sources (Section X.G.1,2.a)

The facility processes aggregate and crushed stone products. Sand, gravel, and crushed stone are excavated and processed at the facility.

The facility receives storm water inflow (run-on) from city streets north and east of the facility. In the event of a storm, stormwater would overflow at DP-1 and flow into a road drainages along Florin Road that leads to Laguna Creek.

Pollutants that can potentially enter storm water run-off and other discharges draining from the facility include:

- ☒ Sediment (including erodible soils and aggregates)
- ☒ Oil and Grease (waste oil and leaks from equipment)
- ☒ Hydrocarbons (petroleum products, hydraulic fluid, and fuel)
- ☒ Gross Pollutants (litter, debris, and floatables)
- ☒ Organics (cleaners, solvents, and herbicides)
- ☒ Trace Metals

Table 2.1.a includes a list of industrial activities and associated materials that are anticipated to be used onsite. These activities and associated materials will or could potentially contribute pollutants to stormwater runoff. The anticipated activities and associated pollutants provided in Table 2.1 are the basis for selecting the BMPs for the facility as described in Section 3.

Table 2.1.b presents the list of industrial materials used at the Site. Locations of all material stockpiles, storage areas, anticipated pollutants, and associated BMPs are show on the Site Map(s) in Appendix A.

**Table 2.1.a: Industrial Activities and Associated Materials**

Industrial Activity	Associated Industrial Materials	Material Quantity	Material Physical Characteristics	Material Location Drainage Area	Associated Pollutants	Stormwater Exposure Pathway
Storage and processing of aggregate, materials for concrete and asphalt production	Sand and gravel	See Table 2.1.b	Solids, Liquids, Powders	Area 4 Area 17	Sediment Oil and Grease Hydrocarbons Gross Pollutants Trace Metals	Exposed stockpiles, leaks, spills
Equipment and vehicle maintenance	Diesel fuel, solvents, oils, antifreeze, hydraulic fluids	See Table 2.1.b	Liquids	Area 4	Oil and Grease Hydrocarbons Gross Pollutants Trace Metals	Poor housekeeping, leaks, spills



**Table 2.1.b: List of Industrial Materials**

Significant Material	Location Where Materials are Stored	Storage Method	Total Quantities
Sand	Process Area	Stockpile	50,190 tons
Rock/Gravel	Process Area	Stockpile	88,751 tons
Diesel Fuel	Service Area	Double Wall Tank	9,000 tons
Solvents and Oils	Service Area	Tanks/Drums	600 gal/195 gal
Antifreeze	Service Area	Drums	165 gal
Hydraulic Fluids	Service Area	Tanks/Drums	300 gal/495 gal
Catatonic	Clarifier	Tanks	1,000 gal
Flocculent	Clarifier	Tanks	750 gal

### 2.3.2 Significant Spills and Leaks (Section X.G.1.d)

No significant spills or leaks have occurred at the Sacramento Facility within the last 5 years.

**Table 2.2: Spills and Leaks within Previous Five-Year Period**

Industrial Material	Material Physical Characteristics	Location of Spill or Leak	Quantity Spilled or Leaked	Quantity Discharged from Site	Remaining Quantity with Potential for Discharge
NA	NA		NA	NA	NA

## 2.4 Identification of Non-Stormwater Discharges (NSWDs) (Section X.G.1.e)

Non-stormwater discharges (NSWDs) consist of discharges which do not originate from precipitation events. The General Permit provides allowances for specified NSWDs provided they:

- Do not cause erosion;
- Do not carry other pollutants;

- Are not prohibited by the local MS4; and
- Do not require a separate NPDES Permit from the Regional Water Board.

NSWDs into storm drainage systems or waterways, which are not authorized under the General Permit and listed in the SWPPP, or authorized under a separate NPDES permit, are prohibited.

Non-stormwater discharges that are authorized at this facility include the following:

- None

Any authorized NSWDs will be managed with the stormwater and non-stormwater BMPs described in Section 3 of this SWPPP. These BMPs are implemented to:

- Reduce or prevent the contact of authorized NSWDs with materials or equipment that are potential sources of pollutants;
- Reduce, to the extent practicable, the flow or volume of authorized NSWDs;
- Ensure that authorized NSWDs do not contain quantities of pollutants that cause or contribute to an exceedance of a water quality standards; and
- Reduce or prevent discharges of pollutants in authorized NSWDs in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

Monthly visual observations will be conducted according to the General Permit (Section XI.A.1) for NSWDs and sources to ensure adequate BMP implementation and effectiveness. Monthly visual observations include observations for evidence of unauthorized NSWDs.

There are no activities at this site that may result in unauthorized non-stormwater discharges.

Steps will be taken, including the implementation of appropriate BMPs as defined in Section 3, to ensure that unauthorized NSWDs are eliminated, controlled, disposed off-site, or treated on-site.

## 2.5 Required Site Map(s) Information (Section X.E)

The facility's Site Map(s) is (are) provided in Appendix A, and include(s) all information required by the General Permit. The maps include information regarding the facility boundary and stormwater drainage areas, nearby water bodies, locations of stormwater collection and conveyance systems including outfalls, locations and descriptions of all industrial activities and materials, and locations and descriptions of all structural control measures.

A summary of all information provided in the Site Map(s) is provided in Table 2.4 below.

**Table 2.4: Required Site Map(s) Information Checklist**

Included on Site Map(s)? Yes/No/ NA	Required Element
Yes	The facility boundary (Section X.E.3.a)
Yes	Stormwater drainage areas within the facility boundary (Section X.E.3.a)
Yes	Portions of any drainage area impacted by discharges from surrounding areas

**Table 2.4: Required Site Map(s) Information Checklist**

Included on Site Map(s)? Yes/No/ NA	Required Element
Yes	Flow direction of each drainage area (Section X.E.3.a)
Yes	On-facility surface water bodies (Section X.E.3.a)
NA*	Areas of soil erosion (Section X.E.3.a)
Yes	Location(s) of nearby water bodies (such as rivers, lakes, wetlands, etc.) (Section X.E.3.a)
NA	Location(s) of municipal storm drain inlets that may receive the facility's industrial stormwater discharges and authorized NSWDS (Section X.E.3.a)
Yes	Locations of stormwater collection and conveyance systems and associated points of discharge, and direction of flow (Section X.E.3.a)
Yes	Any structural control measures (that affect industrial stormwater discharges, authorized NSWDS, and run-on) (Section X.E.3.c)
Yes	All impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures (Section X.E.3.d)
Yes	Locations where materials are directly exposed to precipitation (Section X.E.3.e)
NA	Locations where significant spills or leaks (Section X.G.1.d of the General Permit) have occurred (Section X.E.3.e)
Yes	Areas of industrial activity subject to the General Permit (Section X.E.3.f)
Yes	All storage areas and storage tanks (Section X.E.3.f)
NA	Shipping and receiving areas (Section X.E.3.f)
Yes	Fueling areas (Section X.E.3.f)
Yes	Vehicle and equipment storage/maintenance areas (Section X.E.3.f)
Yes	Material handling and processing areas (Section X.E.3.f)
Yes	Waste treatment and disposal areas (Section X.E.3.f)
NA***	Dust or particulate generating areas
NA	Cleaning and material reuse areas (Section X.E.3.f)
Yes	Any other areas of industrial activity which may have potential pollutant sources (Section X.E.3.f)

\* Mining activities disturb soils that may create the potential for isolated areas of short term soil erosion. Given the dynamic nature of mining activities, it is not practical to accurately identify areas of soil erosion on the Site Map.

\*\* This facility complies with all applicable Air Pollution Control District rules for dust/particulate generation

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## Section 3:

# Best Management Practices

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### 3.1 Minimum Best Management Practices (Section X.H.1)

All minimum BMPs that are required by the General Permit and necessary to meet the facility conditions will be implemented. Guidance for BMP implementation is provided in the CASQA Stormwater BMP Handbook Portal: Industrial and Commercial Fact Sheets and the relevant fact sheets are included in Appendix G. Sections 3.1.1 through 3.1.5 list the requirements for each of these minimum BMPs. Minimum BMPs will be implemented for additional targeted industrial activities, equipment, and materials as necessary. If any of the required minimum BMPs are applicable but cannot be implemented, an explanation and alternative approach will be provided in the following sections.

Table 3.1 provides a list of the five minimum General Permit BMP elements that are included in the relevant BMP fact sheets and indicates which BMPs are implemented at the facility.

Employee Training, described in Section 3.1.6, and Quality Assurance and Record Keeping, described in Section 3.1.7, are additional minimum BMPs that will be implemented.

As required by the General Permit, a summary of all implemented BMPs is included in Section 3.3. The schedule for BMP implementation and the requirements for inspection and maintenance are contained in Section 4.

**Table 3.1: Minimum BMPs**

BMP Name	Addresses Minimum General Permit BMP Requirements					BMP to be Implemented?		
	Good Housekeeping	Preventative Maintenance	Spill and Leak Prevention and Response	Material Handling and Waste Management	Erosion and Sediment Control	YES	NO	Not Applicable
Non-Stormwater Discharges	✓		✓			Y		
Spill Prevention, Control, and Cleanup			✓			Y		
Vehicle and Equipment Fueling	✓	✓	✓	✓		Y		
Vehicle and Equipment Cleaning	✓	✓	✓	✓		Y		
Vehicle and Equipment Maintenance and Repair	✓	✓	✓	✓		Y		
Outdoor Loading and Unloading	✓		✓	✓		Y		
Outdoor Liquid Container Storage	✓	✓	✓	✓		Y		
Outdoor Equipment Operations	✓	✓	✓	✓		Y		
Outdoor Storage of Raw Materials	✓	✓	✓		✓	Y		
Waste Handling and Disposal	✓	✓	✓	✓		Y		
Safer Alternative Products							N	
Contaminated or Erodible Surfaces					✓	Y		
Building and Grounds Maintenance	✓		✓	✓		Y		
Building Repair, Remodeling, and Construction	✓		✓	✓	✓	Y		
Parking Area Maintenance	✓	✓	✓			Y		
Drainage System Maintenance	✓	✓	✓			Y		

**Table 3.1: Minimum BMPs**

BMP Name	Addresses Minimum General Permit BMP Requirements					BMP to be Implemented?		
	Good Housekeeping	Preventative Maintenance	Spill and Leak Prevention and Response	Material Handling and Waste Management	Erosion and Sediment Control	YES	NO	Not Applicable

Additional BMPs Implemented:


### **3.1.1 Good Housekeeping (Section X.H.1.a)**

The following good housekeeping measures will be implemented in accordance with the General Permit (Section X.H.1.a):

- Observe all outdoor areas associated with industrial activity including stormwater discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or stormwater run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials will be cleaned and disposed of properly;
- Minimize or prevent material tracking;
- Minimize dust generated from industrial materials or activities;
- Ensure that all facility areas impacted by rinse/wash waters are cleaned as soon as possible;
- Cover all stored industrial materials that can be readily mobilized by contact with stormwater;
- Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed via by the wind or contact with stormwater;
- Prevent disposal of any rinse/wash waters or industrial materials into the stormwater conveyance system;
- Minimize stormwater discharges from non-industrial areas (e.g., stormwater flows from employee parking area) that contact industrial areas of the facility; and
- Minimize authorized NSWDS from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the facility.

BMPs to be implemented are summarized in Table 3.1 and the BMP fact sheets are included in Appendix G.

### **3.1.2 Preventative Maintenance (Section X.H.1.b)**

The following preventative maintenance measures will be implemented in accordance with the General Permit (Section X.H.1.b):

- Identify all equipment and systems used outdoors that may spill or leak pollutants;
- Observe the identified equipment and systems to detect leaks, or identify conditions that may result in the development of leaks;
- Establish an appropriate schedule for maintenance of identified equipment and systems; and
- Establish procedures for prompt maintenance and repair of equipment, and maintenance of systems when conditions exist that may result in the development of spills or leaks.

Specific preventative maintenance BMPs to be implemented at the facility are provided in Table 3.1 and the BMP fact sheets are included in Appendix G.

### **3.1.2 Spill and Leak Prevention and Response (Section X.G.1.d and Section X.H.1.c)**

The following spill and leak prevention and response measures will be implemented in accordance with the General Permit (Section X.H.1.c):

- Establish procedures and/or controls to minimize spills and leaks;
- Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system. Spilled or leaked industrial materials will be cleaned promptly and disposed of properly;
- Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and
- Identify and train appropriate spill and leak response personnel.

Specific spill and leak prevention and response BMPs to be implemented at the Sacramento facility are provided in Table 3.1 and the BMP fact sheets are included in Appendix G.

### **3.1.3 Material Handling and Waste Management (Section X.G.1.b and Section X.H.1.d)**

The following material handling and waste management measures will be implemented in accordance with the General Permit (Section X.H.1.d):

- Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm event;
- Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with stormwater during handling;
- Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;
- Divert run-on and stormwater generated from within the facility away from all stockpiled materials (to the extent feasible);
- Clean all spills of industrial materials or wastes that occur during handling in accordance with the spill response procedures (Section X.H.1.c); and
- Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.

Specific material handling and waste management BMPs to be implemented at the Sacramento facility are provided in Table 3.1 and the BMP fact sheets are included in Appendix G.

### **3.1.4 Erosion and Sediment Controls (Section X.G.1.f and Section X.H.1.e)**

The following erosion and sediment control measures will be implemented in accordance with the General Permit (Section X.H.1.e):

- Implement effective wind erosion controls;
- Provide effective applied or vegetated stabilization for all disturbed soils and other erodible areas prior to a forecasted storm event (to the extent feasible);



- Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site;
- Divert run-on and stormwater generated from within the facility away from all erodible materials; and
- If sediment basins are implemented, any future basins will be designed to standards in accordance with Section X.H.6. of the General Permit

Specific erosion and sediment control BMPs to be implemented at the Sacramento facility are provided in Table 3.1 and the BMP fact sheets are included in Appendix G.

### **3.1.5 Employee Training Program (Section X.H.1.f)**

An employee training program will be implemented in accordance with the following requirements in the General Permit (Section X.H.1.f):

- Ensure that all team members implementing the various compliance activities of this SWPPP are properly trained in topics including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities;
- Prepare or acquire appropriate training manuals or training materials;
- Identify which personnel need to be trained, their responsibilities, and the type of training they will receive;
- Provide a training schedule; and
- Maintain documentation of all completed training classes and the personnel that received training in the SWPPP.

The Pollution Prevention Team will be trained in implementing the various compliance activities specified in this SWPPP, and documentation of training activities is retained in SWPPP Appendix C. To promote stormwater management awareness specific for this facility, refresher training will be provided on an annual basis.

Task specific training for all employees engaged in activities that have the potential to cause stormwater pollution will be conducted when new employees are hired and refresher training will be provided on an annual basis.

This facility has Baseline status and Baseline Training will be performed by a stormwater professional (CPSWQ/QSD). The certified stormwater professional will be responsible for providing information during training sessions and subsequently completing the training logs shown in Appendix C, which identifies the site-specific stormwater topics covered as well as the names of site personnel who attended the meeting. Each team member will be trained in the specific role they are responsible to undertake.

### **3.1.6 Quality Assurance and Record Keeping (Section X.H.1.g)**

The following quality assurance and record keeping activities will be performed in accordance with the requirements in the General Permit (Section X.H.1.g):

- Develop and implement management procedures to ensure that appropriate staff implements all elements of the SWPPP, including the Monitoring Implementation Plan (SWPPP Section 5);

- Develop a method of tracking and recording the implementation of BMPs identified in the SWPPP; and
- Maintain the BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five (5) years as required in the General Permit (Section XXI.J.4).

BMPs will be implemented according to the schedule and procedures presented in SWPPP Section 4. BMPs will be implemented by properly trained team members as documented in Appendix C.

Visual observations will be performed as described in SWPPP Section 5.5. Potential pollutant sources and BMPs will be inspected during visual observations, and new BMPs will be implemented as needed. Records of visual observations of BMP implementation will be retained in Appendix H.

The tracking of the implementation, maintenance, and installation of BMPs will be recorded on a BMP log. On an annual basis, this SWPPP will be amended with new BMPs, procedures, and implementation schedule accordingly. The SWPPP updates will be recorded in the attached SWPPP amendment log.

Paper or electronic records of documents required by this SWPPP will be retained for a minimum of five (5) years from the date generated or date submitted, whichever is later, for the following items:

- Employee Training Records;
- BMP Implementation Records;
- Spill and Clean-up Related Records;
- Records of Monitoring Information
  - The date, exact location, and time of sampling or measurement;
  - The date(s) analyses were performed;
  - The individual(s) that performed the analyses;
  - The analytical techniques or methods used; and
  - The results of such analyses;
- Level 1 ERA Reports;
- Level 2 ERA Action Plan;
- Level 2 ERA Technical Report; and
- Annual Reports.

## **3.2 Advanced BMPs (Section X.H.2)**

### **3.2.1 Exposure Minimization BMPs (Section X.H.2.b.i)**

Storm resistant shelters are installed onsite to prevent the contact of stormwater with industrial activities and material. The locations of these shelters and associated industrial activities and materials are presented in Table 3.2.

**Table 3.2 Exposure Minimization BMPs**

Shelter Location/Description	Associated Industrial Activity/Material
Drainage Area 4	Material storage area, empty drums, bone yard
Drainage Area 4/ overhead structure, roofed building/shop and maintenance areas, covers over concrete and asphalt admixtures and coloring agents	Vehicle maintenance, equipment maintenance, Asphalt and concrete batching
Drainage Area 4	Equipment storage and light maintenance

Additional storm resistant shelters are not currently being used at the Sacramento Site. It is not feasible or practical to attempt covering the large areas of activity such as stockpiles, aggregate processing, concrete and asphalt batching and materials used in the production of these products.

### **3.2.2 Stormwater Containment and Discharge Reduction BMPs (Section X.H.2.b.ii)**

Stormwater containment and discharge reduction BMPs include BMPs that divert, reuse, contain, or reduce the volume of stormwater runoff. Specific stormwater containment and discharge reduction BMPs to be implemented at the Sacramento facility are provided in Table 3.3 and the BMP fact sheets are included in Appendix G.

**Table 3.3: Stormwater Containment and Discharge Reduction BMPs**

BMP Name	Meets Advanced BMP Requirement	BMP Used		BMP Location, Runoff Sources, and Potential Pollutants (Table 2.1)
		YES	NO	
Infiltration Trench	✓		N	
Infiltration Basin	✓		N	
Harvest and Reuse	✓	Y		Drainage Area 2 (Storm Water flows in and pumped up for use in Aggregate Plant and Clarifier)
Wet Pond	✓		N	
Constructed Wetland	✓		N	
Extended Detention Basin	✓	Y		Drainage Area 11
Vegetated Swale			N	
Vegetated Buffer Strip			N	
Bioretention	✓		N	
Multiple Systems	✓		N	
Biotreatment			N	
Wet Vault			N	
<b>Alternate BMPs Used:</b>				<b>If used, state reason:</b>

### **3.2.3 Treatment Control BMPs (Section X.H.2.b.iii)**

Treatment control BMPs include one or more mechanical, chemical, biologic, physical, or any other treatment process technology and is sized to meet the treatment control design storm standard. Specific treatment control BMPs to be implemented at the Sacramento facility are provided in Table 3.4 and the BMP fact sheets are included in Appendix G.

### **3.2.4 Other Advanced BMPs (Section X.G.2.b and Section X.H.2.b.iv)**

There are not currently any additional or Advanced BMPs being implemented at the Site.

**Table 3.4: Treatment Control BMPs**

BMP Name	Addresses O&M for Advanced BMPs	BMP Used		BMP Location, Runoff Sources, and Potential Pollutants
		YES	NO	
Infiltration Trench	✓		N	
Infiltration Basin	✓		N	
Harvest and Reuse		Y		Drainage Area 2 (Storm Water flows in and pumped up for use in Aggregate Plant and Clarifier)
Wet Pond	✓		N	
Constructed Wetland	✓		N	
Extended Detention Basin	✓	Y		Drainage Area 11
Vegetated Swale	✓		N	
Vegetated Buffer Strip	✓		N	
Bioretention	✓		N	
Media Filter	✓		N	
Water Quality Inlet	✓		N	
Multiple Systems	✓		N	
Biotreatment	✓		N	
Stormwater Filter	✓		N	
Wet Vault	✓		N	
Gravity Separator	✓		N	
Drain Inlet Insert	✓		N	
<b>Alternate BMPs Used:</b>				<b>If used, state reason:</b>

### **3.3 BMP Summary Table (Section X.H.5)**

Table 3.5 summarizes the industrial activities, materials, pollutant sources, potential pollutants, and BMPs being implemented to prevent discharge of pollutants in stormwater runoff.

Descriptions of the specific BMPs being implemented were provided in previous subsections. Implementation and maintenance of BMPs is described in Section 4.

**Table 3.5: BMP Summary Table**

Industrial Activity/Material	Pollutant Sources	Potential Pollutants	BMPs Implemented	Drainage Area/Basin Number	Required Equipment and Tools
Storage and processing of aggregate, materials	Sand, gravel, recycled concrete base, and admixtures	Sediment	Storage and processing of aggregate, materials for concrete and asphalt production	Area 4	Water Truck Broom, dustpan, covered trash bin. Spill Kit Bulldozer for berm maintenance
Equipment and vehicle maintenance	Diesel fuel, solvents, oils, antifreeze, hydraulic fluids	Oil and Grease Hydrocarbons Gross Pollutants Trace Metals	Good Housekeeping. Spill prevention and maintenance. Berms to direct surface flows to basins. Secondary containment. Protective covers over maintenance activity	Area 4	Broom, dustpan, covered trash bin. Spill Kit Bulldozer for berm maintenance



## Section 4:

# Best Management Practices Implementation



## 4.1 BMP Implementation Schedule (Section X.H.4)

The schedule for implementing all minimum and advanced BMPs is presented in Table 4.1. BMPs will be implemented as necessary to reduce or prevent transport of industrial pollutants in stormwater runoff. Slight modifications to this schedule may be necessary to achieve this goal. Records of BMP implementation will be included in Appendix H.

**Table 4.1: BMP Implementation Schedule**

Industrial Activity/ Material and Location	BMP Description	Person Responsible for Implementing BMP	Date and Time of Implementation	Implementation Duration
Storage and processing of aggregate materials	Good Housekeeping. Spill prevention and maintenance. Berms to direct surface flows to basins. Secondary containment.	Rob Hostettler	Currently installed and operational	Ongoing, including inspections and maintenance
Equipment and vehicle maintenance	Good Housekeeping. Spill prevention and maintenance. Berms to direct surface flows to basins. Secondary containment. Protective covers over maintenance activity	Rob Hostettler	Currently installed and operational	Ongoing, including inspections and maintenance

## 4.2 BMP Inspection and Maintenance( Section X.H.4.a.)

The General Permit requires, at a minimum, monthly observations of BMPs, along with inspections during sampling events. Monthly observations will be conducted during daylight hours of scheduled facility operating hours and on days without precipitation. A BMP

observation checklist must be filled out for and maintained on-site with the SWPPP. The observation checklist includes the necessary information as discussed in Section 5.5. A blank observation checklist can be found in Monitoring Implementation Plan Attachment 3, and completed checklists will be kept in Appendix H or in an accompanying file/binder that is referenced in the SWPPP and readily accessible on site.

BMPs will be maintained regularly to ensure proper and effective functionality. If necessary, corrective actions will be implemented within 72 hours of identified deficiencies and associated amendments to the SWPPP will be prepared and documented.

Specific guidance for maintenance, observation, and repair of advanced BMPs can be found in the BMP Factsheets in Appendix G.

### **4.3 Temporary Suspension of Industrial Activities (TSIA) BMPs**

For facilities that plan to temporarily suspend industrial activities for ten (10) or more consecutive calendar days during a reporting year, the Discharger may also suspend monitoring if it is infeasible to conduct monitoring while industrial activities are suspended (e.g., the facility is not staffed, or the facility is remote or inaccessible) and the facility has been stabilized.

This Site is not under the TSIA.

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## Section 5:

# Monitoring Implementation Plan (Section X.I)

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### 5.1 Purpose

This Monitoring Implementation Plan was developed to address the following objectives:

1. Identify the monitoring team;
2. Describe weather and rain event tracking procedures;
3. Describe discharge locations, visual observations procedures
4. Describe visual observation response procedures;
5. Describe sample collection and handling procedures;
6. Describe field instrumentation calibration instructions and intervals;
7. Provide justification for alternative discharge locations, Representative Sample Reduction (RSR), and Qualified Combined Samples (QCS), as applicable; and
8. Provide an example Chain of Custody (COC) form to be used when handling and shipping water quality samples to the laboratory.

### 5.2 Weather and Rain Event Tracking

Stormwater sampling and visual observations will be conducted during Qualified Storm Events (QSEs). A QSE is defined as any precipitation event that produces a discharge for at least one drainage area and is preceded by 48 hours with no discharge from any drainage area. Weather and precipitation forecasts will be tracked to identify potential QSEs.

When targeting a QSE for stormwater sampling, the appropriate team member will weekly consult the National Oceanographic and Atmospheric Administration (NOAA) for weather forecasts. These forecasts can be obtained at <http://www.srh.noaa.gov/>. If weekly forecasts indicate potential for significant precipitation, the weather forecast will be closely monitored during the 48 hours preceding the event. Weather reports with precipitation data should be printed and maintained with the SWPPP in Monitoring Implementation Plan Attachment 1 “Weather Reports” to document precipitation totals and antecedent conditions.

### 5.3 Monitoring Locations (Section X.E.3.b)

Monitoring locations are shown on the Site Map(s) in Appendix A. Monitoring locations are described in Section 5.6.

Whenever changes in facility operations might affect the appropriateness of sampling locations, the sampling locations will be revised accordingly. All such revisions will be implemented as soon as feasible and the SWPPP amended.

## **5.4 Sample Collection and Visual Observation Exceptions (Section XI.C.6)**

The collection of samples or conduct visual observations is not required under the following conditions:

- During dangerous weather conditions such as flooding and electrical storms.
- Outside of scheduled site business hours.

Scheduled site business hours are presented in Section 2.2.

If monitoring (visual observations or sample collection) of the site is unsafe because of the dangerous conditions noted above then the appropriate team member will document the conditions for why an exception to performing the monitoring was necessary. The exception documentation will be filed in Monitoring Implementation Plan Attachment 2 “Monitoring Records.”

## **5.5 Visual Observation Procedures (Section X.I.2)**

Visual monitoring includes observations of drainage areas, BMPs, and discharge locations.

- Observations of BMPs are required to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended.
- Observations of the drainage areas are required to identify any spills, leaks, uncontrolled pollutant sources, and non-stormwater discharges.
- Observations of discharge locations are required to identify the presence of visible pollutants in stormwater discharged from the facility.

Visual observations will be performed at least once every calendar month during dry conditions. Visual observations will also be performed during stormwater sampling events when discharge is occurring.

### **5.5.1 Monthly Visual Observations (XI.A.1)**

Monthly visual observations are necessary to document the presence of and to identify the source of any pollutants and non-stormwater flows. These should consist of observations of the outdoor facility operations, BMPs, and NSWDC observations.

In the event that monthly visual observations are not performed, an explanation must be provided in the annual report.

#### **5.5.1.1 Outdoor Facility Operations Observations (Section XI.A.1.a.iii)**

Observe potential sources of industrial pollutants including industrial equipment and storage areas, and outdoor industrial activities. Record observations of:

- Spills or leaks; and
- Uncontrolled pollutant sources

#### **5.5.1.2 BMP Observations (Section XI.A.1.a.iii)**

Observe BMPs to identify and record:

- BMPs that are properly implemented;

- BMPs that need maintenance to operate effectively;
- BMPs that have failed; or
- BMPs that could fail to operate as intended.

#### **5.5.1.3 Non-Stormwater Discharge Observations (Section XI.A.1.a.ii)**

Observe each drainage area for the presence of or indications of prior unauthorized and authorized non-stormwater discharges. Record:

- Presence or evidence of any non-stormwater discharge (authorized or unauthorized);
- Pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.); and
- Source of discharge.

For authorized non-stormwater discharges, also document whether BMPs are in place and are functioning to prevent contact with materials or equipment that could introduce pollutants

#### **5.5.2 Sampling Event Visual Observations (Section XI.A.2)**

Sampling event visual observations evaluate the general appearance of the stormwater as an indicator of potential pollutants. These observations will be conducted at the same time sampling occurs at the discharge locations identified in Section 5.6.2. At each discharge location where a sample is obtained, record observations of:

- Floating and suspended materials;
- Oil and grease;
- Discoloration;
- Turbidity;
- Odors; and
- Trash.

When pollutants are observed in the discharged stormwater, follow-up observations of the drainage area will be conducted to identify the probable source of the pollutants.

In the event that a discharge location is not visually observed during the sampling event, the location of the discharge and reasoning for not obtaining observations must be recorded.

#### **5.5.3 Visual Monitoring Procedures (Section X.I.1)**

Visual monitoring will be conducted by trained team members. The name(s) and contact number(s) of the site visual monitoring personnel are listed below and their training qualifications are provided in Appendix C.

Assigned Inspector: Rob Hostettler                      Contact phone: (916) 531-5436

Alternate Inspector: Chris Villarreal                      Contact phone: (916) 682-2850

Visual observations will be documented on the *Visual Observation Log* (see Monitoring Implementation Plan Attachment 3 “Example Forms”). Visual observations will be supplemented with a site specific BMP inspection checklist.

The completed logs and checklists will be kept in Monitoring Implementation Plan Attachment 2 “Monitoring Records”.

### 5.5.4 Visual Monitoring Follow-Up and Reporting (Section XI.A)

Correction of deficiencies identified by the observations, including required repairs or maintenance of BMPs, will be initiated and completed as soon as possible. Response actions will include the following:

- Report observations to the Pollution Prevention Team Leader or designated individual;
- Identify and implement appropriate response actions;
- Determine if SWPPP update is needed;
- Verify completion of response actions; and
- Document response actions.

If identified deficiencies require design changes, including additional BMPs, the implementation of changes will be completed as soon as possible, and the SWPPP will be amended to reflect the changes.

BMP deficiencies identified in site observation reports and correction of deficiencies will be tracked on *Visual Observation and BMP Inspection Log* and will be retained in Monitoring Implementation Plan Attachment 3.

Results of visual monitoring must be summarized and reported in the Annual Report.

### 5.5.5 Visual Monitoring Locations (Section XI.A)

The observations identified in Sections 5.5.1 and 5.5.2 will be conducted at the locations identified in this section.

Visual monitoring locations are shown on the Site Map(s) in SWPPP Appendix A.

There are 17 drainage area(s) onsite. Drainage area(s) are shown on the Site Map(s) in Appendix A and are identified in Table 5.1.

**Table 5.1: Facility Drainage Areas**

Location Identifier	Drainage Area Name
DA-1	Drainage Area 1
DA-2	Drainage Area 2
DA-3	Drainage Area 3
DA-4	Drainage Area 4
DA-5	Drainage Area 5
DA-6	Drainage Area 6
DA-7	Drainage Area 7
DA-8	Drainage Area 8
DA-9	Drainage Area 9
DA-10	Drainage Area 10
DA-11	Drainage Area 11
DA-12	Drainage Area 12

**Table 5.1: Facility Drainage Areas**

Location Identifier	Drainage Area Name
DA-13	Drainage Area 13
DA-14	Drainage Area 14
DA-15	Drainage Area 15
DA-16	Drainage Area 16
DA-17	Drainage Area 17

There is 1 discharge location onsite. Site stormwater discharge location is shown on the Site Map(s) in Appendix A and Table 5.2 identifies each stormwater discharge location.

**Table 5.2: Stormwater Discharge Locations**

Location Identifier	Discharge Location (Note Drainage Area that the discharge location drains)
DP-1	Drainage Area 5

There is 1 stormwater storage, sedimentation basins, or containment areas onsite. Stormwater storage or containment areas are shown on the Site Map(s) in Appendix A and Table 5.3 identifies each stormwater storage or containment area by location.

**Table 5.3: Stormwater Storage and Containment Areas**

Location Identifier	Description of Containment
Basin 1	Drainage Area 11, unlined detention basin

## **5.6 Sampling and Analysis Procedures (Section XI.B)**

This section describes the methods and procedures that will be followed for stormwater sampling and analysis. It contains information for sampling schedule, sampling locations, monitoring preparation, analytical constituents, sample collection, sample analysis, and data evaluation and reporting.

### **5.6.1 Sampling Schedule (Section XI.B.)**

Stormwater samples at each discharge location will be collected and analyzed from two (2) QSEs within the first half of each reporting year (July 1 to December 31), and two (2) QSEs within the second half of each reporting year (January 1 to June 30).

A QSE is a precipitation event that:

- Produces a discharge for at least one drainage area; and
- Is preceded by 48 hours with no discharge from any drainage area.

### **5.6.2 Sampling Locations (Section XI.B.4)**

Sampling locations include all locations where stormwater is discharged from the site. Discharge locations are shown on the Site Map(s) in Appendix A and are included in Table 5.4.

A total of 1 discharge location has been identified on the project site for the collection of stormwater runoff samples.



**Table 5.4: Sample Locations**

Sample Location Number	Sample Location Description	Sample Location Latitude and Longitude (Decimal Degrees)
DP-1	Discharge Point - 1	38°29'48.75 121°15'03.93

### 5.6.3 Monitoring Preparation

Samples on the project site will be collected by the following sampling personnel:

Name/Telephone Number: Rob Hostettler (916) 531-5436

Alternate(s)/Telephone Number: Chris Villarreal (916) 682-2850

An adequate stock of monitoring supplies and equipment for sampling will be available onsite 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 facility will include, but are not limited to: clean powder-free nitrile gloves; sample collection equipment; coolers; appropriate number and volume of sample containers; identification labels; re-sealable storage bags; paper towels; personal rain gear; ice; and *Sampling Field Log Sheets* and Chain of Custody (CoC) forms, which are provided in Monitoring Implementation Plan Attachment 3 “Example Forms”.

### 5.6.4 Analytical Constituents (Section X.G.2.d)

Table 5.5 identifies the constituents identified for sampling and analysis.

**Table 5.5: Analytical Constituents**

Constituent	Reason
pH	Basic required constituent
Oil and grease	Basic required constituent
Total Suspended Solids	Basic required constituent
Nitrate + Nitrite	SIC Code constituent (144x Sand and Gravel)

### 5.6.5 Sample Collection (Section XI.B.5)

Samples of discharge will be collected at the designated sampling locations shown on the Site Map(s) in Appendix A. Samples from each discharge location will be collected within four (4) hours of:

- The start of the discharge; or
- The start of facility operations if the QSE occurs within the previous 12 hour period.

Sample collection is required during scheduled facility operating hours and when sampling conditions are safe.

Grab samples will be collected and preserved in accordance with the methods identified in Table 5.6, “Sample Collection, Preservation and Analysis for Water Quality Samples” provided in Section 5.6.6. Only team members properly trained in water quality sampling will collect samples.

The facility is not subject to Subchapter N ELGs mandating pH analysis and has not entered Level 1 Status for pH. Grab samples will be collected and analyzed for pH using litmus paper or other equivalent pH test kits. pH analysis will be performed as soon as practicable, but no later than 15 minutes after sample collection.

Samples from different discharge locations will not be combined or composited prior to shipment to the analytical laboratory. Sample collection and handling requirements are described in Section 5.8.

### 5.6.6 Sample Analysis (Section XI.B.6)

Samples will be analyzed using the analytical methods identified in the Table 5.6.

Samples will be analyzed by:

Laboratory Name: TestAmerica  
Street Address: 17461 Derian Avenue, Suite 100  
City, State Zip: Irvine, CA 92614  
Telephone Number: (949) 261-1022  
Point of Contact: Lena Davidkova  
ELAP Certification No.: 2706

Samples will be delivered to the laboratory by:

Facility Personnel:	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
Picked up by Laboratory Courier:	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
Shipped:	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No

**Table 5.6: Sample Collection, Preservation and Analysis for Water Quality Samples**

Constituent	Analytical Method	Minimum Sample Volume	Sample Containers	Sample Preservation	Reporting Limit	Maximum Holding Time
Total Suspended Solids (TSS)	EPA 160.2	250 mL	250 mL HDPE	Cool to 4 degrees C	1 mg/L	7 days
pH	EPA 9040	60 mL	60 mL HDPE	Cool to 4 degrees C	NA	15 minutes
Oil and Grease (O&G)	EPA 413.2	500 mL	500 mL amber glass	H <sub>2</sub> SO <sub>4</sub> (sulfuric acid) Cool to 4 degrees C	1 mg/L	28 days
Nitrate + Nitrite	EPA 300.0	125 mL	125 mL HDPE	Cool to 4 degrees C	0.01 mg/L	48 hours

**Notes:***HNO<sub>3</sub>*

### **5.6.7 Data Evaluation and Reporting (Section XI.B.11)**

The designated member of the Pollution Prevention Team will complete an evaluation of the water quality sample analytical results.

All sampling and analytical results for all individual samples will be submitted via SMARTS within 30 days of obtaining all results for each sampling event.

The method detection limit will be provided when an analytical result from samples taken is reported by the laboratory as a “non-detect” or less than the method detection limit. A value of zero will not be reported.

Analytical results that are reported by the laboratory as below the minimum level (often referred to as the reporting limit) but above the method detection limit will be provided.

Reported analytical results will be averaged automatically by SMARTS at the end of the reporting year. For any calculations required by the General Permit a value of zero shall be used, all effluent sampling analytical results that are reported by the laboratory as “non-detect” or less than the Method Detection Limit (MDL).

## **5.7 Training of Sampling Personnel (Section IX)**

Sampling personnel will be trained to collect, maintain, and ship samples in accordance with the General Permit and this SWPPP. Training records of designated sampling personnel are provided in Appendix C.

The stormwater sampler(s) and alternate(s) have received the following stormwater sampling training:

Name	Training
Rob Hostettler	Annual Stormwater Training
Chris Villarreal	Annual Stormwater Training
Glen Phillips	Annual Stormwater Training

## **5.8 Sample Collection and Handling (Section XI.B)**

### **5.8.1 Sample Collection (Section XI.B.5)**

Samples will be collected at the designated sampling locations shown on the Site Map(s) and listed in the preceding sections. Samples will be collected, maintained and shipped in accordance with the requirements in the following sections. If sedimentation basins or infiltration basins overflow during wet weather events, samples will be collected from the discharge of each basin which discharges from the facility.

Grab samples will be collected and preserved in accordance with the methods identified in preceding sections.

To maintain sample integrity and prevent cross-contamination, sample collection personnel will follow the protocols below.

- Collect samples (for laboratory analysis) only in analytical laboratory-provided sample containers;
- Wear clean, powder-free nitrile gloves when collecting samples;
- Change gloves whenever something not known to be clean has been touched;
- Change gloves between sites;
- Decontaminate all equipment (e.g. bucket, tubing) prior to sample collection using a trisodium phosphate water wash, distilled water rinse, and final rinse with distilled water. (Dispose of wash and rinse water appropriately, i.e., do not discharge to storm drain or receiving water). Do not decontaminate laboratory provided sample containers;
- Do not smoke during sampling events;
- Never sample near a running vehicle;
- Do not park vehicles in the immediate sample collection area (even non-running vehicles);
- Do not eat or drink during sample collection; and
- Do not breathe, sneeze, or cough in the direction of an open sample container.

The most important aspect of grab sampling is to collect a sample that represents the entire runoff stream. Typically, samples are collected by dipping the collection container in the runoff flow paths and streams as noted below.

- For small streams and flow paths, simply dip the bottle facing upstream until full.
- For larger stream that can be safely accessed, collect a sample in the middle of the flow stream by directly dipping the mouth of the bottle. Once again making sure that the opening of the bottle is facing upstream as to avoid any contamination by the sampler.
- For larger streams that cannot be safely waded, pole-samplers may be needed to safely access the representative flow.
- Avoid collecting samples from ponded, sluggish or stagnant water.
- Avoid collecting samples directly downstream from a bridge as the samples can be affected by the bridge structure or runoff from the road surface.
- Do not stand upstream of the sampling point within the flow path.

*Note, that depending upon the specific analytical test, some containers may contain preservatives. These containers should never be dipped into the stream, but filled indirectly from the collection container.*

### **5.8.2 Sample Handling**

Field pH measurements must be collected immediately. Do not store pH samples for later measurement.

Samples for laboratory analysis must be handled as follows. Immediately following sample collection:

- Cap sample containers;
- Complete sample container labels;
- Sealed containers in a re-sealable storage bag;
- Place sample containers into an ice-chilled cooler;
- Document sample information on the *Sampling Field Log Sheet*; and

- Complete the CoC.

All samples for laboratory analysis must be maintained between 0-6 degrees Celsius during delivery to the laboratory. Samples must be kept on ice, or refrigerated, from sample collection through delivery to the laboratory. Place samples to be shipped inside coolers with ice. Make sure the sample bottles are well packaged to prevent breakage and secure cooler lids with packaging tape.

Ship samples that will be laboratory analyzed to the analytical laboratory right away. Hold times are measured from the time the sample is collected to the time the sample is analyzed. The General Permit requires that samples be received by the analytical laboratory within 48 hours of the physical sampling (unless required sooner by the analytical laboratory).

### 5.8.3 Sample Documentation Procedures

All original data documented on sample bottle identification labels, *Sampling Log*, and CoCs will be recorded using waterproof ink. If an error is made on a document, sampling personnel 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.

Duplicate samples will be identified consistent with the numbering system for other samples to prevent the laboratory from identifying duplicate samples. Duplicate samples will be identified in the *Sampling Log*.

Sample documentation procedures include the following:

Sample Bottle Identification Labels: Sampling personnel will attach an identification label to each sample bottle. Sample identification will uniquely identify each sample location. A unique sample identification number for each collected sample is necessary to avoid confusion of the sampling results. Storm water samples will be labeled with a simple sample identification number; as an example “DP-01-mmddyyyy”:

- DP stands for discharge point.
- 01 is the location designation.
- mmddyyyy is the month, day, and year of the sampling.

The sample date, time, sampler’s initials, and company name will also be written on each sample label.

Field Log Sheets: Sampling personnel will complete the *Effluent Sampling Field Log Sheet* and *Receiving Water Sampling Field Log Sheet* for each sampling event, as appropriate.

Chain of Custody: Sampling personnel will complete the CoC for each sampling event for which samples are collected for laboratory analysis. The sampler will sign the CoC when the sample(s) is turned over to the testing laboratory or courier.

## 5.9 Quality Assurance and Quality Control (Section X.H.1.g)

An effective Quality Assurance and Quality Control (QA/QC) plan will be implemented as part of the IMP to ensure that analytical data can be used with confidence. QA/QC procedures to be initiated include the following:

- Field logs;

- Clean sampling techniques;
- CoCs;
- QA/QC Samples; and
- Data verification.

Each of these procedures is discussed in more detail in the following sections.

### **5.9.1 Field Logs**

The purpose of field logs is to record sampling information and field observations during monitoring that may explain any uncharacteristic analytical results. Sampling information to be included in the field log include the date and time of water quality sample collection, sampling personnel, sample container identification numbers, and types of samples that were collected. Field observations should be noted in the field log for any abnormalities at the sampling location (color, odor, BMPs, etc.). Field measurements for pH and turbidity should also be recorded in the field log. A Visual Inspection Field Log, an Effluent Sampling Field Log Sheet are included in MIP Attachment 3 “Example Forms”.

### **5.9.2 Clean Sampling Techniques**

Clean sampling techniques involve the use of certified clean containers for sample collection and clean powder-free nitrile gloves during sample collection and handling. As discussed in Section 6.8, adoption of a clean sampling approach will minimize the chance of field contamination and questionable data results.

### **5.9.3 Chain of Custody (Section X.I.5)**

The sample CoC is an important documentation step that tracks samples from collection through analysis to ensure the validity of the sample. Sample CoC procedures include the following:

- Proper labeling of samples;
- Use of CoC forms for all samples; and
- Prompt sample delivery to the analytical laboratory.

Analytical laboratories usually provide CoC forms to be filled out for sample containers. An example CoC is included in Monitoring Implementation Plan Attachment 3 “Example Forms”.



## 5.9.4 QA/QC Samples

QA/QC samples provide an indication of the accuracy and precision of the sample collection; sample handling; field measurements; and analytical laboratory methods. Only Field Duplicate samples will be collected as QA/QC samples for this project:

- ☐ Field Duplicates at a frequency of 1 duplicate per sample event  
(Required for all sampling plans with field measurements or laboratory analysis)

### 5.9.4.1 Field Duplicates

Field duplicates provide verification of laboratory or field analysis and sample collection. Duplicate samples will be collected, handled, and analyzed using the same protocols as primary samples. The sample location where field duplicates are collected will be randomly selected from the discharge locations. Duplicate samples will be collected as a split of the primary sample. Duplicate samples will not influence any evaluations or conclusion.

### 5.9.4.2 Equipment Blanks

Equipment blanks provide verification that equipment has not introduced a pollutant into the sample. Equipment blanks are typically collected when:

- New equipment is used;
- Equipment that has been cleaned after use at a contaminated site;
- Equipment that is not dedicated for surface water sampling is used; or
- Whenever a new lot of filters is used when sampling metals.

### 5.9.4.3 Field Blanks

Field blanks assess potential sample contamination levels that occur during field sampling activities. De-ionized water field blanks are taken to the field, transferred to the appropriate container, and treated the same as the corresponding sample type during the course of a sampling event.

### 5.9.4.4 Travel Blanks

Travel blanks assess the potential for cross-contamination of volatile constituents between sample containers during shipment from the field to the laboratory. De-ionized water blanks are taken along for the trip and held unopened in the same cooler with the VOC samples.

## 5.9.5 Data Verification

After results are received from the analytical laboratory, the discharger will verify the data to ensure that it is complete, accurate, and the appropriate QA/QC requirements were met. Data must be verified as soon as the data reports are received. Data verification will include:

- Check the CoC and laboratory reports.  
*Make sure all requested analyses were performed and all samples are accounted for in the reports.*
- Check laboratory reports to make sure hold times were met and that the reporting levels meet or are lower than the reporting levels agreed to in the contract.

- Check data for outlier values and follow up with the laboratory.  
*Occasionally typographical errors, unit reporting errors, or incomplete results are reported and should be easily detected. These errors need to be identified, clarified, and corrected quickly by the laboratory. Especially note data that is an order of magnitude or more different than similar locations, or is inconsistent with previous data from the same location.*
- Check laboratory QA/QC results.  
*EPA establishes QA/QC checks and acceptable criteria for laboratory analyses. These data are typically reported along with the sample results. Evaluate the reported QA/QC data to check for contamination (method, field, and equipment blanks), precision (laboratory matrix spike duplicates), and accuracy (matrix spikes and laboratory control samples). When QA/QC checks are outside acceptable ranges, the laboratory must flag the data, and usually provides an explanation of the potential impact to the sample results.*
- Check the data set for outlier values and accordingly, confirm results and re-analyze samples where appropriate.  
*Sample re-analysis should only be undertaken when it appears that some part of the QA/QC resulted in a value out of the accepted range. Sample results may not be discounted unless the analytical laboratory identifies the required QA/QC criteria were not met and confirms this in writing.*

Field data including pH measurements and visual observations must be verified as soon as the Visual Observation and Sampling Logs are received, typically at the end of the monitoring event. Field data verification will include:

- Check logs to make sure all required measurements were completed and appropriately documented;
- Check reported values that appear out of the typical range or inconsistent; Follow-up immediately to identify potential reporting or equipment problems, if appropriate, recalibrate equipment after sampling;
- Verify equipment calibrations;
- Review observations noted on the logs; and
- Review notations of any errors and actions taken to correct the equipment or recording errors.

## 5.10 Records Retention (XXI.J.4)

Records of stormwater monitoring information and copies of reports (including Annual Reports) must be retained for a period of at least five (5) years from date of submittal or longer if required by the Regional Water Board.

Results of visual observations, field measurements, and laboratory analyses must be kept in the SWPPP along with CoCs, and other documentation related to the monitoring.

Records to be retained include:

- The date, place, and time of inspections, sampling, visual observations, and/or measurements, including precipitation;
- The individual(s) who performed the inspections, sampling, visual observation, and/or field measurements;
- The date and approximate time of field measurements and laboratory analyses;
- The individual(s) who performed the laboratory analyses;
- A summary of all analytical results, the method detection limits and reporting limits, and the analytical techniques or methods used;
- Weather reports;
- QA/QC records and results;
- Calibration records;
- Visual observation and sample collection exception records; and
- The records of any corrective actions and follow-up activities that resulted from analytical results, visual observations, or inspections.

## Monitoring Implementation Plan Attachment 1: Weather Reports

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Place printed weather forecasts and precipitation data in this Attachment.

## Monitoring Implementation Plan Attachment 2: Monitoring Records (Section XXI.J)

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Place Visual Observations Logs, and Sampling Logs, and Laboratory Reports in this Attachment or describe where they are maintained.

## Monitoring Implementation Plan Attachment 3: Forms (Section X.I.5)

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Place forms and check lists (e.g., visual observation logs, sampling logs, chain of custody, etc.) in this Attachment.

<b>Visual Observation and BMP Inspection Log - Monthly</b>				
Date and Time of Inspection:			Report Date:	
Facility Name: Sacramento				
<b>Part I. Observations</b>				
Antecedent Conditions (last 48 hours):			Weather:	
Precipitation Total:			Predicted % chance of rain:	
Estimate storm beginning: _____	Estimate storm duration: _____	Estimate time since last storm: _____	Rain gauge reading: _____	
(date and time)	(hours)	(days or hours)	(inches)	
Runoff Event Observations (for non-sampled events)				
Observations: Location and Drainage Area (DA) to identify probable cause				
Odors	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Drainage Area:	Observations:
Floating material	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Drainage Area:	Observations:
Suspended material	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Drainage Area:	Observations:
Sheen	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Drainage Area:	Observations:
Discolorations	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Drainage Area:	Observations:
Turbidity	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Drainage Area:	Observations:
Estimate time since last runoff from any drainage area: (days or hours)				
Were any authorized non-stormwater discharges observed?			Yes <input type="checkbox"/>	No <input type="checkbox"/>
Were any <u>unauthorized</u> non-stormwater discharges observed?			Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes to either, identify source:				
Outdoor Industrial Equipment and Storage Area Observations				
Drainage Area 1:	Were any deficiencies or any other potential source of industrial pollutants observed? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Drainage Area 2:	Were any deficiencies or any other potential source of industrial pollutants observed? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Drainage Area 3:	Were any deficiencies or any other potential source of industrial pollutants observed? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Drainage Area 4:	Were any deficiencies or any other potential source of industrial pollutants observed? Yes <input type="checkbox"/> No <input type="checkbox"/>			

## Visual Observation and BMP Inspection Log - Monthly

Drainage Area 5:	Were any deficiencies or any other potential source of industrial pollutants observed? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If yes to any, describe:			
Exception Documentation (explanation required if inspection could not be conducted)			
<b>Part II. BMP Observations</b>			
Minimum BMPs (list and inspect all BMPs implemented)	Failures or Other Deficiencies (Yes, No, N/A)	Action Required (Yes/No)	Action Implemented (Date)
Good Housekeeping			
Preventative Maintenance			
Spill and Leak Prevention and Response			
Materials Handling and Waste Management			



<b>Visual Observation and BMP Inspection Log - Monthly</b>			
Minimum BMPs (list and inspect all BMPs implemented)	Failures or Other Deficiencies (Yes, No, N/A)	Action Required (Yes/No)	Action Implemented (Date)
<b>Erosion and Sediment Controls</b>			
<b>Advanced BMPs (list and inspect all BMPs implemented)</b>			
	Failures or Other Deficiencies (Yes, No, N/A)	Action Required (Yes/No)	Action Implemented (Date)
<b>Exposure Minimization BMPs</b>			
<b>Stormwater Containment and Discharge Reduction BMPs</b>			
<b>Treatment control BMPs</b>			

<b>Visual Observation and BMP Inspection Log - Monthly</b>			
Minimum BMPs (list and inspect all BMPs implemented)	Failures or Other Deficiencies (Yes, No, N/A)	Action Required (Yes/No)	Action Implemented (Date)
<b>Other Advanced BMPs</b>			
<b>Inspector Information</b>			
Inspector Name:		Inspector Title:	
Signature:		Date:	

Sampling Log		
Facility Name: Sacramento Aggregates, Sands and Gravels	Date:	Time Start:
Sampler Name:		
Field Meter Calibration		
pH Meter ID No./Description:		
Calibration Date/Time:		
Field pH Measurements		
Discharge Location Identifier	pH	Time
Samples Collected		
Discharge Location Identifier	Constituent	Time
	Oil and Grease	
	Total Suspended Solids	
Additional Sampling Notes:		
Time End:		

CHAIN-OF-CUSTODY Recommended to acquire from Laboratory

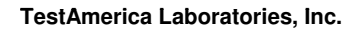
DATE:

Lab ID:

DESTINATION LAB:  ATTN:  ADDRESS:  Office Phone: Cell Phone:							REQUESTED ANALYSIS				Notes:
SAMPLED BY:											
Contact:											
Facility Name											
Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container							
				#	Type	Pres.					
SENDER COMMENTS:							RELINQUISHED BY				
							Signature:				
							Print:				
							Company:				
							Date:		TIME:		
LABORATORY COMMENTS:							RECEIVED BY				
							Signature:				
							Print:				
							Company:				
							Date:		TIME:		

17461 Derian Ave  
Suite 100  
Irvine, CA 92614  
phone 949.261.1022 fax

W ☐ NPDES ☐ RCRA ☐ Other:

[illegible]

## Monitoring Implementation Plan Attachment 4: Field Meter Instructions

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Place instructions for field meters that will be used by sampling personnel in this Attachment.  
For Baseline Sites, pH test strips will be used.

## Monitoring Implementation Plan Attachment 5: Other Regulatory Documents

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Place documents related to Regional Board required monitoring, TMDLs, compliance groups, etc. in this Attachment. Provide descriptions of these requirements in the appropriate sections of the Monitoring Implementation Plan.

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## Section 6:

# References

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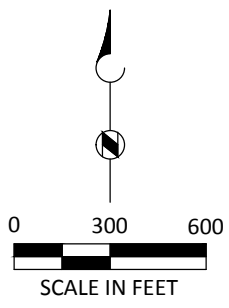
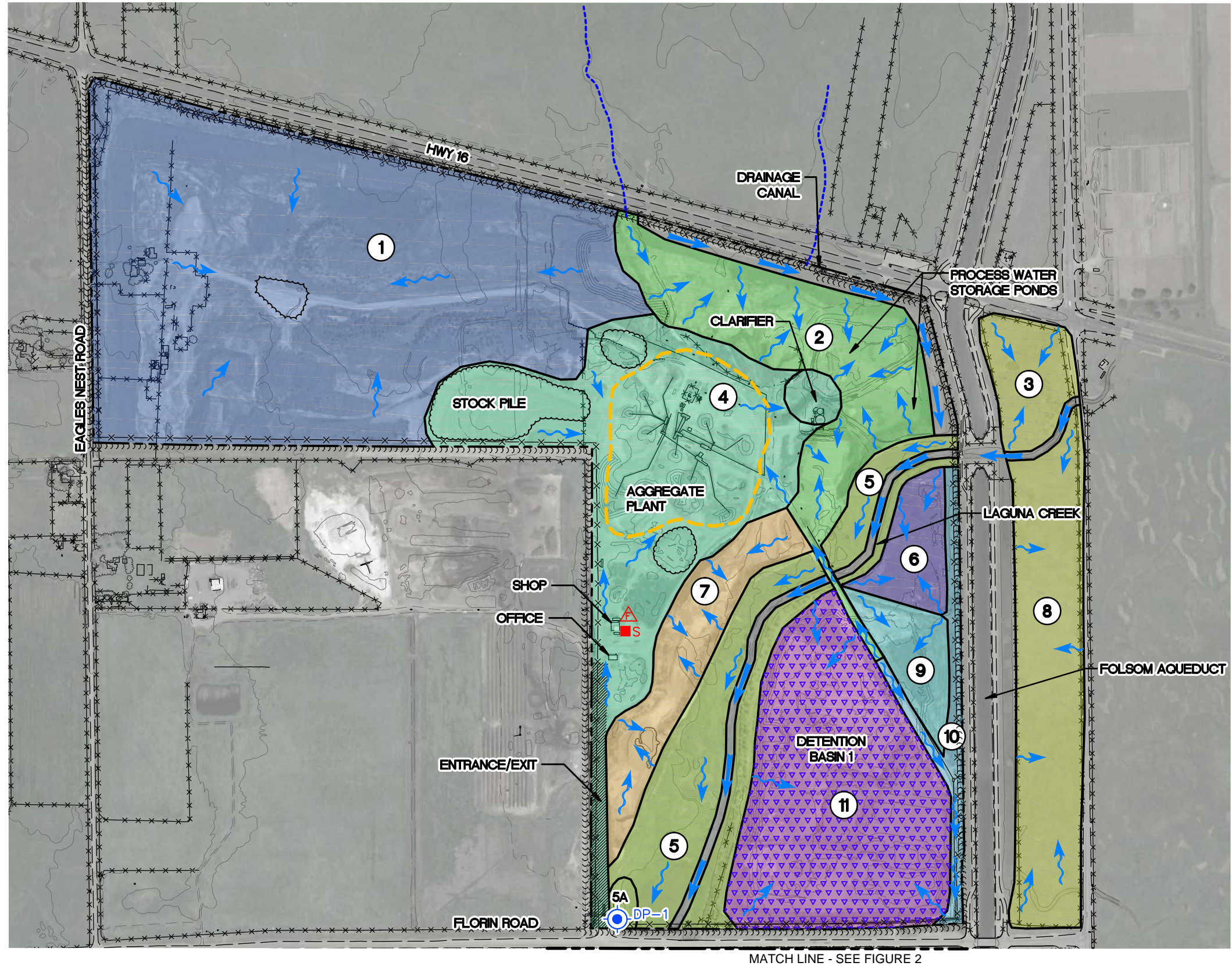
- State Water Resources Control Board (2014). Order 2014-0057-DWQ, NPDES General Permit No. CAS000001: National Pollutant Discharges Elimination System (NPDES) California General Permit for Storm Water Discharge Associated with Industrial Activities. Available on-line at: [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/industrial.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml).
- CASQA 2012, *Stormwater BMP Handbook Portal: Industrial Commercial*, August 2014, [www.casqa.org](http://www.casqa.org)
- SCGA 2006, *Central Sacramento County Groundwater Management Plan*, February 2006. <http://www.scgah2o.org/Pages/default.aspx>
- Helley, E.J., and Harwood, D.S., 1985, *Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierra Foothills, California*. Department of the Interior United States Geologic Survey.
- California Statewide Groundwater Elevation Monitoring Program (CASGEM), California Department of Water Resources, May 2015, [www.casgem.water.ca.gov](http://www.casgem.water.ca.gov)



## Appendix A: Site Map(s)

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ESTILES | Jun 18, 2015 - 12:21PM | Dwg: Sacramento | Layout: FIGURE 1 | Path: P:\Projects\Vulcan Materials Company\147161 - Vulcan IGP Support\CAD-ES\Figures\Sacramento



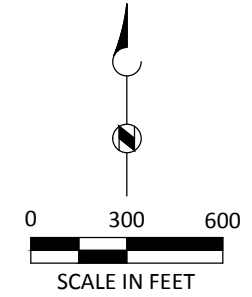
EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- - - APPROXIMATE AREA OF AGGREGATE PLANT
- APPROXIMATE DRAINAGE AREA
- ① DRAINAGE AREA (DA) NUMBER
- - - RUN-ON WATER
- SEDIMENTATION / DETENTION / BIORETENTION BASIN
- DIRECTION OF RUN-OFF FLOW
- DP-1- POTENTIAL DISCHARGE POINT
- FUEL SHUT OFF
- S SPILL KIT
- ..... EARTHEN BERM
- IMPERVIOUS AREA
- x - x - FENCE
- STOCKPILE



Figure 1  
SWPPP SITE MAP  
SACRAMENTO  
11501 FLORIN ROAD  
SACRAMENTO, CA 95830





#### EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE DRAINAGE AREA
- 12 DRAINAGE AREA (DA) NUMBER
- ~ DIRECTION OF RUN-OFF FLOW
- DP-1 POTENTIAL DISCHARGE POINT
- ..... EARTHEN BERM
- WELL

Figure 2  
SWPPP SITE MAP  
SACRAMENTO  
11501 FLORIN ROAD  
SACRAMENTO, CA 95830

## Appendix B: Permit Registration Documents

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Permit Registration Documents included in this Appendix:

Y/N	Permit Registration Document
N - In SMARTS	Notice of Intent
N – In SMARTS	Certification
N – Have not received	Copy of Annual Fee Receipt
Y	Site Map(s), see Appendix A

## Appendix C: Training Reporting Form

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# Trained Team Member Log

## Stormwater Management Training Log and Documentation

Facility Name: Sacramento

WDID #: 5S34I014344

Stormwater Management Topic: (check as appropriate)

☐ Good Housekeeping

☐ Spill and Leak Prevention and Response

☐ Erosion and Sediment Controls

☐ Advanced BMPs

☐ Stormwater Sampling and Analysis

☐ Preventative Maintenance

☐ Material Handling and Waste Management

☐ Quality Assurance and Record Keeping

☐ Visual Monitoring

Specific Training Objective: \_\_\_\_\_

Location: \_\_\_\_\_ Date: \_\_\_\_\_

Instructor: \_\_\_\_\_ Telephone: \_\_\_\_\_

Course Length (hours): \_\_\_\_\_

### Attendee Roster (Attach additional forms if necessary)

Name	Company	Phone

As needed, add proof of external training (e.g., course completion certificates, credentials for QISP).

## Appendix D: Responsible Parties

---

# Authorization of Duly Authorized Representatives

Facility Name: Sacramento

WDID #: 5S34I014344

Name of Personnel	Project Role	Company	Signature	Date



LRP's Signature

June 25, 2015

Date

Cesar Aranda, Water Resources Manager

LRP Name and Title

(559) 434-1202

Telephone Number



# Identification of QISP

Facility Name: Sacramento

WDID #: 5S34I014344

The following are QISPs associated with this project

Name of Personnel <sup>(1)</sup>	Company	Date

<sup>(1)</sup> If additional QISPs are required, add additional lines and include information here

## Appendix E: SWPPP Amendment Certifications

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SWPPP Amendment No. \_\_\_\_\_

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

Project Number: \_\_\_\_\_

Legally Responsible Person's Certification of the  
Stormwater Pollution Prevention Plan Amendment

"This Stormwater Pollution Prevention Plan and attachments were prepared under my direction to meet the requirements of the California Industrial General Permit (SWRCB Order No. 2014-0057-DWQ)."

\_\_\_\_\_  
LRP's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
LRP Name

\_\_\_\_\_  
LRP Title

\_\_\_\_\_  
Title and Affiliation

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Address

\_\_\_\_\_  
Email

## Appendix F: Calculations

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## Appendix G: BMP Fact Sheets

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## Appendix H: BMP Implementation Log

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### Table H.1: BMP Implementation Log

[illegible]

## Appendix I: Industrial General Permit

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- A copy of the General Permit is located at the facility.