

**In Response to CEC & BLM Data Requests 31 and 32
DESCP/SWPP - Volume 2
Application for Certification (08-AFC-5)
SES Solar Two, LLC**

Submitted to:
Bureau of Land Management
1661 S. 4th Street, El Centro, CA 92243



Submitted to:
California Energy Commission
1516 9th Street , MS 15, Sacramento, CA 95814-5504



Submitted by:
SES Solar Two, LLC
2920 E. Camelback Road, Suite 150, Phoenix, AZ 85016



With Support From:
URS Corporation

July 2009

Storm Water Pollution Prevention Plan

For:

Solar Two - 35% Progress Set
Onsite

Prepared for:
SES Solar Two, LLC
24800 N. Scottsdale Road, Suite 5500
Scottsdale, AZ 85251
Robert G. Byall, Sr. Project Civil-EPC
(602) 957-1818

Contractor:
Stirling Energy Systems, Inc.
24800 N. Scottsdale Road, Suite 5500
Scottsdale, AZ 85251
(602) 957-1818
Robert G. Byall, Sr. Project Civil-EPC

Project Site Location/Address:
Portions of Sections 7, 9, 14-22 of Township 16 South, Range 11 East and Sections or
Portions of Sections 12-14, 22-27 of Township 16 South, Range 10 East of the
San Bernardino Meridian

Contractor's Storm Water Pollution Prevention Manager
Robert G. Byall, Sr. Project Civil-EPC
(602) 957-1818

SWPPP Prepared by:
Stantec Consulting Inc.
3105 East Guasti Road
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(909) 390-8880
Ned Araujo, PE

SWPPP Preparation Date:
12/31/2008

Estimated Project Dates: TBD
Start of Construction: Completion of Construction: TBD
WDID No.: _____

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Attachment B	Water Pollution Control Drawings
Attachment C	BMP Consideration Checklist
Attachment D	Computation Sheet for Determining Runoff Coefficients
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Attachment F	Notice of Intent (NOI)
Attachment G	Program for Maintenance, Inspection, and Repair of Construction Site BMPs
Attachment H	Storm Water Quality Construction Site Inspection Checklist
Attachment I	Trained Contractor Personnel Log
Attachment J	Subcontractor Notification Letter and Log
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Section 100

SWPPP Certifications and Approval

100.1 SWPPP Certification by Preparer

Project Name: Solar Two - 35% Progress Set

Project Number: _____

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

Preparer's Signature

Date

Ned Araujo, PE
Preparer's Name and Title

(909) 390-8880
Telephone Number

100.2 Owner Approval and Certification of SWPPP

**Owner's (or Authorized Representative)
Approval and Certification of the
Storm Water Pollution Prevention Plan**

Project Name: Solar Two - 35% Progress Set

Project Number: _____

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

Owner (or Authorized Representative) Signature

Date

Robert G. Byall, Sr. Project Civil-EPC

Name and Title

(602) 957-1818

Telephone Number

100.3 Annual Compliance Certification

By July 1 of each year, the Owner shall complete an Annual Certification of Compliance stating compliance with the terms and conditions of the Permit and the SWPPP. The blank Annual Certification of Compliance Form is included in Attachment M. Completed Annual Certifications of Compliance and Approvals can be found in the following pages.

Section 200

SWPPP Amendments

200.1 SWPPP Amendment Certification and Approval

This SWPPP shall be amended:

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

The following items will be included in each amendment:

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

The amendments for this SWPPP, along with the Owner's Certification and the Owner approval, can be found in the following pages. Amendments are listed in the Amendment Log in section 200.2

SWPPP Amendment No.

Project Name: Solar Two - 35% Progress Set

Project Number: _____

**Preparer Certification of the
Storm Water Pollution Prevention Plan Amendment**

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

Preparer's Signature

Ned Araujo, PE

Preparer's Name and Title

Date

(909) 390-8880

Telephone Number

**Owner (or Owner's Authorized Representative) Approval of the
Storm Water Pollution Prevention Plan Amendment**

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

Owner (or Authorized Representative) Signature

Robert G. Byall, Sr. Project Civil-EPC

Name and Title

Date

(602) 957-1818

Telephone Number

Section 300

Introduction and Project Description

300.1 Introduction and Project Description

The Solar Two project consists of approximately 6500 total acres and is situated primarily on federal land managed by the Bureau of Land Management. The site is located approximately 14 miles west of the City of El Centro, and 100 miles East of San Diego along Highway 8, in the County of Imperial, California.

The facility is designed in such a manner as to minimize ground disturbance and resulting environmental impacts. The number of roadways will be kept to a minimum. Paved roadways will be specifically located to provide main routes for quick access to the site for construction, maintenance and operations. Access from the main paved roads to the individual SunCatchers will be on unpaved roads alternating between rows of SunCatchers. Culverts will be installed in a limited fashion as necessary crossing of natural washes.

The Imperial County landscape is generally flat, with low levels of natural erosion. Erosion is dependent on texture (i.e., clay, sand, or silt content), moisture content, and agronomic practices (i.e., cropped, fresh-tilled, or fallow). Lacustrine basin soils in the Imperial County area formed on nearly level old lakebeds near prehistoric Lake Cahuilla. These soils generally consist of silty clays, silty clay loams, and clay loams; are deep and highly calcareous; and usually contain gypsum and soluble salts.

Soil types near the Project are described and mapped at the level of soil association. The location of, and properties of, the soil associations are based on interpretation of the State Soil Geographic Database (STATSGO) prepared by the Natural Resources Conservation Service (NRCS 1995) and on data from the Soil Data Mart. Characteristics for project soil associations are:

The Rositas-Carrizo-Orita association soils typically form on alluvial fans, terraces, and basins. These soils are commonly silt loams to sands and are somewhat excessively well drained to moderately well drained;

The Meloland-Vint-Indio association soils are formed primarily on valley fill or basin deposits, including lacustrine and eolian deposits. These calcareous soils range from silt loam to loamy sand in the upper layers with a potential for clayey subsoils. These soils are generally moderately well drained to well drained with low to medium runoff and slow permeability;

The Badland-Beeline-Rillito association soils are formed on moderately sloping to steep dissected drainages and in mixed alluvium. These relatively barren soils are underlain by sediments and eroded sedimentary rock, including soft sandstone and shale. Soil texture ranges from gravelly loam to sandy loam and the soils are calcareous. These soils are generally somewhat excessively drained and exhibit slow to medium runoff and moderate permeability.

The completed Project will include solar collectors, various buildings, paved primary access roads, secondary unpaved access roads, and minor asphalt or crushed aggregate parking lots. Infiltration basins are proposed to handle storm water at the Main Services Complex. Therefore, no significant effects to soil resources are anticipated from Project operations.

Areas adjacent to the project will be left undisturbed by site construction or permanent operations. Site disturbance of impervious areas will be limited and no significant increase leading to additional runoff should occur. Natural drainage channels will be left in place and maintained whenever possible. All disturbed areas will be treated with soil binders, including unpaved roadways treated with traffic bearing product.

300.2 Unique Site Features

The proposed project will be owned and maintained by SES Solar Two, LLC.

300.3 Construction Site Estimates

The following are estimates of the construction site:

Construction site area	6500	acres
Percentage impervious area before construction	0	%
Runoff coefficient before construction ⁽¹⁾	0.4	
Percentage impervious area after construction		%
Runoff coefficient after construction ⁽¹⁾	0.4	
Anticipated storm water flow on to the construction site ⁽²⁾	0	cfs

⁽¹⁾ Calculations are shown in Attachment D

⁽²⁾ Calculations are shown in Attachment E

300.4 Project Schedule/Water Pollution Control Schedule

THE GRAPHIC SCHEDULE IS ON THE FOLLOWING PAGE.

300.5 Contact Information/List of Responsible Parties

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

Robert G. Byall, Sr. **Project Civil-EPC**

(602) 957-1818

Stirling Energy Systems, Inc.

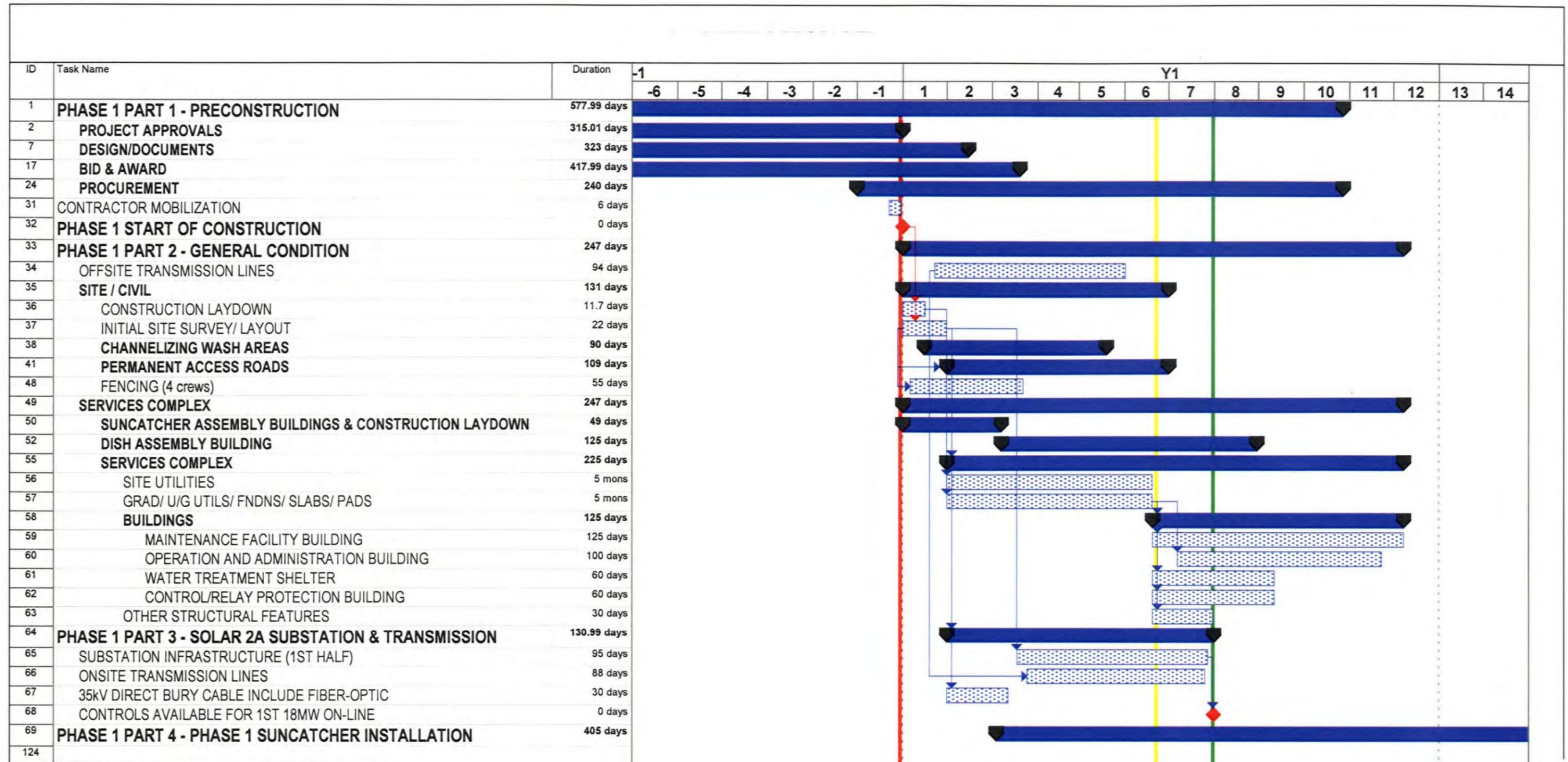
2920 E. Camelback Road, Suite 150

Phoenix, AZ 85016

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

- Ensuring full compliance with the SWPPP and the Permit
- Implementing all elements of the SWPPP, including but not limited to:
 - Implementation of prompt and effective erosion and sediment control measures
 - Implementing all non-storm water management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than storm water are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems; etc.
- Pre-storm inspections
- Storm event inspections
- Post-storm inspections
- Routine inspections as specified in the project's specifications or described in the SWPPP
- Updates/ Amendments to the SWPPP, as needed

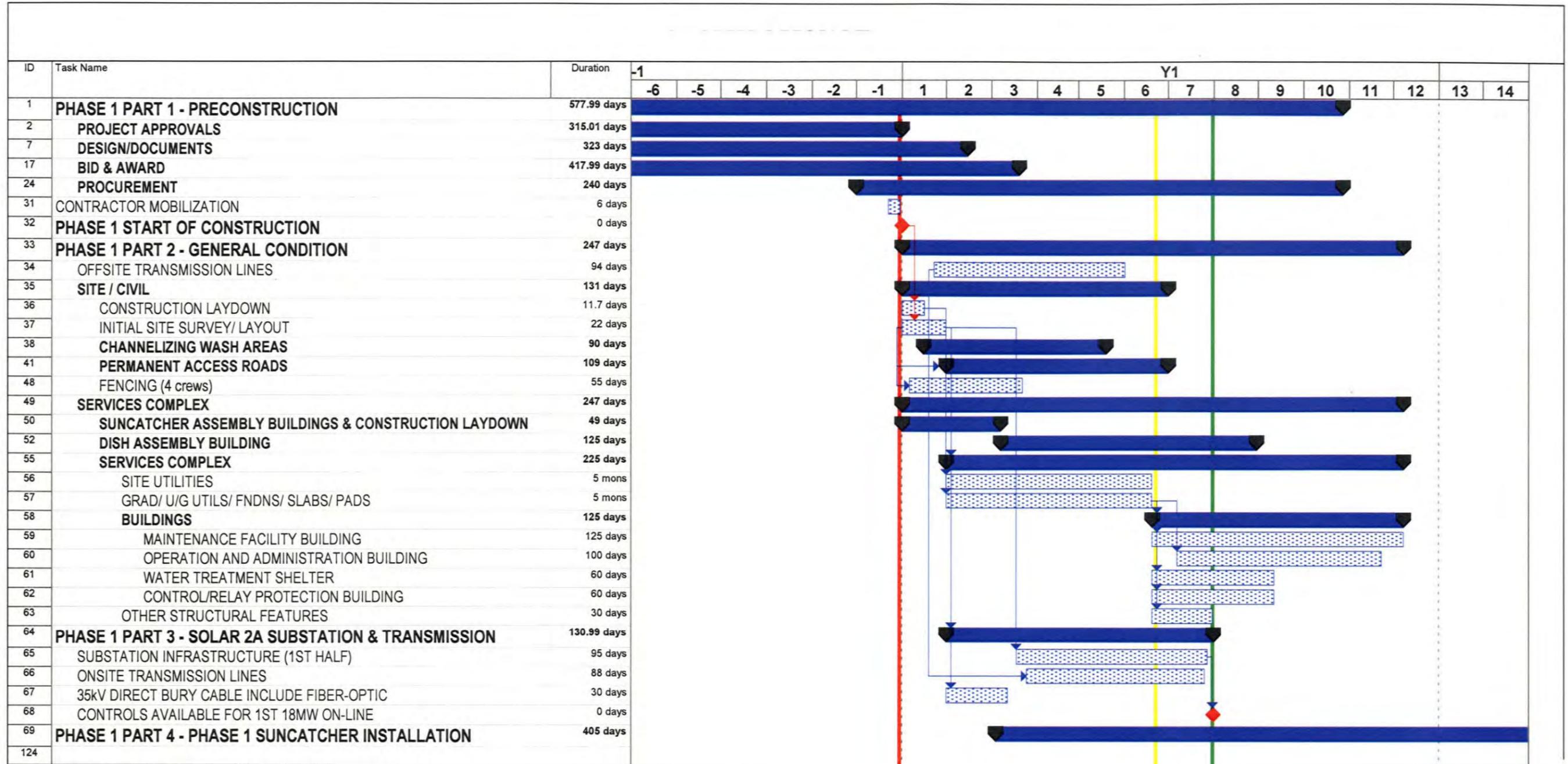
**Figure 3.4-40
Solar Two Milestone Schedule – Phase I**



DRAFT

	SOLAR TWO MILESTONE SCHEDULE PHASE I SOLAR TWO PROJECT		
	CREATED BY: STANTEC PM: AL	DATE: 06-11-08 PROJ. NO: 27657102.00300	FIG. NO: 3-40

**Figure 3.4-41
Solar Two Milestone Schedule – Phase II**



DRAFT

	SOLAR TWO MILESTONE SCHEDULE PHASE II SOLAR TWO PROJECT		
	CREATED BY: STANTEC	DATE: 06-11-08	FIG. NO: 3-41
	PM: AL	PROJ. NO: 27657102.00300	

- Preparing annual compliance certification for owner's, or owner's authorized representative, signature
- Ensuring elimination of all unauthorized discharges
- The SWPPM shall be assigned authority by the Contractor to mobilize crews in order to make immediate repairs to the control measures
- Coordinate with the Contractor to assure all of the necessary corrections/repairs are made immediately, and that the project complies with the SWPPP, the Permit and approved plans at all times
- Submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges

Section 400

References

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

- Project plans and specifications No. (SES Solar Two LLC, Offsite Water Improvement Plans Sheets 1 thru 17) INSERT NUMBER, dated 03-24-2008, prepared by Stantec Consulting, Inc., SPECIFICATIONS AND ESTIMATE.
- State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity.
- California Stormwater BMP Handbook – Construction, January 2003
- SWPPP for Offsite Water Line Improvement Plans - Solar Two
- Application for Certification (AFC) SES Solar Two, LLC, dated June 2008.
- AFC Appendix E - Preliminary Geotechnical and Geological Hazards Evaluation
- AFC Appendix L - Hazardous Materials Handling
- AFC Appendix N - Initial Drainage Report
- AFC Appendix R - Fuel Handling Design Criteria
- AFC Appendix S - Material Safety/ Equipment
- AFC Appendix T - Phase I Environmental Site Assessment
- AFC Appendix V - Air Quality Data

Section 500

Body of SWPPP

500.1 Objectives

This Storm Water Pollution Prevention Plan (SWPPP) has six main objectives:

- Identify all pollutant sources, including sources of sediment that may affect the quality of storm water discharges associated with construction activity (storm water discharges) from the construction site, and
- Identify non-storm water discharges, and
- Identify, construct, implement in accordance with a time schedule, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction, and
- Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs).
- Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharge directly into water bodies listed on Attachment 3 of the Permit (Clean Water Act Section 303(d) [303(d)] Water Bodies listed for Sedimentation).
- For all construction activity, identify a sampling and analysis strategy and sampling schedule for discharges that have been discovered through visual monitoring to be potentially contaminated by pollutants not visually detectable in the runoff.

This SWPPP conforms with the required elements of the General Permit No. CAS000002 issued by the State of California, State Water Resources Control Board (SWRCB). This SWPPP will be modified and amended to reflect any amendments to the Permit or any changes in construction or operations that may affect the discharge of pollutants from the construction site to surface waters, groundwaters, or the municipal separate storm sewer system (MS4). The SWPPP will also be amended if it is in violation of any condition of the Permit or has not achieved the general objective of reducing pollutants in storm water discharges. The SWPPP shall be readily available on-site for the duration of the project.

500.2 Vicinity Map

The construction project vicinity map showing the project location, surface water boundaries, geographic features, construction site perimeter, and general topography, is located in Attachment A. The project's Title Sheet provides more detail regarding the project location and is also included in Attachment A.

500.3 Pollutant Source Identification and BMP Selection

500.3.1 Inventory of Materials and Activities that May Pollute Storm Water

The following is a list of construction materials that will be used and activities that will be performed that will have the potential to contribute pollutants, other than sediment, to storm water runoff (control practices for each activity are identified in the Water Pollution Control Drawings (WPCDs) and/or in Sections 500.3.4 through 500.3.9):

- Vehicle fluids, including oil, grease, petroleum and coolants
- Asphaltic emulsions associated with asphalt-concrete paving operations
- Base and subbase material
- Mortar mix

- BMP materials - sandbags, liquid copolymer
- General litter

Construction activities that have the potential to contribute sediment to storm water discharges include:

- Clear and grub operations
- Grading Operations
- Utility excavation operations

Attachment C lists all Best Management Practices (BMPs) that have been selected for implementation in this project. Implementation and location of BMPs are shown on the WPCDs in Attachment B. Narrative descriptions of BMPs to be used during the project are listed by category in each of the following SWPPP sections. Attachment Q includes a list, and/or copies of the fact sheets of all the BMPs selected for this project.

500.3.2 Existing (pre-construction) Control Measures

The following are existing (pre-construction) control measures encountered within the project site:

- None

500.3.3 Nature of Fill Material and Existing Data Describing the Soil

The site is primarily a natural desert environment with sparse vegetation and numerous off-road trails. The soil at the site is generally very stiff and/or very dense. Groundwater was encountered in Borings at a depth of about 45 feet below the ground surface (approximate elevation -38 feet, NAVD88).

Existing site features that, as a result of past usage, may contribute pollutants to storm water (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site) include:

- None

500.3.4 Erosion Control

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

- 1) Preserve existing vegetation where required and when feasible.
- 2) Apply temporary erosion control to remaining active and non-active areas as required by the California Stormwater BMPs Handbook – Construction, and the contract documents. Reapply as necessary to maintain effectiveness.
- 3) Implement temporary erosion control measures at regular intervals throughout the defined rainy season to achieve and maintain the contract's disturbed soil area requirements. Implement erosion control prior to the defined rainy season.

- 4) Stabilize non-active areas as soon as feasible after the cessation of construction activities.
- 5) Control erosion in concentrated flow paths by applying erosion control blankets, erosion control seeding, and lining swales as required in the contract documents.
- 6) Apply seed to areas deemed substantially complete by the Owner during the defined rainy season.
- 7) At completion of construction, apply permanent erosion control to all remaining disturbed soil areas.

Sufficient erosion control materials will be maintained on-site to allow implementation in conformance with Permit requirements and described in this SWPPP. This includes implementation requirements for active areas and non-active areas that require deployment before the onset of rain.

Implementation and locations of temporary erosion control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B and/or described in this section. The BMP Consideration Checklist in Attachment C indicates the BMPs that will be implemented to control erosion on the construction site; these are:

- EC-1, Scheduling
- EC-2, Preservation of Existing Vegetation
- EC-5, Soil Binders
- EC-9, Earth Dikes and Drainage Swales

500.3.5 Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate sediment control measures required by the contract documents, and other measures selected by the Contractor, SWPPP Manager, or Owner.

Sufficient quantities of temporary sediment control materials will be maintained on-site throughout the duration of the project, to allow implementation of temporary sediment controls in the event of predicted rain, and for rapid response to failures or emergencies, in

conformance with other Permit requirements and as described in this SWPPP. This includes implementation requirements for active areas and non-active areas before the onset of rain.

Implementation and locations of temporary sediment control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B. The BMP Consideration Checklist in Attachment C indicates all the BMPs that will be implemented to control sediment on the construction site; these are:

- SE-1, Silt Fence
- SE-3, Sediment Trap
- SE-9, Straw Bale Barrier

500.3.6 Tracking Control

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

- SE-7, Street Sweeping and Vacuuming
- TC-1, Stabilized Construction Entrance/Exit
- TC-2, Stabilized Construction Roadway

500.3.7 Wind Erosion Control

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

- WE-1, Wind Erosion Control

500.3.8 Non-Storm Water Control

An inventory of construction activities and potential non-storm water discharges is provided in Section 5.3.1. The BMP Consideration Checklist in Attachment C and the following list indicates the BMPs that have been selected to control non-storm water pollution on the construction site. Implementation and locations of some non-storm water

control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B. A narrative description of each BMP follows.

- NS-6, Illicit Connection/Illegal Discharge Detection and Reporting
- NS-8, Vehicle and Equipment Cleaning
- NS-9, Vehicle and Equipment Fueling
- NS-10, Vehicle and Equipment Maintenance
- NS-1, Water Conservation Practices
- NS-3, Paving and Grinding Operations
- NS-4, Temporary Stream Crossing

500.3.9 Waste Management and Materials Pollution Control

An inventory of construction activities, materials, and wastes is provided in Section 5.3.1. The BMP Consideration Checklist in Attachment C and the following list indicates the BMPs that have been selected to handle materials and control construction site wastes. A narrative description of each BMP follows.

- WM-1, Material Delivery and Storage
- WM- 2, Material Use
- WM-3, Stockpile Management
- WM-4, Spill Prevention and Control
- WM-5, Solid Waste Management
- WM-9, Sanitary/Septic Waste Management
- WM-8, Concrete Waste Management

500.3.10 Cost Breakdown for Water Pollution Control

A cost breakdown itemizing the contract lump sum for water pollution control has been developed for this project and included in Attachment O. The cost breakdown reflects the items of work, quantities and costs for BMPs shown in the SWPPP, except for those construction site BMPs and permanent BMPs that are shown on the project plans and for which there is a contract item of work.

500.4 Water Pollution Control Drawings (WPCDs)

The Water Pollution Control Drawings can be found in Attachment B of the SWPPP.

500.5 Construction BMP Maintenance, Inspection, and Repair

Inspections will be conducted as follows:

- Prior to a forecast storm
- after a rain event that causes runoff from the construction site
- at 24-hour intervals during extended rain events
- at any other time(s) or intervals of time specified in the contract documents

Completed inspection checklists will be kept with the SWPPP.

A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs. A program for Maintenance, Inspection and Repair of BMPs is shown in Attachment G.

500.6 Post-Construction Storm Water Management

500.6.1 Post-Construction Control Practices

The following are the post-construction BMPs that are to be used at this construction site after all construction is complete:

- Native plants seeding and planting

500.6.2 Operation/Maintenance after Project Completion

The post-construction BMPs that are described above will be funded and maintained by SES Solar Two, LLC

500.7 Training

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

-
-
-
-

The training log showing formal and informal training of various Contractor personnel is shown in Attachment I.

This SWPPP was prepared by Stantec Consulting Inc, Ned Araujo, P.E.

500.8 List of Subcontractors

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

500.9 Other Plans/Permits

Attachment N includes copies of other local, state, and federal plans and permits. Following is a list of the plans and permits included in Attachment N:

- State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity.

Section 600

Monitoring Program and Reports

600.1 Site Inspections

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

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

Assigned inspector:

Contact phone:

600.2 Non-Compliance Reporting

If a discharge occurs or if the project receives a written notice of non-compliance, the Contractor will immediately notify the Owner and will file a written report to the Owner within 7 days of the discharge or notice. The Owner is responsible for filing a written report to the Regional Water Quality Control Board (RWQCB) within 30 days or identification of non-compliance. Corrective measures will be implemented immediately following the discharge, notice or order. A sample Notice of Non-Compliance (NONC) form is provided in Attachment K. All discharges will be documented on a Discharge Reporting Log using the example form in Attachment T.

The report to the Owner and to the RWQCB will contain the following items:

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

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

600.3 Record Keeping and Reports

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

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

600.4 Sampling and Analysis Plan for Sediment

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

600.5 Sampling and Analysis Plan for Non-Visible Pollutants

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

600.5.1 Scope of Monitoring Activities

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

-
-
-

The following existing site features, as identified in Section 500.3.3, are potential sources of non-visible pollutants to storm water discharges from the project. Locations of existing site

features contaminated with non-visible pollutants are shown on the WPCDs in Attachment B.

-
-
-

The following soil amendments have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil and will be used on the project site. Locations of soil amendment application are shown on the WPCDs in Attachment B.

-
-
-

The project has the potential to receive storm water run-on with the potential to contribute non-visible pollutants to storm water discharges from the project. Locations of such run-on to the project site are shown on the WPCDs in Attachment B.

-
-
-

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

600.5.2 Monitoring Strategy

Sampling Schedule

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

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

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

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

Sampling Locations

Sampling locations are based on proximity to planned non-visible pollutant storage, occurrence or use; accessibility for sampling, personnel safety; and other factors in accordance with the applicable requirements in the Permit. Planned sampling locations are shown on the WPCDs in Attachment B and include the following:

- [Enter number of locations] sampling locations have been identified for the collection of samples of runoff that drain areas where soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil will be applied.

- Sample location number(s) is located .
- [Enter number of locations] sampling locations have been identified for the collection of samples of runoff that drain areas contaminated by historical usage of the site.
- Sample location number(s) is located .
- [Enter number of locations] sampling locations have been identified for the collection of samples of run-on to the project site with the potential to combine with discharges being sampled for non-visible pollutants. These samples are intended to identify sources of potential non-visible pollutants that originate off the project site.
- Sample location number(s) is located .
- A location has been identified for the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. This location was selected such that the sample will not have come in contact with (1) operational or storage areas associated with the materials, wastes, and activities identified in Section 500.3.1; (2) potential non-visible pollutants due to historical use of the site as identified in Section 500.3.3; (3) areas in which soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied; or (4) disturbed soils areas.
- Sample location number(s) is located .

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

600.5.3 Monitoring Preparation

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

Name/Telephone Number:

Name/Telephone Number:

Alternate(s)/Telephone

Number:

Alternate(s)/Telephone

Number:

Prior to the rainy season, all sampling personnel and alternates will review the SAP. Qualifications of designated Contractor personnel describing environmental sampling training and experience are provided in Attachment I.

An adequate stock of monitoring supplies and equipment for monitoring non-visible pollutants will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool-temperature environment that will not come into contact with rain or direct sunlight. Sampling personnel will be available to collect samples in accordance with the sampling schedule.

Supplies maintained at the project site will include, but are not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, Sampling Activity Log forms, and Chain of Custody (COC) forms. The Contractor will obtain and maintain the field-testing instruments, as identified in Section 600.5.6, for analyzing samples in the field by Contractor sampling personnel.

Safety practices for sample collection will be in accordance with the [ENTER TITLE AND PUBLICATION DATE OF CONTRACTOR'S HEALTH AND SAFETY PLAN FOR THE PROJECT OR PROVIDE SPECIFIC REQUIREMENTS HEREIN].

Samples on the project site will be collected by the following [specify laboratory or environmental consultant]:

Company Name:

Address:

Telephone Number:

Point of Contact:

Qualifications of designated Contractor personnel describing environmental sampling training and experience are provided in Attachment I.

SWPPM will contact [specify name of laboratory or environmental consultant] [enter number of hours] hours prior to a predicted rain event and if one of the triggering conditions is identified during an inspection before, during, or after a storm event to ensure that adequate sample collection personnel, supplies and field test equipment for monitoring non-visible pollutants are available and will be mobilized to collect samples on the project site in accordance with the sampling schedule.

[Specify name of laboratory or environmental consultant] will obtain and maintain the field-testing instruments, as identified in Section 600.5.6, for analyzing samples in the field by their sampling personnel.

600.5.4 Analytical Constituents

Identification of Non-Visible Pollutants

Table 600-2 lists the specific sources and types of potential non-visible pollutants on the project site and the applicable water quality indicator constituent(s) for that pollutant.

Table 600-2

Potential Non-Visible Pollutants and Water Quality Indicator Constituents

Pollutant Source	Pollutant	Water Quality Indicator Constituent
-------------------------	------------------	--

600.5.5 Sample Collection and Handling

Sample Collection Procedures

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

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

Samples will be collected by placing a separate lab-provided sample container directly into a stream of water downgradient and within close proximity to the potential non-visible pollutant discharge location. This separate lab-provided sample container will be used to collect water, which will be transferred to sample bottles for laboratory analysis. The

upgradient and uncontaminated background samples shall be collected first prior to collecting the downgradient to minimize cross-contamination. The sampling personnel will collect the water upgradient of where they are standing. Once the separate lab-provided sample container is filled, the water sample will be poured directly into sample bottles provided by the laboratory for the analyte(s) being monitored.

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

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

Sample Handling Procedures

Immediately following collection, sample bottles for laboratory analytical testing will be capped, labeled, documented on a Chain of Custody form provided by the analytical laboratory, sealed in a re-sealable storage bag, placed in an ice-chilled cooler, at as near to 4

degrees Celsius as practicable, and delivered within 24 hours to the following California state-certified laboratory:

Laboratory Name:

Address:

Telephone Number:

Point of Contact:

Immediately following collection, samples for field analysis will be tested in accordance with the field instrument manufacturer's instructions and results recorded on the Sampling Activity Log.

Sample Documentation Procedures

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

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

- **Sample Bottle Identification Labels:** Sampling personnel will attach an identification label to each sample bottle. At a minimum, the following information will be recorded on the label, as appropriate:

- Project name
- Project number
- Unique sample identification number and location.
[Project Number]-[Six digit sample collection date]-[Location]
(Example: 0G5304-081801-Inlet472).

Quality assurance/quality control (QA/QC) samples shall be identified similarly using a unique sample number or designation
(Example: 0G5304-081801-DUP1).

- Collection date/time (No time applied to QA/QC samples)
- Analysis constituent

- Sampling Activity Logs: A log of sampling events will identify:
 - Sampling date
 - Separate times for collected samples and QA/QC samples recorded to the nearest minute
 - Unique sample identification number and location
 - Analysis constituent
 - Names of sampling personnel
 - Weather conditions (including precipitation amount)
 - Field analysis results
 - Other pertinent data

- Chain of Custody (COC) forms: All samples to be analyzed by a laboratory will be accompanied by a COC form provided by the laboratory. Only the sample collectors will sign the COC form over to the lab. COC procedures will be strictly adhered to for QA/QC purposes.

- Storm Water Quality Construction Inspection Checklists: When applicable, the Contractor's storm water inspector will document on the checklist that samples for non-visible pollutants were taken during a rain event.

600.5.6 Sample Analysis

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

For samples collected for field analysis, collection, analysis and equipment calibration will be in accordance with the field instrument manufacturer's specifications.

The following field instrument(s) will be used to analyze the following constituents:

Field Instrument	Constituent

- The instrument(s) will be maintained in accordance with manufacturer's instructions.
- The instrument(s) will be calibrated before each sampling and analysis event.
- Maintenance and calibration records will be maintained with the SWPPP.

600.5.7 Quality Assurance/Quality Control

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

600.5.8 Data Management and Reporting

A copy of all water quality analytical results and QA/QC data will be included in the on-site SWPPP within 5 days of sampling (for field analyses) and within 30 days (for laboratory analyses).

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

600.5.9 Data Evaluation

An evaluation of the water quality sample analytical results, including figures with sample locations, the water quality analytical results, and the QA/QC data, will be included in the on-site SWPPP.

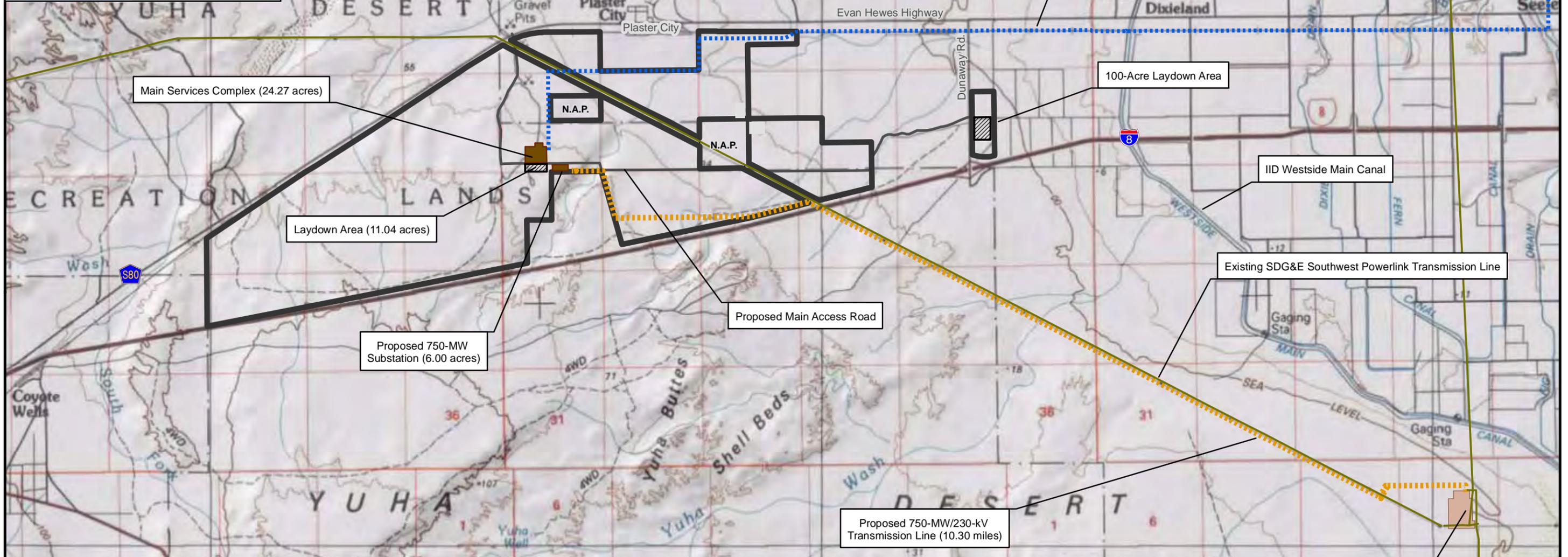
Should the runoff/ downgradient sample show an increased level of the tested analyte relative to the background sample, the BMPs, site conditions, and surrounding influences will be assessed to determine the probable cause for the increase. As determined by the site and data evaluation, appropriate BMPs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

600.5.10 Change of Conditions

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

Attachment A

Vicinity Map

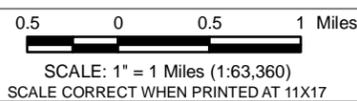


LEGEND

- Project Boundary (6,176.65 acres)
- Proposed Main Access Road
- N.A.P. Not A Part (Owned by Others)
- Proposed Substation and Main Services Complex
- Laydown Areas
- Existing Transmission Line
- Proposed 750-MW/230-kV Transmission Line (10.30 miles)
- Proposed Waterline (11.79 miles)

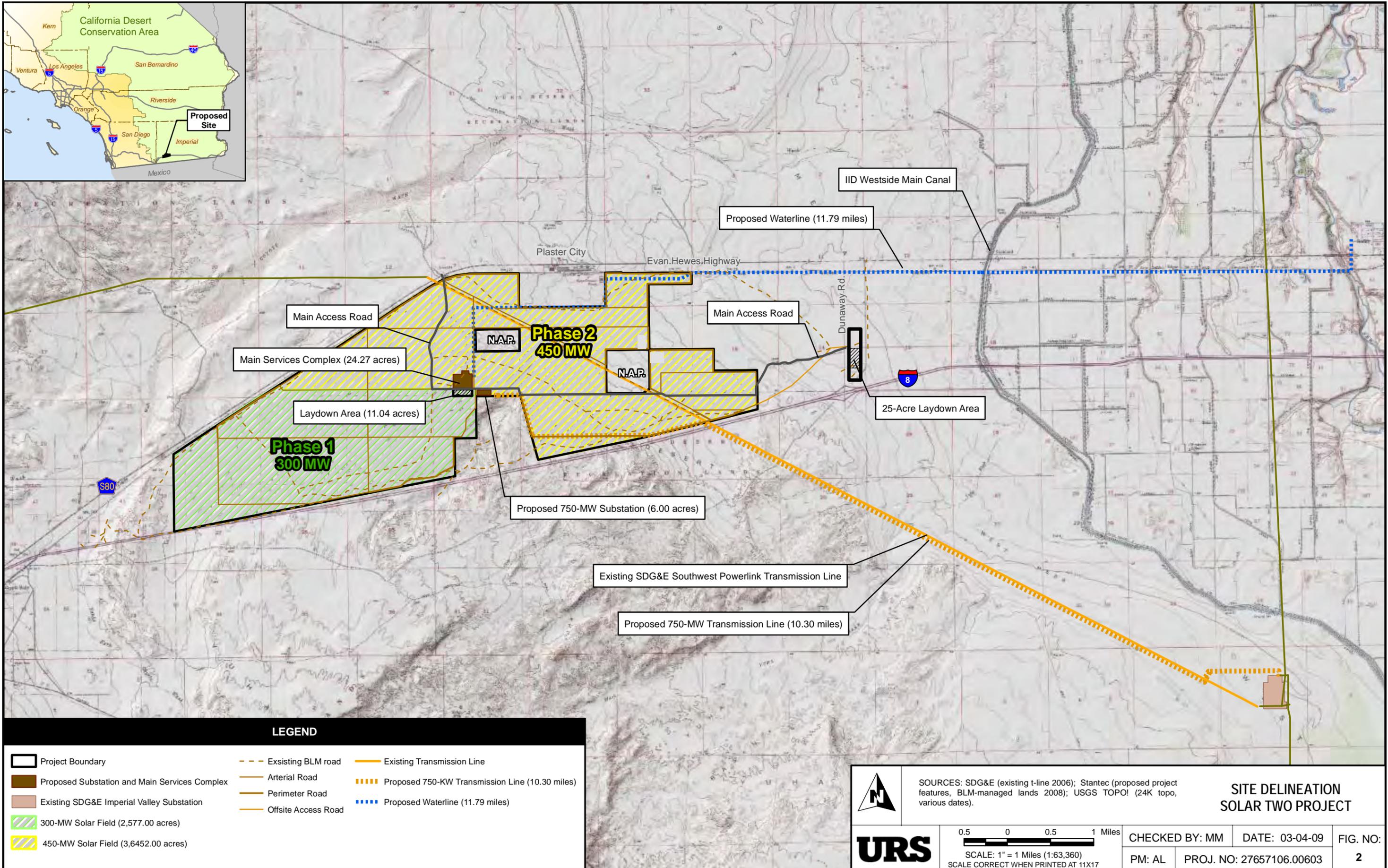


SOURCES: SDG&E (existing t-line 2006); Stantec (proposed project features 2008); CERES - California Environmental Resources Evaluation System (Anza-Borrego 1999); USGS TOPO! (100K topo, various dates).



**GENERAL VICINITY MAP
SOLAR TWO PROJECT**

CHECKED BY: MM	DATE: 03-04-09	FIG. NO:
PM: AL	PROJ. NO: 27657106.00603	1



Path: G:\gis\projects\1577\22238980\msd\fig_2_project_site_delineation.mxd, 06/30/09, Randall_Clark

Attachment B

Water Pollution Control Drawings (WPCDs)

Drawings were submitted as Appendix A of the DESCP/
SWPP - Volume 1.

Attachment C

BMP Consideration Checklist

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
EROSION CONTROL BMPs					
BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
EC-1	Scheduling				
EC-2	Preservation of Existing Vegetation				
EC-3	Hydraulic Mulch				
EC-4	Hydroseeding				
EC-5	Soil Binders				
EC-6	Straw Mulch				
EC-7	Geotextiles & Mats				
EC-8	Wood Mulching				
EC-9	Earth Dikes & Drainage Swales				
EC-10	Velocity Dissipation Devices				
EC-11	Slope Drains				
EC-12	Streambank Stabilization				
EC-13	Polyacrylamide				

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

SEDIMENT CONTROL BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
SE-1	Silt Fence				
SE-2	Sediment Basin				
SE-3	Sediment Trap				
SE-4	Check Dam				
SE-5	Fiber Rolls				
SE-6	Gravel Bag Berm				
SE-7	Street Sweeping and Vacuuming				
SE-8	Sand Bag Barrier				
SE-9	Straw Bale Barrier				
SE-10	Storm Drain Inlet Protection				
SE-11	Chemical Treatment				

WIND EROSION CONTROL BMPs

WE-1	Wind Erosion Control				
------	----------------------	--	--	--	--

TRACKING CONTROL BMPs

TR-1	Stabilized Construction Entrance/Exit				
TR-2	Stabilized Construction Roadway				
TR-3	Entrance/Outlet Tire Wash				

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

NON-STORM WATER MANAGEMENT BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
NS-1	Water Conservation Practices				
NS-2	Dewatering Operations				
NS-3	Paving and Grinding Operations				
NS-4	Temporary Stream Crossing				
NS-5	Clear Water Diversion				
NS-6	Illicit Connection/ Discharge				
NS-7	Potable Water/Irrigation				
NS-8	Vehicle and Equipment Cleaning				
NS-9	Vehicle and Equipment Fueling				
NS-10	Vehicle and Equipment Maintenance				
NS-11	Pile Driving Operations				
NS-12	Concrete Curing				
NS-13	Concrete Finishing				
NS-14	Material and Equipment Use Over Water				
NS-15	Demolition Adjacent to Water				
NS-16	Temporary Batch Plants				

**CONSTRUCTION SITE BMPs
 CONSIDERATION CHECKLIST**

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
WM-1	Material Delivery and Storage				
WM-2	Material Use				
WM-3	Stockpile Management				
WM-4	Spill Prevention and Control				
WM-5	Solid Waste Management				
WM-6	Hazardous Waste Management				
WM-7	Contaminated Soil Management				
WM-8	Concrete Waste Management				
WM-9	Sanitary/Septic Waste Management				
WM-10	Liquid Waste Management				

Attachment D

Computation Sheet for Determining Runoff Coefficients

$$\text{Total Site Area} = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{A})$$

Existing Site Conditions

$$\text{Impervious Site Area}^1 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{B})$$

$$\text{Impervious Site Area Runoff Coefficient}^{2,4} = \underline{\hspace{2cm}} \quad (\text{C})$$

$$\text{Pervious Site Area}^3 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{D})$$

$$\text{Pervious Site Area Runoff Coefficient}^4 = \underline{\hspace{2cm}} \quad (\text{E})$$

$$\text{Existing Site Area Runoff Coefficient} \frac{(B \times C) + (D \times E)}{(A)} = \underline{\hspace{2cm}} \quad (\text{F})$$

Proposed Site Conditions (after construction)

$$\text{Impervious Site Area}^1 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{G})$$

$$\text{Impervious Site Area Runoff Coefficient}^{2,4} = \underline{\hspace{2cm}} \quad (\text{H})$$

$$\text{Pervious Site Area}^3 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{I})$$

$$\text{Pervious Site Area Runoff Coefficient}^4 = \underline{\hspace{2cm}} \quad (\text{J})$$

$$\text{Proposed Site Area Runoff Coefficient} \frac{(G \times H) + (I \times J)}{(A)} = \underline{\hspace{2cm}} \quad (\text{K})$$

1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
2. Use 0.95 unless lower or higher runoff coefficient can be verified.
3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
4. Refer to local Hydrology Manual for typical C values.

Memo



Stantec

To: SES / URS – Response to DESCOP data request.

From: Ned J. Araujo, PE

File: V:\2015\active\2015026801\civil\design\analysis\drainage_calcs\Debris Basin and Storage Study Data Sheet 10-29-2008.doc

Date: January 20, 2009

Debris Basin and Storage Study Data Sheet

Prepared on 10-29-2008 by Grant Becklund, PE

Reviewed by Ned J. Araujo, PE

Table 4 was developed utilizing Sediment Yield Charts from the USGS Fact Sheet 2006-3007 titled "Sediment Yield and runoff frequency of small drainage basins in the Mojave Desert, California and Nevada.

The drainage area for each drainage sub-area was established at the project boundaries, at road crossings and at points of special study and was used to develop a volume of debris expected to be generated at each of these locations for different periods of time. The size of each of the debris basins were then determined utilizing a two year production rate.

The proposed debris capacities of the basins were limited to four different sizes as follows:

Basin "A"	200 CY of capacity
Basin "B"	400 CY of capacity
Basin "C"	600 CY of capacity
Special	Volume capacity to be determined at 100 percent engineering

The Desilting Basins Index Map for Grading Plans and Table 4 both identify the proposed Basin Design for each location as follows:

Yellow Shading:	Basin sized based on Debris Storage Chart
Purple Shading:	No basin proposed in this location on plans
Orange Shading:	Basin added on plan
Blue Shading:	Basin added at project boundary on plans.

Yellow Shaded Basins are shown on the design charts and the actual location shown on the plans may be slightly different than the location shown as a chart location. This shift will continue to occur during the final engineering process.

The Purple Shaded Basins are not shown on the plans and these locations should be reviewed to determine if the road was designed to capture debris and therefore eliminate the basin or if there is no disturbed areas up-stream that would eliminate the need for this basin.

One Team. Infinite Solutions.

Stantec

January 20, 2009

SES / URS

Page 2 of 2

The Orange Shaded Basins do not have drainage areas calculated and are sized by inspection.

The Blue Shaded Basins do not have drainage areas calculated and were sized by inspection.

STANTEC CONSULTING INC.

Ned Araujo, P.E.

Senior Project Manager

ned.araujo@stantec.com

c. Peter Haub

Attachment E

Computational Sheet for Determining Run-on Discharges

Existing Site Conditions

Area Runoff Coefficient = _____ (A)

Area Rainfall Intensity = _____ in/hr (B)

Drainage Area = _____ Acres (C)

Site Area Run-on Discharge (A) x (B) x (C) = _____ ft³/sec (D)

Attachment F

Notice of Intent (NOI)



NOTICE OF INTENT
 TO COMPLY WITH THE TERMS OF THE
 GENERAL PERMIT TO DISCHARGE STORM WATER
 ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER No. 99-08-DWQ)

I. NOI STATUS (SEE INSTRUCTIONS)

MARK ONLY ONE ITEM	1. <input type="checkbox"/> New Construction	2. <input type="checkbox"/> Change of Information for WDID#
--------------------	--	---

II. PROPERTY OWNER

Name	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone () --

III. DEVELOPER/CONTRACTOR INFORMATION

Developer/Contractor	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone () --

IV. CONSTRUCTION PROJECT INFORMATION

Site/Project Name		Site Contact Person		
Physical Address/Location		Latitude _____°	Longitude _____°	County
City (or nearest City)		Zip	Site Phone Number () --	Emergency Phone Number () --
A. Total size of construction site area: _____ Acres	C. Percent of site imperviousness (including rooftops):		D. Tract Number(s): _____, _____	
B. Total area to be disturbed: _____ Acres (% of total _____)	Before Construction: _____%		E. Mile Post Marker: _____	
F. Is the construction site part of a larger common plan of development or sale? <input type="checkbox"/> YES <input type="checkbox"/> NO		G. Name of plan or development:		
H. Construction commencement date: ____/____/____		J. Projected construction dates: Complete grading: ____/____/____ Complete project: ____/____/____		
I. % of site to be mass graded: _____				
K. Type of Construction (Check all that apply):				
1. <input type="checkbox"/> Residential 2. <input type="checkbox"/> Commercial 3. <input type="checkbox"/> Industrial 4. <input type="checkbox"/> Reconstruction 5. <input type="checkbox"/> Transportation				
6. <input type="checkbox"/> Utility Description: _____ 7. <input type="checkbox"/> Other (Please List): _____				

V. BILLING INFORMATION

SEND BILL TO: <input type="checkbox"/> OWNER (as in II. above)	Name	Contact Person	
<input type="checkbox"/> DEVELOPER (as in III. above)	Mailing Address	Phone/Fax	
<input type="checkbox"/> OTHER (enter information at right)	City	State	Zip

VI. REGULATORY STATUS

A. Has a local agency approved a required erosion/sediment control plan?..... YES NO
 Does the erosion/sediment control plan address construction activities such as infrastructure and structures?..... YES NO
 Name of local agency: _____ Phone: () -- _____

B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification?..... YES NO
 If yes, provide details: _____

VII. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (Check all that apply):

1. Indirectly to waters of the U.S.
 2. Storm drain system - Enter owner's name: _____
 3. Directly to waters of U.S. (e.g., river, lake, creek, stream, bay, ocean, etc.)

B. Name of receiving water: (river, lake, creek, stream, bay, ocean): _____

VIII. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)

A SWPPP has been prepared for this facility and is available for review: Date Prepared: ___/___/___ Date Amended: ___/___/___
 A SWPPP will be prepared and ready for review by (enter date): ___/___/___
 A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.

B. MONITORING PROGRAM

A monitoring and maintenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.

If checked above: A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes..... YES NO

Name: _____ Phone: () _____

C. PERMIT COMPLIANCE RESPONSIBILITY

A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Water Pollution Prevention Plan including:

1. Preparing an annual compliance evaluation..... YES NO
 Name: _____ Phone: () -- _____

2. Eliminating all unauthorized discharges..... YES NO

IX. VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)

Have you included a vicinity map with this submittal? YES NO
 Have you included payment of the annual fee with this submittal?..... YES NO

X. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."

Printed Name: _____
 Signature: _____ Date: _____
 Title: _____

Attachment G

Program for Maintenance, Inspection, and Repair of Construction Site BMPs

<i>The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP</i>		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
TEMPORARY EROSION CONTROL BMPs		
Soil Binders	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Reapply the selected soil binder as needed to maintain effectiveness.
Earth Dikes/Drainage Swales & Lined Ditches	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Inspect ditches and berms for washouts. ■ Replace lost riprap, damage linings or soil stabilizers as needed. ■ Remove debris and sediment. ■ Temporary conveyance should be completely removed as soon as the surrounding drainage area has been stabilized or at the completion of construction.
TEMPORARY SEDIMENT CONTROL BMPs		
Silt Fences	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Repair undercut silt fences. ■ Repair or replace split, torn, slumping, or weathered fabric. The lifespan of silt fence fabric is generally 5 to 8 months. ■ Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height.
Check Dam	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Replace missing rock, bags, bales, etc. Replace bags or bales that have degraded or have become damaged. ■ Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. ■ If the check dam is used as a grade control structure, sediment removal is not required as long as the system continues to control the grade.

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Street Sweeping	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ When actively in use, points of ingress and egress must be inspected daily. ■ When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. ■ After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.
WIND EROSION CONTROL BMPs		
Wind Erosion Control	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Check areas protected to ensure coverage. ■ Most dust control measures require frequent, often daily, or multiple times per day attention.
TRACKING CONTROL BMPs		
Street Sweeping and Vacuuming	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ When actively in use, points of ingress and egress must be inspected daily. ■ When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. ■ After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.
NON-STORM WATER MANAGEMENT BMPs		
Vehicle and Equipment Cleaning	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur. ■ Inspection and maintenance is minimal, although some berm repair may be necessary. ■ Monitor employees and subcontractors throughout the duration of the construction project to ensure appropriate practices are being implemented. ■ Inspect sump regularly and remove liquids and sediment as needed. ■ Prohibit employees and subcontractors from washing personal vehicles and equipment on the construction site./

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Vehicle and Equipment Fueling	<ul style="list-style-type: none"> ■ Vehicles and equipment should be inspected each day of use for leaks. Leaks should be repaired immediately or problem vehicles or equipment should be removed from the project site. 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill cleanup materials onsite. ■ Immediately clean up spills and properly dispose of contaminated soil and cleanup materials.
Vehicle and Equipment Maintenance	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill cleanup materials onsite. ■ Maintain waste fluid containers in leak proof condition. ■ Vehicles and equipment should be inspected on each day of use. Leaks should be repaired immediately or the problem vehicle(s) or equipment should be removed from the project site. ■ Inspect equipment for damaged hoses and leaky gaskets routinely. Repair or replace as needed.
Material and Equipment Use Over Water	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Ensure that employees and subcontractors implement the appropriate measures for storage and use of materials and equipment. ■ Inspect and maintain all associated BMPs and perimeter controls to ensure continuous protection of the water courses, including waters of the United States.
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs		
Material Delivery and Storage	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep an ample supply of spill cleanup materials near the storage area. ■ Keep storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. ■ Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.

<i>The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP</i>		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Material Use	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Maintenance of this best management practice is minimal. ■ Spot check employees and subcontractors throughout the job to ensure appropriate practices are being employed.
Stockpile Management		<ul style="list-style-type: none"> ■
Spill Prevention and Control	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill control and cleanup materials onsite, near storage, unloading, and maintenance areas. ■ Update your spill prevention and control plan and stock cleanup materials as changes occur in the types of chemicals onsite.
Solid Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Arrange for regular waste collection.
Sanitary/Septic Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Arrange for regular waste collection. ■ If high winds are expected, portable sanitary facilities must be secured with spikes or weighed down to prevent over turning.
Liquid Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Remove deposited solids in containment areas and capturing devices as needed and at the completion of the task.

Attachment H

Storm Water Quality Construction Site Inspection Checklist

GENERAL INFORMATION				
Project Name				
Project N°				
Contractor				
Inspector's Name				
Inspector's Title				
Signature				
Date of Inspection				
Inspection Type (Check Applicable)	<input type="checkbox"/> Prior to forecast rain		<input type="checkbox"/> After a rain event	
	<input type="checkbox"/> 24-hr intervals during extended rain		<input type="checkbox"/> Other _____	
Season (Check Applicable)	<input type="checkbox"/> Rainy		<input type="checkbox"/> Non-Rainy	
Storm Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (inches)	

PROJECT AREA SUMMARY AND DISTURBED SOIL AREA (DSA) SIZE	
Total Project Area	_____ Acres
Field Estimate of Active DSAs	_____ Acres
Field Estimate of Non-Active DSAs	_____ Acres

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Preservation of Existing Vegetation				
Is temporary fencing provided to preserve vegetation in areas where no construction activity is planned?				
Location:				
Erosion Control				
Does the applied temporary erosion control provide 100% coverage for the affected areas?				
Are any non-vegetated areas that may require temporary erosion control?				
Is the area where erosion controls are used required free from visible erosion?				
Location:				
Temporary Linear Sediment Barriers (Silt Fence, Fiber Rolls, Sandbag Barriers, etc.)				
Are temporary linear sediment barriers properly installed, functional and maintained?				
Are temporary linear sediment barriers free of accumulated litter?				
Is the built-up sediment less than 1/3 the height of the barrier?				
Are cross barriers installed where necessary and properly spaced?				
Location:				
Storm Drain Inlet Protection				
Are storm drain inlets internal to the project properly protected?				
Are storm drain inlet protection devices in working order and being properly maintained?				
Location:				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Sediment Basins				
Are basins designed in accordance with the requirements of the General Permit?				
Are basins maintained to provide the required retention/detention?				
Are basin controls (inlets, outlets, diversions, weirs, spillways, and racks) in working order?				
Location:				
Stockpiles				
Are all locations of temporary stockpiles, including soil, hazardous waste, and construction materials in approved areas?				
Are stockpiles protected from run-on, run-off from adjacent areas and from winds?				
Are stockpiles located at least 15 m from concentrated flows, downstream drainage courses and storm drain inlets?				
Are required covers and/or perimeter controls in place?				
Location:				
Concentrated Flows				
Are concentrated flow paths free of visible erosion?				
Location:				
Tracking Control				
Is the entrance stabilized to prevent tracking				
Is the stabilized entrance inspected daily to ensure that it is working properly				
Are points of ingress/egress to public/private roads inspected and swept and vacuumed as needed?				
Are all paved areas free of visible sediment tracking or other particulate matter?				
Location:				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Wind Erosion Control				
Is dust control implemented?				
Location:				
Dewatering Operations				
Are all one-time dewatering operations covered by the General Permit inspected before and as they occur and BMPs implemented as necessary during discharge?				
Is ground water dewatering handled in conformance with the dewatering permit issued by the RWQCB?				
Is required treatment provided for dewatering effluent?				
Location:				
Vehicle & Equipment Fueling, Cleaning, and Maintenance				
Are vehicle and equipment fueling, cleaning and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious material?				
Are vehicle and equipment fueling, cleaning and maintenance activities performed on an impermeable surface in dedicated areas?				
If no, are drip pans used?				
Are dedicated fueling, cleaning, and maintenance areas located at least 15 m away from downstream drainage facilities and watercourses and protected from run-on and runoff?				
Is wash water contained for infiltration/ evaporation and disposed of appropriately?				
Is on-site cleaning limited to washing with water (no soap, soaps substitutes, solvents, or steam)?				
On each day of use, are vehicles and equipment inspected for leaks and if necessary, repaired?				
Location:				
Waste Management & Materials Pollution Control				
Are material storage areas and washout areas protected from run-on and runoff, and located at least 15 m from concentrated flows and downstream drainage facilities?				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Are all material handling and storage areas clean; organized; free of spills, leaks, or any other deleterious material; and stocked with appropriate clean-up supplies?				
Are liquid materials, hazardous materials, and hazardous wastes stored in temporary containment facilities?				
Are bagged and boxed materials stored on pallets?				
Are hazardous materials and wastes stored in appropriate, labeled containers?				
Are proper storage, clean-up, and spill-reporting procedures for hazardous materials and wastes posted in open, conspicuous and accessible locations adjacent to storage areas?				
Are temporary containment facilities free of spills and rainwater?				
Are temporary containment facilities and bagged/boxed materials covered?				
Are temporary concrete washout facilities designated and being used?				
Are temporary concrete washout facilities functional for receiving and containing concrete waste and are concrete residues prevented from entering the drainage system?				
Do temporary concrete washout facilities provide sufficient volume and freeboard for planned concrete operations?				
Are concrete wastes, including residues from cutting and grinding, contained and disposed of off-site or in concrete washout facilities?				
Are spills from mobile equipment fueling and maintenance properly contained and cleaned up?				
Is the site free of litter?				
Are trash receptacles provided in the yard, field trailer areas, and at locations where workers congregate for lunch and break periods?				
Is litter from work areas collected and placed in watertight dumpsters?				
Are waste management receptacles free of leaks?				
Are the contents of waste management receptacles properly protected from contact with storm water or from being dislodged by winds?				
Are waste management receptacles filled at or beyond capacity?				
Location:				
Temporary Water Body Crossing or Encroachment				
Are temporary water body crossings and encroachments constructed appropriately?				
Does the project conform to the requirements of the 404 permit and/or 1601 agreement?				
Location:				

Attachment H
 Storm Water Quality Construction Inspection Checklist

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Location:				
Location:				
Location:				
Illicit Connection/ Discharge				
Is there any evidence of illicit discharges or illegal dumping on the project site?				
If yes, has the Owner/Operator been notified?				
Location:				
Discharge Points				
Are discharge points and discharge flows free from visible pollutants?				
Are discharge points free of any significant sediment transport?				
Location:				
SWPPP Update				
Does the SWPPP and Project Schedule adequately reflect the current site conditions and contractor operations?				
Are all BMPs shown on the water pollution control drawings installed in the proper location(s) and according to the details in the SWPPP?				
Location:				
General				
Are there any other potential concerns at the site?				
Location:				
Storm Water Monitoring				
Does storm water discharge directly to a water body listed in the General Permit as impaired for sediment/sedimentation or turbidity?				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
If yes, were samples for sediment/sedimentation or turbidity collected pursuant to the sampling and analysis plan in the SWPPP?				
Did the sampling results indicate that the discharges are causing or contributing to further impairment?				
If yes, were the erosion/sediment control BMPs improved or maintained to reduce the discharge of sediment to the water body?				
Were there any BMPs not properly implemented or breaches, malfunctions, leakages or spills observed which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				
If sampling indicated pollution of the storm water, were the leaks, breaches, spills, etc. cleaned up and the contaminated soil properly disposed of?				
Were the BMPs maintained or replaced?				
Were soil amendments (e.g., gypsum, lime) used on the project?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan in the SWPPP?				
If sampling indicated pollution of the storm water by the use of the soil amendments, is there a contingency plan for retention onsite of the polluted storm water?				
Did storm water contact stored materials or waste and run off the construction site? (Materials not in watertight containers, etc.)				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan in the SWPPP?				

Name	Company	Phone

COMMENTS:

Attachment J

Subcontractor Notification Letter and Notification Log

SWPPP Notification

Company
Address
City, State, ZIP

Dear Sir/Madam,

Please be advised that the California State Water Resources Control Board has adopted the General Permit (General Permit) for Storm Water Discharges Associated with Construction Activity (CAS000002). The goal of these permits is prevent the discharge of pollutants associated with construction activity from entering the storm drain system, ground and surface waters.

[Owner] has developed a Storm Water Pollution Prevention Plan (SWPPP) in order to implement the requirements of the Permits.

As a subcontractor, you are required to comply with the SWPPP and the Permits for any work that you perform on site. Any person or group who violates any condition of the Permits may be subject to substantial penalties in accordance with state and federal law. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP and the Permits. A copy of the Permits and the SWPPP are available for your review at the construction office. Please contact me if you have further questions.

Sincerely,

Name
Title

Attachment K

Notice of Non-Compliance

To: Name of Owner [City/Agency Engineer]/Regional Board Staff
Insert Date

Date:

Subject: Notice of Non-Compliance

Project Name: Insert Project Name

Project Number/Location: Project number

In accordance with the NPDES Statewide Permit for Storm Water Discharges Associated with Construction Activity, the following instance of discharge is noted:

Date, time, and location of discharge

Insert description and date of event

Nature of the operation that caused the discharge

insert description of operation

Initial assessment of any impact cause by the discharge

insert assessment

Existing BMP(s) in place prior to discharge event

list BMPs in place

Date of deployment and type of BMPs deployed after the discharge.

BMPs deployed after the discharge (with dates)

Steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

insert steps taken to prevent recurrence

Implementation and maintenance schedule for any affected BMPs

insert implementation and maintenance schedule

If further information or a modification to the above schedule is required, notify the contact person below.

Name of Contact Person

Title

Company

Telephone Number

Signature

Date

Attachment L

Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program Checklist

CONSTRUCTION PROJECT: _____

PREPARER: _____

CONTRACT NO: _____

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	100	<i>SWPPP Certification and Approval</i>	C.10	
	100.1	SWPPP Certification	C.10	
	100.2	SWPPP Approval	C.10	
	200	<i>SWPPP Amendments</i>	A.4.a, A.16	
	200.1	Amendment number and date entered into SWPPP – Amendment Log	A.4.a, A.16	
	200.2	Amendment Certification and Approval	A.4.a, A.16	
	300	<i>Introduction/Project Description</i>		
	300.1	Project Description and Location (narrative)	A.5.a.1	
	300.2	Unique Site Features (narrative)	A.5.a.1	
	300.4	<i>Project Schedule (narrative and graphical)</i>	A.5.c.5	
	400	<i>References</i>	A.14	
	500.2	<i>Vicinity Map (narrative or graphic)</i>	A.5.a.1	
	500.2	Site perimeter	A.5.a.1	
	500.2	Geographic Features	A.5.a.1	
	500.2	General topography	A.5.a.1	
	500.4	<i>Water Pollution Control Drawings (WPCDs) (graphic or narrative)</i>	A.5.a.2	
	500.4	Site perimeter	A.5.a.2	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	500.4	Existing and proposed buildings, lots, and roadways	A.5.a.2	
	500.4	Storm water collection and discharge points	A.5.a.2	
	500.4	General topography before and after construction	A.5.a.2	
	500.4	Anticipated discharge location(s)	A.5.a.2	
	500.4	Drainage patterns including the entire relevant drainage areas	A.5.a.2	
	500.4	Temporary on-site drainage(s)	A.5.a.2	
	500.3	<i>Pollutant Source and BMP Identification (narrate/ or indicate on site map)</i>	A.5.b	
		<i>Drainage</i>	A.5.b.1	
	500.4	Drainage patterns after major grading	A.5.b.1	
	500.4	Slopes after major grading	A.5.b.1	
	Attach. E	Calculations for storm water run-on	A.5.b.1	
	500.4	BMPs that divert off-site drainage from passing through site	A.5.b.1	
	500.4	<i>Storm Water Inlets</i>	A.5.b.2	
	500.4	Drainage patterns to storm water inlets or receiving water	A.5.b.2	
	500.4	BMPs that protect storm water inlets or receiving water	A.5.b.2	
		<i>Site History (narrative; if possible, indicate location(s) on the Water Pollution Control Drawings)</i>	A.5.b	
	500.3.3	Nature of fill material and data describing the soil. Description of toxic materials treated, stored, disposed, spilled or leaked on site	A.5.b.3	
	500.3.8 & 500.3.9	BMPs that minimize contact of contaminants with storm water	A.5.b.3	
		<i>Location of Areas Designated for:</i>	A.5.b.4	
	500.3.8 & 500.4	Vehicle storage & service	A.5.b.4	
	500.3.8 & 500.4	Equipment storage, cleaning, maintenance	A.5.b.4	
	500.3.9 & 500.4	Soil or waste storage	A.5.b.4	
	500.3.9 & 500.4	Construction material loading, unloading, storage and access	A.5.b.4	
	500.3.8 & 500.3.9	Areas outside of physical site (yards, borrow areas, etc.)		
		<i>BMP Locations or Descriptions for:</i>	A.5.b.5	
	500.3.9 & 500.4	Waste handling and disposal areas	A.5.b.5	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	500.3.9 & 500.4	On-site storage and disposal of construction materials and waste	A.5.b.5	
	500.3.8, 500.3.9 & 500.4	Minimum exposure of storm water to construction materials, equipment, vehicles, waste	A.5.b.5	
	500.6	Post Construction BMPs	A.5.b.6	
	500.6.1	Listing or Description of Post-construction BMPs	A.5.b.6	
	500.4	Location of post-construction BMPs	A.5.b.6	
	500.6.2	Parties responsible for long-term maintenance	A.5.b.6	
		Additional Information	A.5.c	
	500.3.1	Description of other pollutant sources and BMPs	A.5.c.1	
	500.3.2	Pre-construction control practices	A.5.c.1	
	500.3.1	Inventory of materials and activities that may pollute storm water	A.5.c.2	
	500.3.8 & 500.3.9	BMPs to reduce/eliminate potential pollutants listed in the inventory	A.5.c.2	
	300.4	Runoff coefficient (before & after)	A.5.c.3	
	300.4	Percent impervious (before & after)	A.5.c.3	
	Attach. F	Copy of the NOT	A.5.c.4	
	300.3	Construction activity schedule	A.5.c.5	
	300.5	Contact information	A.5.c.6	
	500.4.1	SOIL STABILIZATION (EROSION CONTROL)	A.6	
		The SWPPP shall include:	A.6.a-c	
	500.4	Areas of vegetation on site	A.6.a.1	
	500.4	Areas of soil disturbance that will be stabilized during rainy season	A.6.a.2	
	500.4	Areas of soil disturbance which will be exposed during any part of the rainy season	A.6.a.3	
	300.4	Implementation schedule for erosion control measures	A.6.a.4	
	500.3.4	BMPs for erosion control	A.6.b	
	500.3.7	BMPs to control wind erosion	A.6.c	
	500.3.5	SEDIMENT CONTROL	A.8	
	500.3.5 & 500.4	Description/Illustration of BMPs to prevent increase of sediment load in discharge	A.8	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	300.4, 500.3.5	Implementation schedule for sediment control measures	A.8	
	500.3.6	BMPs to control sediment tracking	A.8	
	500.3.8 & 500.3.9	NON-STORM WATER MANAGEMENT	A.9	
	500.3.8 & 500.3.9	Description of non-storm water discharges to receiving waters	A.9	
	500.3.8 & 500.3.9	Locations of discharges	A.9	
	500.3.8 & 500.3.9	Description of BMPs	A.9	
	300.5	Name and phone number of person responsible for non-storm water management	A.9	
	500.6	POST-CONSTRUCTION	A.10	
	500.6.1	Description of post-construction BMPs	A.10	
	500.6.2	Operation/Maintenance of BMPs after project completion (including short-term funding, long-term funding and responsible party)	A.10	
	500.5	MAINTENANCE, INSPECTIONS, AND REPAIR	A.11	
	300.5, 600.1	Name and phone number of person(s) responsible for inspections	A.11	
	600.1, Attach. H	Complete inspection checklist: date, weather, inadequate BMPs, visual observations of BMPs, corrective action, inspector's name, title, signature	A.11.a-f	
		OTHER REQUIREMENTS	A.12-16	
	500.7	Documentation of all training	A.12	
	500.8	List of Contractors/Subcontractors	A.13	

SECTION B: MONITORING AND REPORTING REQUIREMENTS				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	600.1	Description of Site Inspection Plans	B.3	
	100.3	Compliance certification (annually 7/1)	B.4	
	600.2	Discharge reporting	B.5	
	600.3	Keep records of all inspections, compliance certifications, and noncompliance reports on site for a period of at least three years	B.6	
	600.4	Sampling and Analysis Plan for Sediment	B.7	

SECTION B: MONITORING AND REPORTING REQUIREMENTS				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	600.5	Sampling and Analysis Plan for Non-Visible Pollutants	B.8	

SECTION C: STANDARD PROVISIONS FOR CONSTRUCTION ACTIVITIES				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	100.1	Signed SWPPP Certification	C.9,10	

Attachment M

Annual Certification of Compliance Form

Project Name: _____

Project Number: _____

Company Name: _____

Address: _____

Construction Start Date: _____ **Completion Date:** _____

This project is in compliance with the General Permit and this SWPPP (check yes or no) **YES** **NO**

Description of Work:

description of work

Work Now in Progress:

work in progress

Work Planned for Next 12 Months:

work planned

"I certify under penalty of law that, during the past 12 months, the construction activities are in compliance with the requirements of the General Permit and this SWPPP. This Certification is based upon the site inspections required in Section B, Item 3 of the General Permit. This document was 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."

Owner (or Authorized Representative) Signature

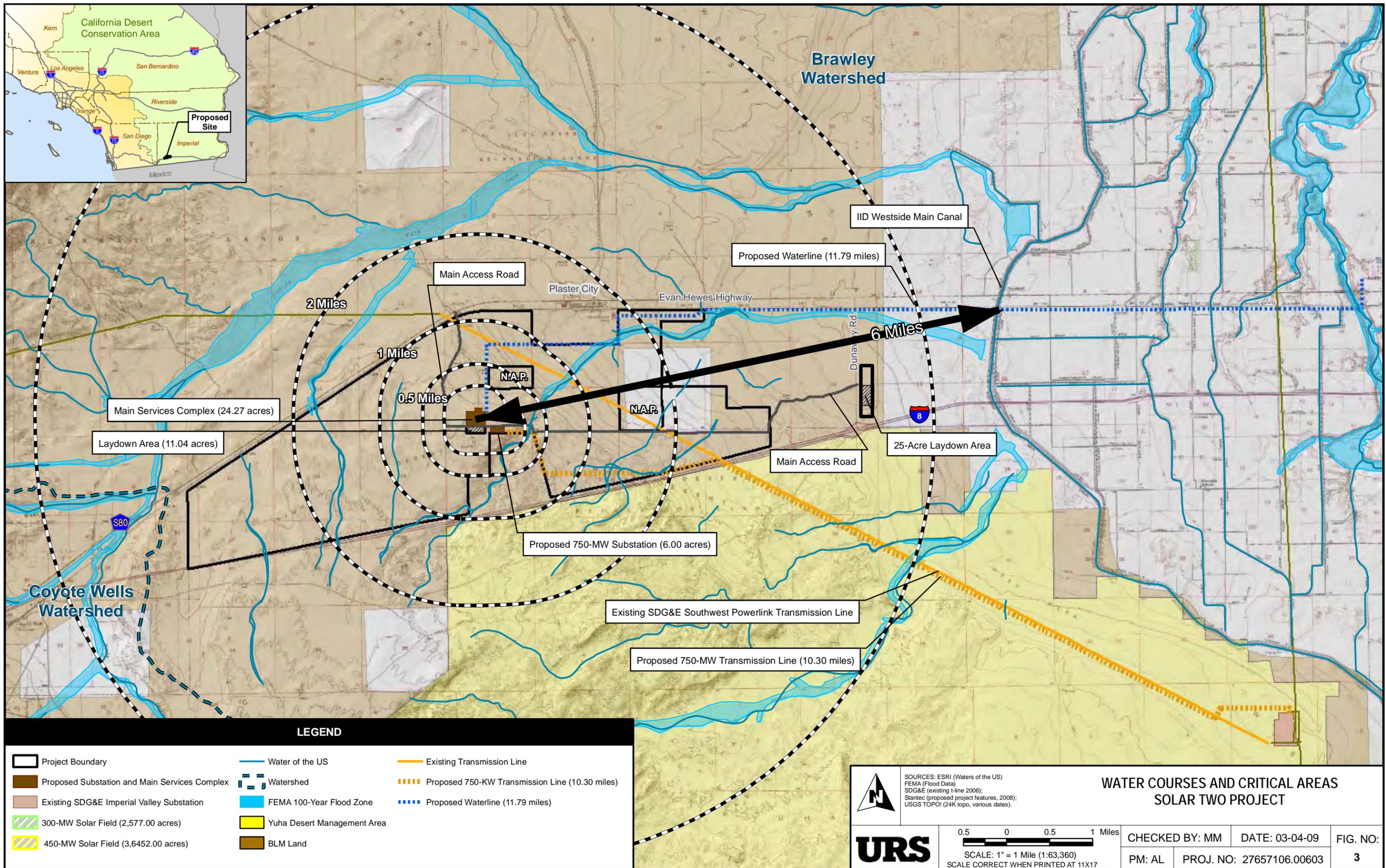
Date

Name and Title

Telephone Number

Attachment N

Other Plans and Permits



LEGEND					
	Project Boundary		Water of the US		Existing Transmission Line
	Proposed Substation and Main Services Complex		Watershed		Proposed 750-KW Transmission Line (10.30 miles)
	Existing SDG&E Imperial Valley Substation		FEMA 100-Year Flood Zone		Proposed Waterline (11.79 miles)
	300-MW Solar Field (2,577.00 acres)		Yuma Desert Management Area		
	450-MW Solar Field (3,6452.00 acres)		BLM Land		

SOURCES: ESRI (Waters of the US)
FEMA (Flood Data)
SDG&E (existing t-line 2006);
Slantec (proposed project features, 2008);
USGS TOPOI (24K topo, various dates).

WATER COURSES AND CRITICAL AREAS SOLAR TWO PROJECT

CHECKED BY: MM DATE: 03-04-09 FIG. NO:
PM: AL PROJ. NO: 27657106.00603 **3**

SCALE: 1" = 1 Mile (1:63,360)
SCALE CORRECT WHEN PRINTED AT 11X17

Path: G:\gis\projects\1577\22238980\mxd\fig_3_water_critical_area.mxd, 06/30/09, Randall_Clark

Attachment O

Water Pollution Control Cost Breakdown

Project Name: _____

Project Number: _____

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
EC-3	Hydraulic Mulch	FT ²			
EC-4	Hydroseeding	FT ²			
EC-5	Soil Binders	FT ²			
EC-6	Straw Mulch	FT ²			
EC-7	Geotextiles & Mats	FT ²			
EC-8	Wood Mulching	FT ²			
EC-9	Earth Dikes & Drainage Swales	FT			
EC-10	Velocity Dissipation Devices	EA			
EC-11	Slope Drains	EA			
EC-12	Streambank Protection	LS			
EC-13	Polyacrylamide	LS			
SE-1	Silt Fence	FT			
SE-2	Sediment Basin	EA			
SE-3	Sediment Trap	EA			
SE-4	Check Dam	EA			
SE-5	Fiber Rolls	FT			
SE-6	Gravel Bag Berm	FT			
SE-7	Street Sweeping and Vacuuming	LS			
SE-8	Sandbag Barrier	FT			
SE-9	Straw Bale Barrier	FT			
SE-10	Storm Drain Inlet Protection	EA			
WE-1	Wind Erosion Control	LS			
TC-1	Stabilized Construction Entrance/Exit	EA			
TC-2	Stabilized Construction Roadway	EA			

Attachment O
Water Pollution Control Cost Breakdown

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
TC-3	Entrance/Outlet Tire Wash	EA			
NS-1	Water Conservation Practices	LS			
NS-2	Dewatering Operations	EA			
NS-3	Paving and Grinding Operations	LS			
NS-4	Temporary Stream Crossing	EA			
NS-5	Clear Water Diversion	EA			
NS-6	Illicit Connection/ Discharge	LS			
NS-7	Potable Water/Irrigation	LS			
NS-8	Vehicle and Equipment Cleaning	LS			
NS-9	Vehicle and Equipment Fueling	LS			
NS-10	Vehicle and Equipment Maintenance	LS			
NS-11	Pile Driving Operations	LS			
NS-12	Concrete Curing	LS			
NS-13	Material and Equipment Use Over Water	LS			
NS-14	Concrete Finishing	LS			
NS-15	Demolition Adjacent to Water	LS			
NS-16	Temporary Batch Plants	LS			
WM-1	Material Delivery and Storage	LS			
WM-2	Material Use	LS			
WM-3	Stockpile Management	LS			
WM-4	Spill Prevention and Control	LS			
WM-5	Solid Waste Management	LS			
WM-6	Hazardous Waste Management	LS			
WM-7	Contaminated Soil Management	LS			
WM-8	Concrete Waste Management	LS			
WM-9	Sanitary/Septic Waste Management	LS			
WM-10	Liquid Waste Management	LS			
			TOTAL		

Attachment P

Notice of Termination

Attachment Q

BMPs Selected for the Project

Attachment S

Pollutant Testing Guidance Table

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Asphalt Products	Hot Asphalt	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		
	Asphalt Emulsion				
	Liquid Asphalt (tack coat)				
	Cold Mix				
	Crumb Rubber	Yes – Black, solid material	Visually Observable - No Testing Required		
	Asphalt Concrete (Any Type)	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		
Cleaning Products	Acids	No	pH Acidity Anions (acetic acid, phosphoric acid, sulfuric acid, nitric acid, hydrogen chloride)	pH Meter Acidity Test Kit	EPA 150.1 (pH)
					SM 2310B (Acidity)
					EPA 300.0 (Anion)
	Bleaches	No	Residual Chlorine	Chlorine	SM 4500-CL G (Res. Chlorine)
	Detergents	Yes - Foam	Visually Observable - No Testing Required		
	TSP	No	Phosphate	Phosphate	EPA 365.3 (Phosphate)
	Solvents	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
SVOC			None	EPA 625 (SVOC)	

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Portland Concrete Cement & Masonry Products	Portland Cement (PCC)	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Masonry products	No	pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
			Alkalinity		SM 2320 (Alkalinity)
	Sealant (Methyl Methacrylate - MMA)	No	Methyl Methacrylate	None	EPA 625 (SVOC)
			Cobalt		EPA 200.8 (Metal)
			Zinc		
	Incinerator Bottom Ash Bottom Ash Steel Slag Foundry Sand Fly Ash Municipal Solid Waste	No	Aluminum Calcium Vanadium Zinc	Calcium Test	EPA 200.8 (Metal) EPA 200.7 (Calcium)
	Mortar	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Concrete Rinse Water	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Non-Pigmented Curing Compounds	No	Acidity	pH Meter Alkalinity or Acidity Test Kit	SM 2310B (Acidity)
Alkalinity			SM 2320 (Alkalinity)		
pH			EPA 150.1 (pH)		
VOC			EPA 601/602 or EPA 624 (VOC)		
SVOC			EPA 625 (SVOC)		

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory	
Landscaping and Other Products	Aluminum Sulfate	No	Aluminum	TDS Meter Sulfate	EPA 200.8 (Metal)	
			TDS		EPA 160.1 (TDS)	
			Sulfate		EPA 300.0 (Sulfate)	
	Sulfur-Elemental	No	Sulfate	Sulfate	EPA 300.0 (Sulfate)	
	Fertilizers-Inorganic ⁴	No	Nitrate	Nitrate	EPA 300.0 (Nitrate)	
			Phosphate	Phosphate	EPA 365.3 (Phosphate)	
			Organic Nitrogen	None	EPA 351.3 (TKN)	
			Potassium	None	EPA 200.8 (Metal)	
	Fertilizers-Organic	No	TOC	Nitrate	EPA 415.1 (TOC)	
			Nitrate		EPA 300.0 (Nitrate)	
			Organic Nitrogen		EPA 351.3 (TKN)	
			COD		EPA 410.4 (COD)	
	Natural Earth (Sand, Gravel, and Topsoil)	Yes - Cloudiness and turbidity	Visually Observable - No Testing Required			
	Herbicide	No	Herbicide	None	Check lab for specific herbicide or pesticide	
	Pesticide		Pesticide			
	Lime		Alkalinity	pH Meter Alkalinity or Acidity Test Kit	SM 2320 (Alkalinity)	
pH			EPA 150.1 (pH)			

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Painting Products	Paint	Yes	Visually Observable - No Testing Required		
	Paint Strippers	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
			SVOC	None	EPA 625 (SVOC)
	Resins	No	COD	None	EPA 410.4 (COD)
			SVOC		EPA 625 (SVOC)
	Sealants	No	COD	None	EPA 410.4 (COD)
	Solvents	No	COD	None	EPA 410.4 (COD)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)
	Lacquers, Varnish, Enamels, and Turpentine	No	COD	None	EPA 410.4 (COD)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)
	Thinners	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
			COD		EPA 410.4 (COD)
Portable Toilet Waste Products	Portable Toilet Waste	Yes	Visually Observable - No Testing Required		

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Contaminated Soil ⁵	Aerially Deposited Lead ³	No	Lead	None	EPA 200.8 (Metal)
	Petroleum	Yes – Rainbow Surface Sheen and Odor	Visually Observable - No Testing Required		
	Other	No	Contaminant Specific	Contaminant Specific	Contaminant Specific
Line Flushing Products	Chlorinated Water	No	Total chlorine	Chlorine	SM 4500-CL G (Res. Chlorine)
Adhesives	Adhesives	No	COD	None	EPA 410.4 (COD)
			Phenols	Phenol	EPA 420.1 (Phenol)
			SVOC	None	EPA 625 (SVOC)
Dust Palliative Products	Salts (Magnesium Chloride, Calcium Chloride, and Natural Brines)	No	Chloride	Chloride	EPA 300.0 (Chloride)
			TDS	TDS Meter	EPA 160.1 (TDS)
			Cations (Sodium, Magnesium, Calcium)	None	EPA 200.7 (Cations)
Vehicle	Antifreeze and Other Vehicle Fluids	Yes - Colored Liquid	Visually Observable - No Testing Required		
	Batteries	No	Sulfuric Acid	None	EPA 300.0 (Sulfate)
			Lead	None	EPA 200.8 (Metal)
			pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
Fuels, Oils, Lubricants	Yes - Rainbow Surface Sheen and Odor	Visually Observable - No Testing Required			

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Soil Amendment/Stabilization Products	Polymer/Copolymer ^{6, 7}	No	Organic Nitrogen	None	EPA 351.3 (TKN)
			BOD	None	EPA 405.1 (BOD)
			COD	None	EPA 410.4 (COD)
			DOC	None	EPA 415.1 (DOC)
			Nitrate	Nitrate	EPA 300.0 (Nitrate)
			Sulfate	Sulfate	EPA 300.0 (Sulfate)
			Nickel	None	EPA 200.8 (Metal)
	Straw/Mulch	Yes - Solids	Visually Observable - No Testing Required		
	Lignin Sulfonate	No	Alkalinity	Alkalinity	SM 2320 (Alkalinity)
			TDS	TDS Meter	EPA 160.1 (TDS)
	Psyllium	No	COD	None	EPA 410.4 (COD)
			TOC		EPA 415.1 (TOC)
	Guar/Plant Gums	No	COD	None	EPA 410.4 (COD)
			TOC		EPA 415.1 (TOC)
			Nickel		EPA 200.8 (Metal)
	Gypsum	No	pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
			Calcium	Calcium	EPA 200.7 (Calcium)
			Sulfate	Sulfate	EPA 300.0 (Sulfate)
			Aluminum	None	EPA 200.8 (Metal)
			Barium		
Manganese					
Vanadium					

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Treated Wood Products	Ammoniacal-Copper-Zinc-Arsenate (ACZA)	No	Arsenic	Total Chromium	EPA 200.8 (Metal)
	Copper-Chromium-Arsenic (CCA)		Total Chromium		
	Ammoniacal-Copper-Arsenate (ACA)		Copper		
	Copper Naphthenate		Zinc		
	Creosote	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		

Notes:

1. 1 If specific pollutant is known, analyze only for that specific pollutant. See MSDS to verify.
2. For each construction material, test for one of the pollutant indicators. Bolded pollutant indicates lowest analysis cost or best indicator. However, the composition of the specific construction material, if known, is the first criterion for selecting which analysis to use.
3. See www.hach.com, www.lamotte.com, www.ysi.com and www.chemetrics.com for some of the test kits
4. If the type of inorganic fertilizer is unknown, analyze for all pollutant indicators listed.
5. Only if special handling requirements are required in the contract documents for aerially deposited lead (ADL)
6. If used with a dye or fiber matrix, it is considered visually observable and no testing is required.
7. Based upon research conducted by the State of California Department of Transportation (Caltrans), the following copolymers/polymers do not discharge pollutants and water quality sampling and analysis is **not** required: Super Tak™, M-Binder™, Fish Stik™, Pro40dc™, Fisch-Bond™, and Soil Master WR™.

Storm Water Pollution Prevention Plan

For:

**SES SOLAR TWO WATER LINE
IMPERIAL COUNTY, CALIFORNIA**

Prepared for:

**SES Solar Two, LLC
4800 North Scottsdale Road, Suite 5500
Scottsdale, AZ 85251
Kevin Harper
(602) 957-1818**

Contractor:

**Stirling Energy Systems, Inc.
4800 North Scottsdale Road, Suite 5500
Scottsdale, AZ 85251
(602) 957-1818**

Project Site Location/Address:

SES SOLAR TWO, Bewteen Plaster City and Seeley along Evan Hewes Highway

Contractor's Storm Water Pollution Prevention Manager

**Robert G. Byall
(602) 957-1818**

SWPPP Prepared by:

**URS Corporation
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
(619) 294-9400
Matt Moore, Project Engineer**

SWPPP Preparation Date:

June 19, 2009

Estimated Project Dates:

Start of Construction: TBD Completion of Construction: TBD

WDID No.: _____

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Attachment M	Annual Certification of Compliance Form	
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Attachment R.....Sampling Activity Log
Attachment S.....Construction Material and Pollutant Testing Guidance Table – Non-Visible Pollutants
Attachment T Discharge Reporting Log

100.2 Owner Approval and Certification of SWPPP

**Owner's (or Authorized Representative)
Approval and Certification of the
Storm Water Pollution Prevention Plan**

Project Name: SES SOLAR TWO WATER LINE
IMPERIAL COUNTY, CALIFORNIA

Project Number: _____

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

Owner (or Authorized Representative) Signature

Date

Robert G. Byall
Name and Title

(602) 957-1818
Telephone Number

100.3 Annual Compliance Certification

By July 1 of each year, the Owner shall complete an Annual Certification of Compliance stating compliance with the terms and conditions of the Permit and the SWPPP. The blank Annual Certification of Compliance Form is included in Attachment M. Completed Annual Certifications of Compliance and Approvals can be found in the following pages.

Section 200

SWPPP Amendments

200.1 SWPPP Amendment Certification and Approval

This SWPPP shall be amended:

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

The following items will be included in each amendment:

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

The amendments for this SWPPP, along with the Owner's Certification and the Owner approval, can be found in the following pages. Amendments are listed in the Amendment Log in section 200.2

SWPPP Amendment No.

Project Name: SES SOLAR TWO WATER LINE
IMPERIAL COUNTY, CALIFORNIA

Project Number: _____

**Preparer Certification of the
Storm Water Pollution Prevention Plan Amendment**

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

Preparer's Signature

Matt Moore

Preparer's Name and Title

Date

(619)294-9400

Telephone Number

**Owner (or Owner's Authorized Representative) Approval of the
Storm Water Pollution Prevention Plan Amendment**

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

Owner (or Authorized Representative) Signature

Robert G. Byall

Name and Title

Date

(602) 957-1818

Telephone Number

200.2 Amendment Log

Project Name: SES SOLAR TWO WATER LINE
IMPERIAL COUNTY, CALIFORNIA

Project Number: _____

Amendment No.	Date	Brief Description of Amendment	Prepared By

Section 300

Introduction and Project Description

300.1 Introduction and Project Description

The offsite water improvement is a small part of the larger plan of development, which is known as Solar Two located approximately 14 miles west of City of El Centro. A separate SWPPP document will be prepared as needed for all onsite construction activities.

The proposed water line and pump station, estimated to be 12 miles in length, will be within the Evan Hewes Highway right-of-way, running generally parallel to the existing road in the east-west direction. It will convey water from the Seely Waste Water treatment plant to the Solar Two project site for both construction and operation purposes (non-potable). The pipeline will be buried within the Evan Hewes Highway ROW approximately 30" below the existing grade. The line will enter the SES property at the exact location as the previously identified line (approximately 1,000 yards east of Plaster City and then run due south to the Raw Water Storage Tank).

300.2 Unique Site Features

The proposed pump station and water line will be owned and maintained by SES Solar Two, LLC.

300.3 Construction Site Estimates

The following are estimates of the construction site:

Construction site area	<u>8.0</u>	acres
Percentage impervious area before construction	<u>0</u>	%
Runoff coefficient before construction ⁽¹⁾	<u>0.4</u>	
Percentage impervious area after construction	<u>0</u>	%
Runoff coefficient after construction ⁽¹⁾	<u>0.4</u>	
Anticipated storm water flow on to the construction site ⁽²⁾	<u>1.4</u>	cfs

⁽¹⁾ Calculations are shown in Attachment D

⁽²⁾ Calculations are shown in Attachment E

300.4 Project Schedule/Water Pollution Control Schedule

The project schedule/water pollution control schedule will be developed after approval of the water line design.

300.5 Contact Information/List of Responsible Parties

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

Robert G. Byall

(602) 957-1818

Stirling Energy Systems, Inc.

4800 North Scottsdale Road, Suite 5500

Scottsdale, AZ 85251

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

- Ensuring full compliance with the SWPPP and the Permit
- Implementing all elements of the SWPPP, including but not limited to:
 - Implementation of prompt and effective erosion and sediment control measures
 - Implementing all non-storm water management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than storm water are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems; etc.
- Pre-storm inspections
- Storm event inspections
- Post-storm inspections
- Routine inspections as specified in the project's specifications or described in the SWPPP
- Updates/ Amendments to the SWPPP, as needed

- Preparing annual compliance certification for owner's, or owner's authorized representative, signature
- Ensuring elimination of all unauthorized discharges
- The SWPPM shall be assigned authority by the Contractor to mobilize crews in order to make immediate repairs to the control measures
- Coordinate with the Contractor to assure all of the necessary corrections/repairs are made immediately, and that the project complies with the SWPPP, the Permit and approved plans at all times
- Submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges

Section 400

References

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

- Project plans and specifications No. (TBD), dated TBD, prepared by TBD.
- State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity.
- California Stormwater BMP Handbook - Construction, January 2003

Section 500

Body of SWPPP

500.1 Objectives

This Storm Water Pollution Prevention Plan (SWPPP) has six main objectives:

- Identify all pollutant sources, including sources of sediment that may affect the quality of storm water discharges associated with construction activity (storm water discharges) from the construction site, and
- Identify non-storm water discharges, and
- Identify, construct, implement in accordance with a time schedule, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction, and
- Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs).
- Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharge directly into water bodies listed on Attachment 3 of the Permit (Clean Water Act Section 303(d) [303(d)] Water Bodies listed for Sedimentation).
- For all construction activity, identify a sampling and analysis strategy and sampling schedule for discharges that have been discovered through visual monitoring to be potentially contaminated by pollutants not visually detectable in the runoff.

This SWPPP conforms with the required elements of the General Permit No. CAS000002 issued by the State of California, State Water Resources Control Board (SWRCB). This SWPPP will be modified and amended to reflect any amendments to the Permit or any changes in construction or operations that may affect the discharge of pollutants from the construction site to surface waters, groundwaters, or the municipal separate storm sewer system (MS4). The SWPPP will also be amended if it is in violation of any condition of the Permit or has not achieved the general objective of reducing pollutants in storm water discharges. The SWPPP shall be readily available on-site for the duration of the project.

500.2 Vicinity Map

The construction project vicinity map showing the project location, surface water boundaries, geographic features, construction site perimeter, and general topography, is located in Attachment A. The project's Title Sheet provides more detail regarding the project location and is also included in Attachment A.

500.3 Pollutant Source Identification and BMP Selection

500.3.1 Inventory of Materials and Activities that May Pollute Storm Water

The following is a list of construction materials that will be used and activities that will be performed that will have the potential to contribute pollutants, other than sediment, to storm water runoff (control practices for each activity are identified in the Water Pollution Control Drawings (WPCDs) and/or in Sections 500.3.4 through 500.3.9:

- Vehicle fluids, including oil, grease, petroleum and coolants
- Base and subbase material
- Mortar mix
- BMP materials - sand bags, liquid copolymer
- General Litter

Construction activities that have the potential to contribute sediment to storm water discharges include:

- Clear and grub operations
- Utility excavation operations

Attachment C lists all Best Management Practices (BMPs) that have been selected for implementation in this project. Implementation and location of BMPs are shown on the WPCDs in Attachment B. Narrative descriptions of BMPs to be used during the project are listed by category in each of the following SWPPP sections. Attachment Q includes a list, and/or copies of the fact sheets of all the BMPs selected for this project.

500.3.2 Existing (pre-construction) Control Measures

The following are existing (pre-construction) control measures encountered within the project site:

- None

500.3.3 Nature of Fill Material and Existing Data Describing the Soil

The site is primarily a natural desert environment with sparse vegetation and numerous off-road trails. The soil at the site is generally very stiff and/or very dense. Groundwater was encountered in boring at a depth of about 45 feet below ground surface (approximate elevation -38 feet, NAVD88).

Existing site features that, as a result of past usage, may contribute pollutants to storm water (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site) include:

- None

500.3.4 Erosion Control

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

- 1) Preserve existing vegetation where required and when feasible.
- 2) Apply temporary erosion control to remaining active and non-active areas as required by the California Stormwater BMPs Handbook – Construction, and the contract documents. Reapply as necessary to maintain effectiveness.
- 3) Implement temporary erosion control measures at regular intervals throughout the defined rainy season to achieve and maintain the contract’s disturbed soil area requirements. Implement erosion control prior to the defined rainy season.
- 4) Stabilize non-active areas as soon as feasible after the cessation of construction activities.

- 5) Control erosion in concentrated flow paths by applying erosion control blankets, erosion control seeding, and lining swales as required in the contract documents.
- 6) Apply seed to areas deemed substantially complete by the Owner during the defined rainy season.
- 7) At completion of construction, apply permanent erosion control to all remaining disturbed soil areas.

Sufficient erosion control materials will be maintained on-site to allow implementation in conformance with Permit requirements and described in this SWPPP. This includes implementation requirements for active areas and non-active areas that require deployment before the onset of rain.

Implementation and locations of temporary erosion control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B and/or described in this section. The BMP Consideration Checklist in Attachment C indicates the BMPs that will be implemented to control erosion on the construction site; these are:

- EC-1, Scheduling
- EC-2, Preservation of Existing Vegetation
- EC-5, Soil Binders
- EC-9, Earth Dikes/Drainage Swales & Lined Ditches

Scheduling

Scheduling is the development of a written plan that includes sequencing of construction activities and the implementation of BMPs such as erosion control and sediment control while taking local climate (rainfall, wind, etc.) into consideration. The purposes is to reduce the amount and duration soil is exposed to erosion by wind, rain, runoff, and vehicle tracking, and to perform the construction activities and control practices in accordance with the planned schedule.

Preservation and Existing Vegetation

Carefully planned preservation of existing vegetation minimizes the potential of removing or injuring existing trees, vines, shrubs, and grasses that protect soil from erosion.

Soil Binders

Soil binders consist of applying and maintaining a soil stabilizer to exposed soil surfaces. Soil binders are materials applied to the soil surfaces. Soil binders are materials applied to the soil surface to temporarily prevent water induced erosion of exposed soils on construction sites. Soil binders also prevent wind erosion.

Earth Dikes and Drainage Swales

An earth dike is a temporary berm or ridge of compacted soil used to divert runoff or channel water to a desired location. A drainage swale is a shaped and sloped depression in the soil surface used to convey runoff to a desired location. Earth dikes and drainage swales are used to divert offsite runoff around the construction site, divert runoff from stabilized areas and disturbed areas, and direct runoff into sediment basins or traps.

500.3.5 Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate sediment control measures required by the contract documents, and other measures selected by the Contractor, SWPPP Manager, or Owner.

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

Implementation and locations of temporary sediment control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B. The BMP Consideration Checklist in Attachment C indicates all the BMPs that will be implemented to control sediment on the construction site; these are:

- SE-1, Silt Fence
- SE-4, Check Dam
- SE-7, Street Sweeping

Silt Fence

A silt fence is made of a filter fabric that has been entrenched, attached to supporting poles, and sometimes backed by a plastic or wire mesh for support. The silt fence detains sediment-laden water, promoting sedimentation behind the fence.

Silt fences are suitable for perimeter control, placed below areas where sheet flows discharge from the site. They should also be used as interior controls below disturbed areas where runoff may occur in the form of sheet and rill erosion. Silt fences are generally ineffective in locations where the flow is concentrated and are only applicable for sheet or overland flows. Silt fences are most effective when used in combination with erosion controls.

Check Dams

A check dam is a small barrier constructed of rock, gravel bags, sand bags, fiber rolls, or reusable products, placed across a constructed swale or drainage ditch. Check dams reduce the effective slope of the channel, thereby reducing the velocity of flowing water, allowing sediment to settle and reducing erosion.

500.3.6 Tracking Control

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

- SE-7, Street Sweeping and Vacuuming

Street Sweeping and Vacuuming

Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters.

500.3.7 Wind Erosion Control

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

- WE-1, Wind Erosion Control

Wind Erosion Control

Wind erosion or dust control consists of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. Covering small stockpiles or areas is an alternative to applying water or other dust palliatives.

500.3.8 Non-Storm Water Control

An inventory of construction activities and potential non-storm water discharges is provided in Section 5.3.1. The BMP Consideration Checklist in Attachment C and the following list indicates the BMPs that have been selected to control non-storm water pollution on the construction site. Implementation and locations of some non-storm water control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B. A narrative description of each BMP follows.

- NS-6, Illicit Connection/Illegal Discharge Detection and Reporting
- NS-8, Vehicle and Equipment Cleaning
- NS-9, Vehicle and Equipment Fueling
- NS-10, Vehicle and Equipment Maintenance
- NS-13, Material and Equipment Use Over Water

Vehicle and Equipment Cleaning

Vehicle and equipment cleaning procedures and practices eliminate or reduce the discharge of pollutants to stormwater from vehicle and equipment cleaning operations. Procedures and practices include but are not limited to the storm drain by infiltrating the wash water; and training employees and subcontractors in proper cleaning procedures.

Vehicle and Equipment Fueling

Vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.

Liquid Waste Management

Liquid waste management includes procedures and practices to prevent discharge of pollutants to the storm drain system or to watercourses as a result of the creation, collection, and disposal on non-hazardous liquid wastes.

Vehicle and Equipment Maintenance

Prevent or reduce the contamination of stormwater resulting from vehicle and equipment maintenance by running a "dry and clean site." The best option would be to perform maintenance activities at an offsite facility. If this option is not available then work should be performed in designated areas only, while providing cover for materials stored outside,

checking for leads and spills, and containing and cleaning up spills immediately. Employees and subcontractors must be trained in proper procedures.

Material and Equipment Use over Water

Procedures for the proper use, storage, and disposal of materials and equipment on barges, boats, temporary construction pads, or similar locations, that minimize or eliminate the discharge of potential pollutants to a watercourse.

Applies where materials and equipment are used on barges, boats, docks, and other platforms over or adjacent to a watercourse, including waters of the United States. These procedures should be implemented for construction materials, or any other materials that may cause or contribute to exceedances of water quality standards.

500.3.9 Waste Management and Materials Pollution Control

An inventory of construction activities, materials, and wastes is provided in Section 5.3.1. The BMP Consideration Checklist in Attachment C and the following list indicates the BMPs that have been selected to handle materials and control construction site wastes. A narrative description of each BMP follows.

- WM-1, Material Delivery and Storage
- WM- 2, Material Use
- WM-3, Stockpile Management
- WM-4, Spill Prevention and Control
- WM-5, Solid Waste Management
- WM-9, Sanitary/Septic Waste Management
- WM-10, Liquid Waste Management

Material Delivery and Storage

Prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.

Material Use

Prevent or reduce the discharge of pollutants to the storm drain system or watercourses from material use by using alternative products, minimizing hazardous material use onsite, and training employees and subcontractors.

Spill Prevention

Prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the sources of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

Solid Waste Management

Solid waste management procedures and practices are designed to prevent or reduce the discharge of pollutants to stormwater from solid and construction waste by providing designated waste collection areas and containers, arranging for regular disposal and training employees and subcontractors.

Sanitary/Septic Waste Management

Proper sanitary and septic waste management prevent the discharge of pollutants to stormwater from sanitary and septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal.

Liquid Waste Management

Liquid waste management includes procedures and practices to prevent discharge of pollutants to the storm drain system or to watercourses as a result of the creation, collection, and disposal of non-hazardous liquid wastes.

500.3.10 Cost Breakdown for Water Pollution Control

A cost breakdown itemizing the contract lump sum for water pollution control has been developed for this project and included in Attachment O. The cost breakdown reflects the items of work, quantities and costs for BMPs shown in the SWPPP, except for those construction site BMPs and permanent BMPs that are shown on the project plans and for which there is a contract item of work.

500.4 Water Pollution Control Drawings (WPCDs)

The Water Pollution Control Drawings can be found in Attachment B of the SWPPP.

500.5 Construction BMP Maintenance, Inspection, and Repair

Inspections will be conducted as follows:

- Prior to a forecast storm
- after a rain event that causes runoff from the construction site
- at 24-hour intervals during extended rain events
- at any other time(s) or intervals of time specified in the contract documents

Completed inspection checklists will be kept with the SWPPP.

A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs. A program for Maintenance, Inspection and Repair of BMPs is shown in Attachment G.

500.6 Post-Construction Storm Water Management

500.6.1 Post-Construction Control Practices

The following are the post-construction BMPs that are to be used at this construction site after all construction is complete:

- Native plants seeding and planting

500.6.2 Operation/Maintenance after Project Completion

The post-construction BMPs that are described above will be funded and maintained by (TBD)

500.7 Training

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

- Construction Stormwater Pollution Prevention - SWPPP and BMP Concepts
-
-
-

The training log showing formal and informal training of various Contractor personnel is shown in Attachment I.

This SWPPP was prepared by URS Corporation, Tom Grace, EIT.

500.8 List of Subcontractors

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

500.9 Other Plans/Permits

Attachment N includes copies of other local, state, and federal plans and permits. Following is a list of the plans and permits included in Attachment N:

- State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity.

Section 600

Monitoring Program and Reports

600.1 Site Inspections

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

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

Assigned inspector: TBD Contact phone: TBD

600.2 Non-Compliance Reporting

If a discharge occurs or if the project receives a written notice of non-compliance, the Contractor will immediately notify the Owner and will file a written report to the Owner within 7 days of the discharge or notice. The Owner is responsible for filing a written report to the Regional Water Quality Control Board (RWQCB) within 30 days of identification of non-compliance. Corrective measures will be implemented immediately following the discharge, notice or order. A sample Notice of Non-Compliance (NONC) form is provided in Attachment K. All discharges will be documented on a Discharge Reporting Log using the example form in Attachment T.

The report to the Owner and to the RWQCB will contain the following items:

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

600.3 Record Keeping and Reports

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

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

600.4 Sampling and Analysis Plan for Sediment

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

600.5 Sampling and Analysis Plan for Non-Visible Pollutants

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

600.5.1 Scope of Monitoring Activities

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

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The following existing site features, as identified in Section 500.3.3, are potential sources of non-visible pollutants to storm water discharges from the project. Locations of existing site features contaminated with non-visible pollutants are shown on the WPCDs in Attachment B.

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-
-

The following soil amendments have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil and will be used on the project site. Locations of soil amendment application are shown on the WPCDs in Attachment B.

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-
-

The project has the potential to receive storm water run-on with the potential to contribute non-visible pollutants to storm water discharges from the project. Locations of such run-on to the project site are shown on the WPCDs in Attachment B.

-
-
-

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

600.5.2 Monitoring Strategy

Sampling Schedule

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

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

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

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

Sampling Locations

Sampling locations are based on proximity to planned non-visible pollutant storage, occurrence or use; accessibility for sampling, personnel safety; and other factors in accordance with the applicable requirements in the Permit. Planned sampling locations are shown on the WPCDs in Attachment B and include the following:

- [Enter number of locations] sampling locations have been identified for the collection of samples of runoff that drain areas where soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil will be applied.
- If applicable Sample location number(s) is located .
- [Enter number of locations] sampling locations have been identified for the collection of samples of runoff that drain areas contaminated by historical usage of the site.
- If applicable Sample location number(s) is located .

- [Enter number of locations] sampling locations have been identified for the collection of samples of run-on to the project site with the potential to combine with discharges being sampled for non-visible pollutants. These samples are intended to identify sources of potential non-visible pollutants that originate off the project site.
- If applicable Sample location number(s) is located .
- A location has been identified for the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. This location was selected such that the sample will not have come in contact with (1) operational or storage areas associated with the materials, wastes, and activities identified in Section 500.3.1; (2) potential non-visible pollutants due to historical use of the site as identified in Section 500.3.3; (3) areas in which soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied; or (4) disturbed soils areas.
- If applicable Sample location number(s) is located .

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

600.5.3 Monitoring Preparation

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

Name/Telephone Number:

Name/Telephone Number:

Alternate(s)/Telephone

Number:

Alternate(s)/Telephone

Number:

Prior to the rainy season, all sampling personnel and alternates will review the SAP. Qualifications of designated Contractor personnel describing environmental sampling training and experience are provided in Attachment I.

An adequate stock of monitoring supplies and equipment for monitoring non-visible pollutants will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool-temperature environment that will not come into contact with rain or direct sunlight. Sampling personnel will be available to collect samples in accordance with the sampling schedule.

Supplies maintained at the project site will include, but are not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, Sampling Activity Log forms, and Chain of Custody (COC) forms. The Contractor will obtain and maintain the field-testing instruments, as identified in Section 600.5.6, for analyzing samples in the field by Contractor sampling personnel.

Safety practices for sample collection will be in accordance with the [ENTER TITLE AND PUBLICATION DATE OF CONTRACTOR'S HEALTH AND SAFETY PLAN FOR THE PROJECT OR PROVIDE SPECIFIC REQUIREMENTS HEREIN].

Samples on the project site will be collected by the following [specify laboratory or environmental consultant]:

Company Name:

Address:

Telephone Number:

Point of Contact:

Qualifications of designated Contractor personnel describing environmental sampling training and experience are provided in Attachment I.

SWPPM will contact [specify name of laboratory or environmental consultant] [enter number of hours] hours prior to a predicted rain event and if one of the triggering conditions is identified during an inspection before, during, or after a storm event to ensure that adequate sample collection personnel, supplies and field test equipment for monitoring non-visible pollutants are available and will be mobilized to collect samples on the project site in accordance with the sampling schedule.

[Specify name of laboratory or environmental consultant] will obtain and maintain the field-testing instruments, as identified in Section 600.5.6, for analyzing samples in the field by their sampling personnel.

600.5.4 Analytical Constituents

Identification of Non-Visible Pollutants

Table 600-2 lists the specific sources and types of potential non-visible pollutants on the project site and the applicable water quality indicator constituent(s) for that pollutant.

Table 600-2

Potential Non-Visible Pollutants and Water Quality Indicator Constituents

Pollutant Source	Pollutant	Water Quality Indicator Constituent
<i>Example:</i> Vehicle batteries	Lead, Sulfate or pH	Lead, sulfate or pH

600.5.5 Sample Collection and Handling

Sample Collection Procedures

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

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

Samples will be collected by placing a separate lab-provided sample container directly into a stream of water downgradient and within close proximity to the potential non-visible pollutant discharge location. This separate lab-provided sample container will be used to

collect water, which will be transferred to sample bottles for laboratory analysis. The upgradient and uncontaminated background samples shall be collected first prior to collecting the downgradient to minimize cross-contamination. The sampling personnel will collect the water upgradient of where they are standing. Once the separate lab-provided sample container is filled, the water sample will be poured directly into sample bottles provided by the laboratory for the analyte(s) being monitored.

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

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

Sample Handling Procedures

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

Laboratory Name:

Address:

Telephone Number:

Point of Contact:

Immediately following collection, samples for field analysis will be tested in accordance with the field instrument manufacturer's instructions and results recorded on the Sampling Activity Log.

Sample Documentation Procedures

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

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

- **Sample Bottle Identification Labels:** Sampling personnel will attach an identification label to each sample bottle. At a minimum, the following information will be recorded on the label, as appropriate:
 - Project name
 - Project number
 - Unique sample identification number and location.
[Project Number]-[Six digit sample collection date]-[Location]
(Example: 0G5304-081801-Inlet472).

Quality assurance/quality control (QA/QC) samples shall be identified similarly using a unique sample number or designation

(Example: 0G5304-081801-DUP1).

- Collection date/time (No time applied to QA/QC samples)
- Analysis constituent

■ Sampling Activity Logs: A log of sampling events will identify:

- Sampling date
- Separate times for collected samples and QA/QC samples recorded to the nearest minute
- Unique sample identification number and location
- Analysis constituent
- Names of sampling personnel
- Weather conditions (including precipitation amount)
- Field analysis results
- Other pertinent data

■ Chain of Custody (COC) forms: All samples to be analyzed by a laboratory will be accompanied by a COC form provided by the laboratory. Only the sample collectors will sign the COC form over to the lab. COC procedures will be strictly adhered to for QA/QC purposes.

■ Storm Water Quality Construction Inspection Checklists: When applicable, the Contractor's storm water inspector will document on the checklist that samples for non-visible pollutants were taken during a rain event.

600.5.6 Sample Analysis

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

For samples collected for field analysis, collection, analysis and equipment calibration will be in accordance with the field instrument manufacturer's specifications.

The following field instrument(s) will be used to analyze the following constituents:

Field Instrument	Constituent

- The instrument(s) will be maintained in accordance with manufacturer's instructions.
- The instrument(s) will be calibrated before each sampling and analysis event.
- Maintenance and calibration records will be maintained with the SWPPP.

600.5.7 Quality Assurance/Quality Control

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

600.5.8 Data Management and Reporting

A copy of all water quality analytical results and QA/QC data will be included in the on-site SWPPP within 5 days of sampling (for field analyses) and within 30 days (for laboratory analyses).

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

600.5.9 Data Evaluation

An evaluation of the water quality sample analytical results, including figures with sample locations, the water quality analytical results, and the QA/QC data, will be included in the on-site SWPPP.

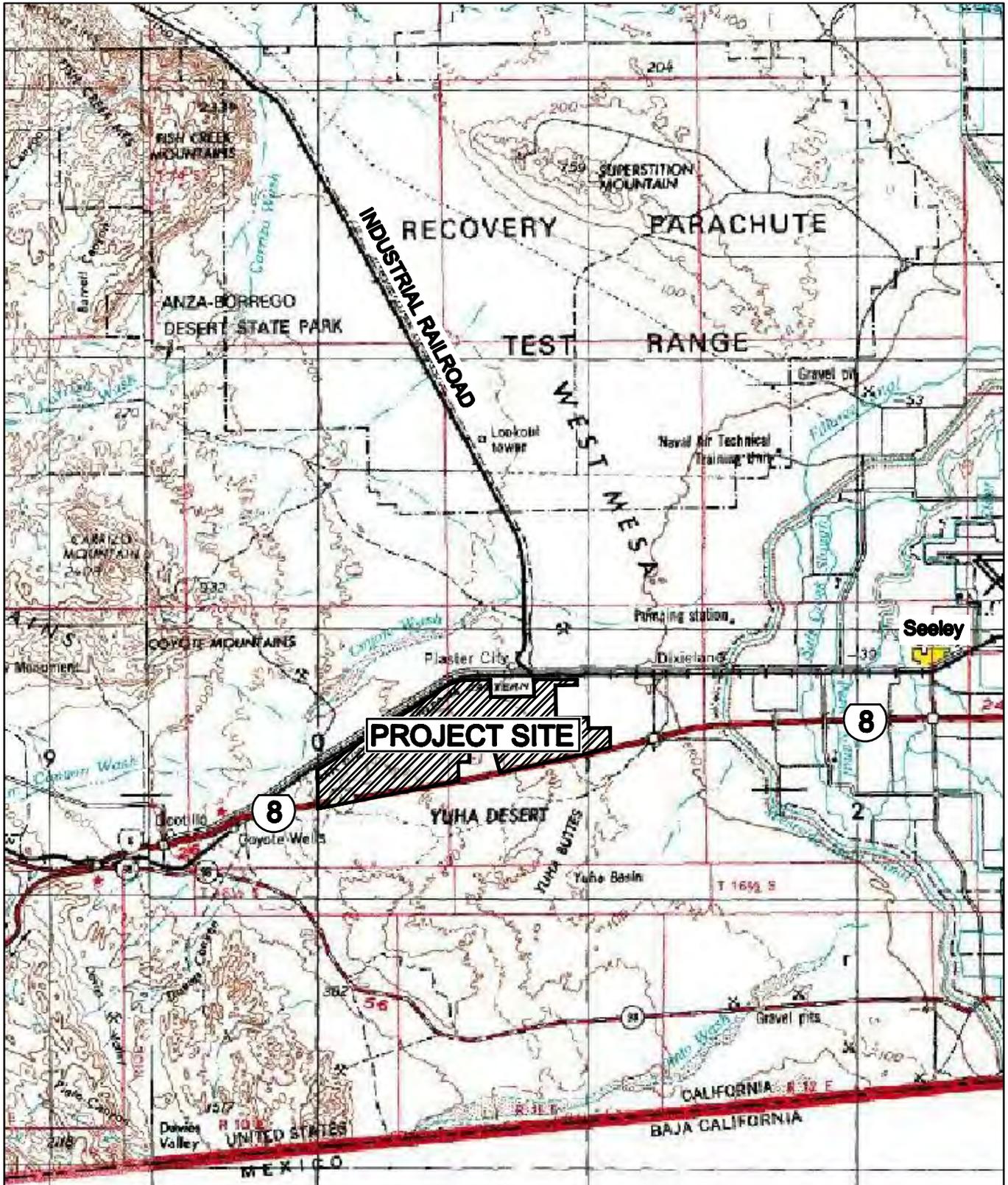
Should the runoff/ downgradient sample show an increased level of the tested analyte relative to the background sample, the BMPs, site conditions, and surrounding influences will be assessed to determine the probable cause for the increase. As determined by the site and data evaluation, appropriate BMPs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

600.5.10 Change of Conditions

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

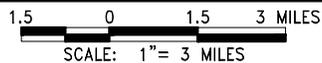
Attachment A

Vicinity Map



**SOLAR TWO PROJECT
VICINITY MAP**

URS



CHECKED BY: MM

DATE: 05-15-2009

EXHIBIT

PM:

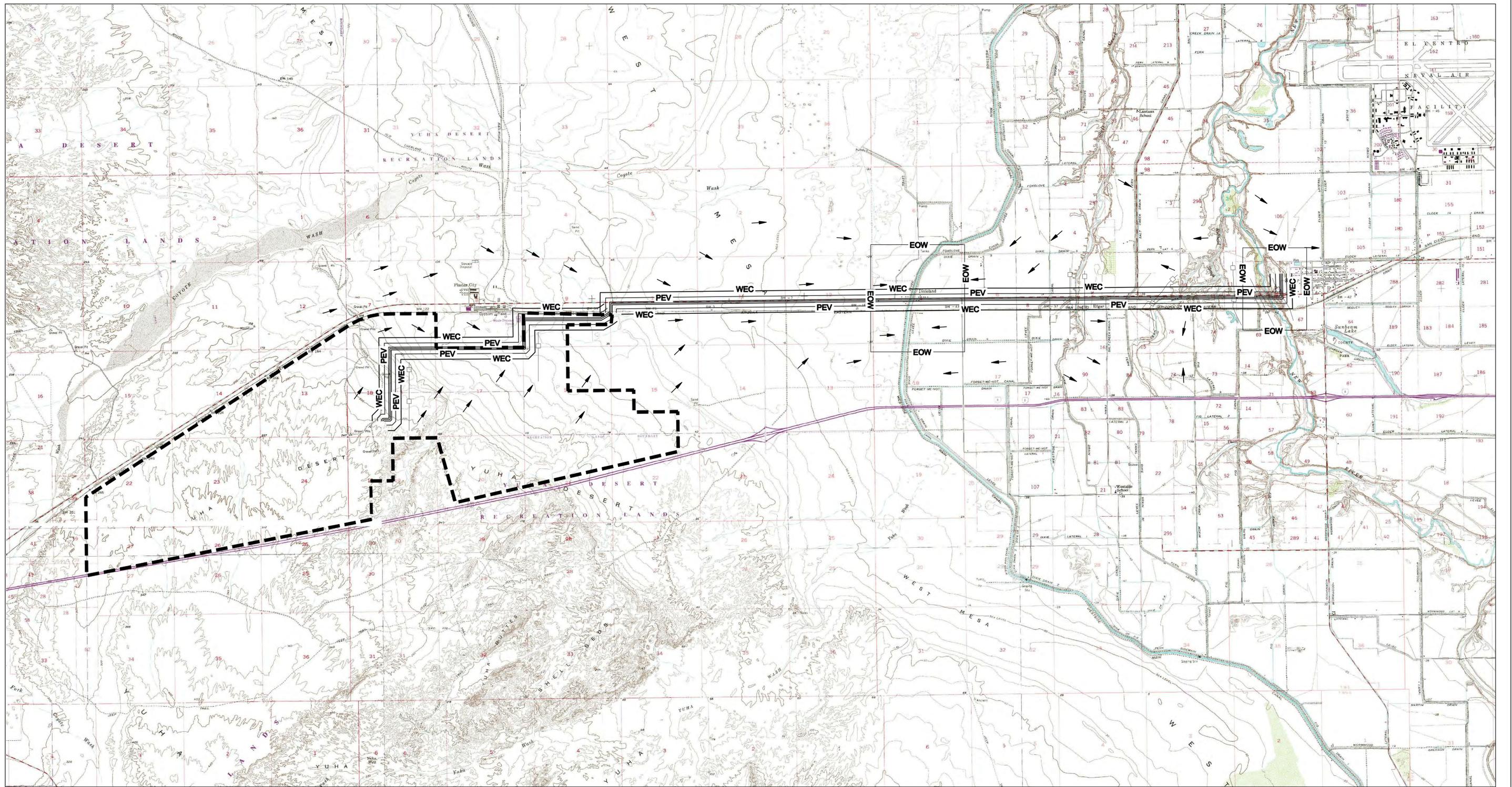
PROJ. NO: 27657106

A

Attachment B

Water Pollution Control Drawings (WPCDs)

Drawings were submitted as Appendix A of the DESCP/
SWPP - Volume 1.



LEGEND

- | | | | | | | | | | | | |
|--|-------------------------------------|--|------------------------------|--|--------------------------------|--|-----------------------------------|--|----------------------------------|--|---------------------------------|
| | Proposed Water Line Alignment | | Project Boundary | | Street Sweeping and Vacuuming | | Vehicle and Equipment Fueling | | Sanitary Septic Waste Management | | Earth Dikes and Drainage Swales |
| | Preservation of Existing Vegetation | | Scheduling | | Silt Fence | | Vehicle and Equipment Maintenance | | Storm Water Management | | Check Dams |
| | Wind Erosion Controls | | Spill Prevention and Control | | Vehicle and Equipment Cleaning | | Liquid Waste Management | | Material Use | | |
| | Equipment Over Water | | Soil Binders | | Material Delivery and Storage | | | | | | |
| | Flow Direction | | | | | | | | | | |

Attachment C

BMP Consideration Checklist

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
EROSION CONTROL BMPs					
BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
EC-1	Scheduling				
EC-2	Preservation of Existing Vegetation				
EC-3	Hydraulic Mulch				
EC-4	Hydroseeding				
EC-5	Soil Binders				
EC-6	Straw Mulch				
EC-7	Geotextiles & Mats				
EC-8	Wood Mulching				
EC-9	Earth Dikes & Drainage Swales				
EC-10	Velocity Dissipation Devices				
EC-11	Slope Drains				
EC-12	Streambank Stabilization				
EC-13	Polyacrylamide				

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
SEDIMENT CONTROL BMPs					
BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
SE-1	Silt Fence				
SE-2	Sediment Basin				
SE-3	Sediment Trap				
SE-4	Check Dam				
SE-5	Fiber Rolls				
SE-6	Gravel Bag Berm				
SE-7	Street Sweeping and Vacuuming				
SE-8	Sand Bag Barrier				
SE-9	Straw Bale Barrier				
SE-10	Storm Drain Inlet Protection				
SE-11	Chemical Treatment				
WIND EROSION CONTROL BMPs					
WE-1	Wind Erosion Control				
TRACKING CONTROL BMPs					
TR-1	Stabilized Construction Entrance/Exit				
TR-2	Stabilized Construction Roadway				
TR-3	Entrance/Outlet Tire Wash				

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

NON-STORM WATER MANAGEMENT BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
NS-1	Water Conservation Practices				
NS-2	Dewatering Operations				
NS-3	Paving and Grinding Operations				
NS-4	Temporary Stream Crossing				
NS-5	Clear Water Diversion				
NS-6	Illicit Connection/ Discharge				
NS-7	Potable Water/Irrigation				
NS-8	Vehicle and Equipment Cleaning				
NS-9	Vehicle and Equipment Fueling				
NS-10	Vehicle and Equipment Maintenance				
NS-11	Pile Driving Operations				
NS-12	Concrete Curing				
NS-13	Concrete Finishing				
NS-14	Material and Equipment Use Over Water				
NS-15	Demolition Adjacent to Water				
NS-16	Temporary Batch Plants				

**CONSTRUCTION SITE BMPs
 CONSIDERATION CHECKLIST**

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
WM-1	Material Delivery and Storage				
WM-2	Material Use				
WM-3	Stockpile Management				
WM-4	Spill Prevention and Control				
WM-5	Solid Waste Management				
WM-6	Hazardous Waste Management				
WM-7	Contaminated Soil Management				
WM-8	Concrete Waste Management				
WM-9	Sanitary/Septic Waste Management				
WM-10	Liquid Waste Management				

Attachment D

Computation Sheet for Determining Runoff Coefficients

$$\text{Total Site Area} = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{A})$$

Existing Site Conditions

$$\text{Impervious Site Area}^1 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{B})$$

$$\text{Impervious Site Area Runoff Coefficient}^{2,4} = \underline{\hspace{2cm}} \quad (\text{C})$$

$$\text{Pervious Site Area}^3 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{D})$$

$$\text{Pervious Site Area Runoff Coefficient}^4 = \underline{\hspace{2cm}} \quad (\text{E})$$

$$\text{Existing Site Area Runoff Coefficient} \frac{(B \times C) + (D \times E)}{(A)} = \underline{\hspace{2cm}} \quad (\text{F})$$

Proposed Site Conditions (after construction)

$$\text{Impervious Site Area}^1 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{G})$$

$$\text{Impervious Site Area Runoff Coefficient}^{2,4} = \underline{\hspace{2cm}} \quad (\text{H})$$

$$\text{Pervious Site Area}^3 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{I})$$

$$\text{Pervious Site Area Runoff Coefficient}^4 = \underline{\hspace{2cm}} \quad (\text{J})$$

$$\text{Proposed Site Area Runoff Coefficient} \frac{(G \times H) + (I \times J)}{(A)} = \underline{\hspace{2cm}} \quad (\text{K})$$

1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
2. Use 0.95 unless lower or higher runoff coefficient can be verified.
3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
4. Refer to local Hydrology Manual for typical C values.

Attachment E

Computational Sheet for Determining Run-on Discharges

Existing Site Conditions

Area Runoff Coefficient = _____ (A)

Area Rainfall Intensity = _____ in/hr (B)

Drainage Area = _____ Acres (C)

Site Area Run-on Discharge (A) x (B) x (C) = _____ ft³/sec (D)

Attachment F

Notice of Intent (NOI)



NOTICE OF INTENT
 TO COMPLY WITH THE TERMS OF THE
 GENERAL PERMIT TO DISCHARGE STORM WATER
 ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER No. 99-08-DWQ)

I. NOI STATUS (SEE INSTRUCTIONS)

MARK ONLY ONE ITEM	1. <input type="checkbox"/> New Construction	2. <input type="checkbox"/> Change of Information for WDID#
--------------------	--	---

II. PROPERTY OWNER

Name	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone () --

III. DEVELOPER/CONTRACTOR INFORMATION

Developer/Contractor	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone () --

IV. CONSTRUCTION PROJECT INFORMATION

Site/Project Name		Site Contact Person		
Physical Address/Location		Latitude _____°	Longitude _____°	County
City (or nearest City)		Zip	Site Phone Number () --	Emergency Phone Number () --
A. Total size of construction site area: _____ Acres	C. Percent of site imperviousness (including rooftops):		D. Tract Number(s): _____, _____	
B. Total area to be disturbed: _____ Acres (% of total _____)	Before Construction: _____%		E. Mile Post Marker: _____	
After Construction: _____%		F. Is the construction site part of a larger common plan of development or sale? <input type="checkbox"/> YES <input type="checkbox"/> NO		
G. Name of plan or development:		H. Construction commencement date: ____/____/____		
I. % of site to be mass graded: _____		J. Projected construction dates: Complete grading: ____/____/____ Complete project: ____/____/____		
K. Type of Construction (Check all that apply):				
1. <input type="checkbox"/> Residential 2. <input type="checkbox"/> Commercial 3. <input type="checkbox"/> Industrial 4. <input type="checkbox"/> Reconstruction 5. <input type="checkbox"/> Transportation				
6. <input type="checkbox"/> Utility Description: _____ 7. <input type="checkbox"/> Other (Please List): _____				

V. BILLING INFORMATION

SEND BILL TO: <input type="checkbox"/> OWNER (as in II. above)	Name	Contact Person	
<input type="checkbox"/> DEVELOPER (as in III. above)	Mailing Address	Phone/Fax	
<input type="checkbox"/> OTHER (enter information at right)	City	State	Zip

VI. REGULATORY STATUS

A. Has a local agency approved a required erosion/sediment control plan?..... YES NO
Does the erosion/sediment control plan address construction activities such as infrastructure and structures?..... YES NO
Name of local agency: _____ Phone: () -- _____

B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification?..... YES NO
If yes, provide details: _____

VII. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (Check all that apply):

1. Indirectly to waters of the U.S.

2. Storm drain system - Enter owner's name: _____

3. Directly to waters of U.S. (e.g., river, lake, creek, stream, bay, ocean, etc.)

B. Name of receiving water: (river, lake, creek, stream, bay, ocean): _____

VIII. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)

A SWPPP has been prepared for this facility and is available for review: Date Prepared: ___/___/___ Date Amended: ___/___/___

A SWPPP will be prepared and ready for review by (enter date): ___/___/___

A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.

B. MONITORING PROGRAM

A monitoring and maintenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.

If checked above: A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes..... YES NO

Name: _____ Phone: () -- _____

C. PERMIT COMPLIANCE RESPONSIBILITY

A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Water Pollution Prevention Plan including:

1. Preparing an annual compliance evaluation..... YES NO
Name: _____ Phone: () -- _____

2. Eliminating all unauthorized discharges..... YES NO

IX. VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)

Have you included a vicinity map with this submittal? YES NO

Have you included payment of the annual fee with this submittal?..... YES NO

X. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."

Printed Name: _____

Signature: _____ Date: _____

Title: _____

Attachment G

Program for Maintenance, Inspection, and Repair of Construction Site BMPs

<i>The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP</i>		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
TEMPORARY EROSION CONTROL BMPs		
Soil Binders	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Reapply the selected soil binder as needed to maintain effectiveness.
Earth Dikes/Drainage Swales & Lined Ditches	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Inspect ditches and berms for washouts. ■ Replace lost riprap, damage linings or soil stabilizers as needed. ■ Remove debris and sediment. ■ Temporary conveyance should be completely removed as soon as the surrounding drainage area has been stabilized or at the completion of construction.
TEMPORARY SEDIMENT CONTROL BMPs		
Silt Fences	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Repair undercut silt fences. ■ Repair or replace split, torn, slumping, or weathered fabric. The lifespan of silt fence fabric is generally 5 to 8 months. ■ Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height.
Check Dam	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Replace missing rock, bags, bales, etc. Replace bags or bales that have degraded or have become damaged. ■ Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. ■ If the check dam is used as a grade control structure, sediment removal is not required as long as the system continues to control the grade.

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Street Sweeping	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ When actively in use, points of ingress and egress must be inspected daily. ■ When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. ■ After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.
WIND EROSION CONTROL BMPs		
Wind Erosion Control	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Check areas protected to ensure coverage. ■ Most dust control measures require frequent, often daily, or multiple times per day attention.
TRACKING CONTROL BMPs		
Street Sweeping and Vacuuming	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ When actively in use, points of ingress and egress must be inspected daily. ■ When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. ■ After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.
NON-STORM WATER MANAGEMENT BMPs		
Vehicle and Equipment Cleaning	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur. ■ Inspection and maintenance is minimal, although some berm repair may be necessary. ■ Monitor employees and subcontractors throughout the duration of the construction project to ensure appropriate practices are being implemented. ■ Inspect sump regularly and remove liquids and sediment as needed. ■ Prohibit employees and subcontractors from washing personal vehicles and equipment on the construction site./

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Vehicle and Equipment Fueling	<ul style="list-style-type: none"> ■ Vehicles and equipment should be inspected each day of use for leaks. Leaks should be repaired immediately or problem vehicles or equipment should be removed from the project site. 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill cleanup materials onsite. ■ Immediately clean up spills and properly dispose of contaminated soil and cleanup materials.
Vehicle and Equipment Maintenance	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill cleanup materials onsite. ■ Maintain waste fluid containers in leak proof condition. ■ Vehicles and equipment should be inspected on each day of use. Leaks should be repaired immediately or the problem vehicle(s) or equipment should be removed from the project site. ■ Inspect equipment for damaged hoses and leaky gaskets routinely. Repair or replace as needed.
Material and Equipment Use Over Water	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Ensure that employees and subcontractors implement the appropriate measures for storage and use of materials and equipment. ■ Inspect and maintain all associated BMPs and perimeter controls to ensure continuous protection of the water courses, including waters of the United States.
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs		
Material Delivery and Storage	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep an ample supply of spill cleanup materials near the storage area. ■ Keep storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. ■ Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.

<i>The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP</i>		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Material Use	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Maintenance of this best management practice is minimal. ■ Spot check employees and subcontractors throughout the job to ensure appropriate practices are being employed.
Stockpile Management		<ul style="list-style-type: none"> ■
Spill Prevention and Control	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill control and cleanup materials onsite, near storage, unloading, and maintenance areas. ■ Update your spill prevention and control plan and stock cleanup materials as changes occur in the types of chemicals onsite.
Solid Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Arrange for regular waste collection.
Sanitary/Septic Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Arrange for regular waste collection. ■ If high winds are expected, portable sanitary facilities must be secured with spikes or weighed down to prevent over turning.
Liquid Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Remove deposited solids in containment areas and capturing devices as needed and at the completion of the task.

Attachment H

Storm Water Quality Construction Site Inspection Checklist

GENERAL INFORMATION				
Project Name				
Project N°				
Contractor				
Inspector's Name				
Inspector's Title				
Signature				
Date of Inspection				
Inspection Type (Check Applicable)	<input type="checkbox"/> Prior to forecast rain		<input type="checkbox"/> After a rain event	
	<input type="checkbox"/> 24-hr intervals during extended rain		<input type="checkbox"/> Other _____	
Season (Check Applicable)	<input type="checkbox"/> Rainy		<input type="checkbox"/> Non-Rainy	
Storm Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (inches)	

PROJECT AREA SUMMARY AND DISTURBED SOIL AREA (DSA) SIZE	
Total Project Area	_____ Acres
Field Estimate of Active DSAs	_____ Acres
Field Estimate of Non-Active DSAs	_____ Acres

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Preservation of Existing Vegetation				
Is temporary fencing provided to preserve vegetation in areas where no construction activity is planned?				
Location:				
Erosion Control				
Does the applied temporary erosion control provide 100% coverage for the affected areas?				
Are any non-vegetated areas that may require temporary erosion control?				
Is the area where erosion controls are used required free from visible erosion?				
Location:				
Temporary Linear Sediment Barriers (Silt Fence, Fiber Rolls, Sandbag Barriers, etc.)				
Are temporary linear sediment barriers properly installed, functional and maintained?				
Are temporary linear sediment barriers free of accumulated litter?				
Is the built-up sediment less than 1/3 the height of the barrier?				
Are cross barriers installed where necessary and properly spaced?				
Location:				
Storm Drain Inlet Protection				
Are storm drain inlets internal to the project properly protected?				
Are storm drain inlet protection devices in working order and being properly maintained?				
Location:				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Sediment Basins				
Are basins designed in accordance with the requirements of the General Permit?				
Are basins maintained to provide the required retention/detention?				
Are basin controls (inlets, outlets, diversions, weirs, spillways, and racks) in working order?				
Location:				
Stockpiles				
Are all locations of temporary stockpiles, including soil, hazardous waste, and construction materials in approved areas?				
Are stockpiles protected from run-on, run-off from adjacent areas and from winds?				
Are stockpiles located at least 15 m from concentrated flows, downstream drainage courses and storm drain inlets?				
Are required covers and/or perimeter controls in place?				
Location:				
Concentrated Flows				
Are concentrated flow paths free of visible erosion?				
Location:				
Tracking Control				
Is the entrance stabilized to prevent tracking				
Is the stabilized entrance inspected daily to ensure that it is working properly				
Are points of ingress/egress to public/private roads inspected and swept and vacuumed as needed?				
Are all paved areas free of visible sediment tracking or other particulate matter?				
Location:				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Wind Erosion Control				
Is dust control implemented?				
Location:				
Dewatering Operations				
Are all one-time dewatering operations covered by the General Permit inspected before and as they occur and BMPs implemented as necessary during discharge?				
Is ground water dewatering handled in conformance with the dewatering permit issued by the RWQCB?				
Is required treatment provided for dewatering effluent?				
Location:				
Vehicle & Equipment Fueling, Cleaning, and Maintenance				
Are vehicle and equipment fueling, cleaning and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious material?				
Are vehicle and equipment fueling, cleaning and maintenance activities performed on an impermeable surface in dedicated areas?				
If no, are drip pans used?				
Are dedicated fueling, cleaning, and maintenance areas located at least 15 m away from downstream drainage facilities and watercourses and protected from run-on and runoff?				
Is wash water contained for infiltration/ evaporation and disposed of appropriately?				
Is on-site cleaning limited to washing with water (no soap, soaps substitutes, solvents, or steam)?				
On each day of use, are vehicles and equipment inspected for leaks and if necessary, repaired?				
Location:				
Waste Management & Materials Pollution Control				
Are material storage areas and washout areas protected from run-on and runoff, and located at least 15 m from concentrated flows and downstream drainage facilities?				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Are all material handling and storage areas clean; organized; free of spills, leaks, or any other deleterious material; and stocked with appropriate clean-up supplies?				
Are liquid materials, hazardous materials, and hazardous wastes stored in temporary containment facilities?				
Are bagged and boxed materials stored on pallets?				
Are hazardous materials and wastes stored in appropriate, labeled containers?				
Are proper storage, clean-up, and spill-reporting procedures for hazardous materials and wastes posted in open, conspicuous and accessible locations adjacent to storage areas?				
Are temporary containment facilities free of spills and rainwater?				
Are temporary containment facilities and bagged/boxed materials covered?				
Are temporary concrete washout facilities designated and being used?				
Are temporary concrete washout facilities functional for receiving and containing concrete waste and are concrete residues prevented from entering the drainage system?				
Do temporary concrete washout facilities provide sufficient volume and freeboard for planned concrete operations?				
Are concrete wastes, including residues from cutting and grinding, contained and disposed of off-site or in concrete washout facilities?				
Are spills from mobile equipment fueling and maintenance properly contained and cleaned up?				
Is the site free of litter?				
Are trash receptacles provided in the yard, field trailer areas, and at locations where workers congregate for lunch and break periods?				
Is litter from work areas collected and placed in watertight dumpsters?				
Are waste management receptacles free of leaks?				
Are the contents of waste management receptacles properly protected from contact with storm water or from being dislodged by winds?				
Are waste management receptacles filled at or beyond capacity?				
Location:				
Temporary Water Body Crossing or Encroachment				
Are temporary water body crossings and encroachments constructed appropriately?				
Does the project conform to the requirements of the 404 permit and/or 1601 agreement?				
Location:				

Attachment H
Storm Water Quality Construction Inspection Checklist

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Location:				
Location:				
Location:				
Illicit Connection/ Discharge				
Is there any evidence of illicit discharges or illegal dumping on the project site?				
If yes, has the Owner/Operator been notified?				
Location:				
Discharge Points				
Are discharge points and discharge flows free from visible pollutants?				
Are discharge points free of any significant sediment transport?				
Location:				
SWPPP Update				
Does the SWPPP and Project Schedule adequately reflect the current site conditions and contractor operations?				
Are all BMPs shown on the water pollution control drawings installed in the proper location(s) and according to the details in the SWPPP?				
Location:				
General				
Are there any other potential concerns at the site?				
Location:				
Storm Water Monitoring				
Does storm water discharge directly to a water body listed in the General Permit as impaired for sediment/sedimentation or turbidity?				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
If yes, were samples for sediment/sedimentation or turbidity collected pursuant to the sampling and analysis plan in the SWPPP?				
Did the sampling results indicate that the discharges are causing or contributing to further impairment?				
If yes, were the erosion/sediment control BMPs improved or maintained to reduce the discharge of sediment to the water body?				
Were there any BMPs not properly implemented or breaches, malfunctions, leakages or spills observed which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				
If sampling indicated pollution of the storm water, were the leaks, breaches, spills, etc. cleaned up and the contaminated soil properly disposed of?				
Were the BMPs maintained or replaced?				
Were soil amendments (e.g., gypsum, lime) used on the project?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan in the SWPPP?				
If sampling indicated pollution of the storm water by the use of the soil amendments, is there a contingency plan for retention onsite of the polluted storm water?				
Did storm water contact stored materials or waste and run off the construction site? (Materials not in watertight containers, etc.)				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan in the SWPPP?				

Name	Company	Phone

COMMENTS:

Attachment J

Subcontractor Notification Letter and Notification Log

SWPPP Notification

Company
Address
City, State, ZIP

Dear Sir/Madam,

Please be advised that the California State Water Resources Control Board has adopted the General Permit (General Permit) for Storm Water Discharges Associated with Construction Activity (CAS000002). The goal of these permits is prevent the discharge of pollutants associated with construction activity from entering the storm drain system, ground and surface waters.

[Owner] has developed a Storm Water Pollution Prevention Plan (SWPPP) in order to implement the requirements of the Permits.

As a subcontractor, you are required to comply with the SWPPP and the Permits for any work that you perform on site. Any person or group who violates any condition of the Permits may be subject to substantial penalties in accordance with state and federal law. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP and the Permits. A copy of the Permits and the SWPPP are available for your review at the construction office. Please contact me if you have further questions.

Sincerely,

Name
Title

Attachment K

Notice of Non-Compliance

To: Name of Owner [City/Agency Engineer]/Regional Board Staff
Insert Date

Date:

Subject: Notice of Non-Compliance

Project Name: Insert Project Name

Project Number/Location: Project number

In accordance with the NPDES Statewide Permit for Storm Water Discharges Associated with Construction Activity, the following instance of discharge is noted:

Date, time, and location of discharge

Insert description and date of event

Nature of the operation that caused the discharge

insert description of operation

Initial assessment of any impact cause by the discharge

insert assessment

Existing BMP(s) in place prior to discharge event

list BMPs in place

Date of deployment and type of BMPs deployed after the discharge.

BMPs deployed after the discharge (with dates)

Steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

insert steps taken to prevent recurrence

Implementation and maintenance schedule for any affected BMPs

insert implementation and maintenance schedule

If further information or a modification to the above schedule is required, notify the contact person below.

Name of Contact Person

Title

Company

Telephone Number

Signature

Date

Attachment L

Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program Checklist

CONSTRUCTION PROJECT: _____

PREPARER: _____

CONTRACT NO: _____

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	100	<i>SWPPP Certification and Approval</i>	C.10	
	100.1	SWPPP Certification	C.10	
	100.2	SWPPP Approval	C.10	
	200	<i>SWPPP Amendments</i>	A.4.a, A.16	
	200.1	Amendment number and date entered into SWPPP – Amendment Log	A.4.a, A.16	
	200.2	Amendment Certification and Approval	A.4.a, A.16	
	300	<i>Introduction/Project Description</i>		
	300.1	Project Description and Location (narrative)	A.5.a.1	
	300.2	Unique Site Features (narrative)	A.5.a.1	
	300.4	<i>Project Schedule (narrative and graphical)</i>	A.5.c.5	
	400	<i>References</i>	A.14	
	500.2	<i>Vicinity Map (narrative or graphic)</i>	A.5.a.1	
	500.2	Site perimeter	A.5.a.1	
	500.2	Geographic Features	A.5.a.1	
	500.2	General topography	A.5.a.1	
	500.4	<i>Water Pollution Control Drawings (WPCDs) (graphic or narrative)</i>	A.5.a.2	
	500.4	Site perimeter	A.5.a.2	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	500.4	Existing and proposed buildings, lots, and roadways	A.5.a.2	
	500.4	Storm water collection and discharge points	A.5.a.2	
	500.4	General topography before and after construction	A.5.a.2	
	500.4	Anticipated discharge location(s)	A.5.a.2	
	500.4	Drainage patterns including the entire relevant drainage areas	A.5.a.2	
	500.4	Temporary on-site drainage(s)	A.5.a.2	
	500.3	<i>Pollutant Source and BMP Identification (narrate/ or indicate on site map)</i>	A.5.b	
		<i>Drainage</i>	A.5.b.1	
	500.4	Drainage patterns after major grading	A.5.b.1	
	500.4	Slopes after major grading	A.5.b.1	
	Attach. E	Calculations for storm water run-on	A.5.b.1	
	500.4	BMPs that divert off-site drainage from passing through site	A.5.b.1	
	500.4	<i>Storm Water Inlets</i>	A.5.b.2	
	500.4	Drainage patterns to storm water inlets or receiving water	A.5.b.2	
	500.4	BMPs that protect storm water inlets or receiving water	A.5.b.2	
		<i>Site History (narrative; if possible, indicate location(s) on the Water Pollution Control Drawings)</i>	A.5.b	
	500.3.3	Nature of fill material and data describing the soil. Description of toxic materials treated, stored, disposed, spilled or leaked on site	A.5.b.3	
	500.3.8 & 500.3.9	BMPs that minimize contact of contaminants with storm water	A.5.b.3	
		<i>Location of Areas Designated for:</i>	A.5.b.4	
	500.3.8 & 500.4	Vehicle storage & service	A.5.b.4	
	500.3.8 & 500.4	Equipment storage, cleaning, maintenance	A.5.b.4	
	500.3.9 & 500.4	Soil or waste storage	A.5.b.4	
	500.3.9 & 500.4	Construction material loading, unloading, storage and access	A.5.b.4	
	500.3.8 & 500.3.9	Areas outside of physical site (yards, borrow areas, etc.)		
		<i>BMP Locations or Descriptions for:</i>	A.5.b.5	
	500.3.9 & 500.4	Waste handling and disposal areas	A.5.b.5	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	500.3.9 & 500.4	On-site storage and disposal of construction materials and waste	A.5.b.5	
	500.3.8, 500.3.9 & 500.4	Minimum exposure of storm water to construction materials, equipment, vehicles, waste	A.5.b.5	
	500.6	Post Construction BMPs	A.5.b.6	
	500.6.1	Listing or Description of Post-construction BMPs	A.5.b.6	
	500.4	Location of post-construction BMPs	A.5.b.6	
	500.6.2	Parties responsible for long-term maintenance	A.5.b.6	
		Additional Information	A.5.c	
	500.3.1	Description of other pollutant sources and BMPs	A.5.c.1	
	500.3.2	Pre-construction control practices	A.5.c.1	
	500.3.1	Inventory of materials and activities that may pollute storm water	A.5.c.2	
	500.3.8 & 500.3.9	BMPs to reduce/eliminate potential pollutants listed in the inventory	A.5.c.2	
	300.4	Runoff coefficient (before & after)	A.5.c.3	
	300.4	Percent impervious (before & after)	A.5.c.3	
	Attach. F	Copy of the NOT	A.5.c.4	
	300.3	Construction activity schedule	A.5.c.5	
	300.5	Contact information	A.5.c.6	
	500.4.1	SOIL STABILIZATION (EROSION CONTROL)	A.6	
		The SWPPP shall include:	A.6.a-c	
	500.4	Areas of vegetation on site	A.6.a.1	
	500.4	Areas of soil disturbance that will be stabilized during rainy season	A.6.a.2	
	500.4	Areas of soil disturbance which will be exposed during any part of the rainy season	A.6.a.3	
	300.4	Implementation schedule for erosion control measures	A.6.a.4	
	500.3.4	BMPs for erosion control	A.6.b	
	500.3.7	BMPs to control wind erosion	A.6.c	
	500.3.5	SEDIMENT CONTROL	A.8	
	500.3.5 & 500.4	Description/Illustration of BMPs to prevent increase of sediment load in discharge	A.8	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	300.4, 500.3.5	Implementation schedule for sediment control measures	A.8	
	500.3.6	BMPs to control sediment tracking	A.8	
	500.3.8 & 500.3.9	NON-STORM WATER MANAGEMENT	A.9	
	500.3.8 & 500.3.9	Description of non-storm water discharges to receiving waters	A.9	
	500.3.8 & 500.3.9	Locations of discharges	A.9	
	500.3.8 & 500.3.9	Description of BMPs	A.9	
	300.5	Name and phone number of person responsible for non-storm water management	A.9	
	500.6	POST-CONSTRUCTION	A.10	
	500.6.1	Description of post-construction BMPs	A.10	
	500.6.2	Operation/Maintenance of BMPs after project completion (including short-term funding, long-term funding and responsible party)	A.10	
	500.5	MAINTENANCE, INSPECTIONS, AND REPAIR	A.11	
	300.5, 600.1	Name and phone number of person(s) responsible for inspections	A.11	
	600.1, Attach. H	Complete inspection checklist: date, weather, inadequate BMPs, visual observations of BMPs, corrective action, inspector's name, title, signature	A.11.a-f	
		OTHER REQUIREMENTS	A.12-16	
	500.7	Documentation of all training	A.12	
	500.8	List of Contractors/Subcontractors	A.13	

SECTION B: MONITORING AND REPORTING REQUIREMENTS				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	600.1	Description of Site Inspection Plans	B.3	
	100.3	Compliance certification (annually 7/1)	B.4	
	600.2	Discharge reporting	B.5	
	600.3	Keep records of all inspections, compliance certifications, and noncompliance reports on site for a period of at least three years	B.6	
	600.4	Sampling and Analysis Plan for Sediment	B.7	

SECTION B: MONITORING AND REPORTING REQUIREMENTS				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	600.5	Sampling and Analysis Plan for Non-Visible Pollutants	B.8	

SECTION C: STANDARD PROVISIONS FOR CONSTRUCTION ACTIVITIES				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	100.1	Signed SWPPP Certification	C.9,10	

Attachment M

Annual Certification of Compliance Form

Project Name: _____

Project Number: _____

Company Name: _____

Address: _____

Construction Start Date: _____ **Completion Date:** _____

This project is in compliance with the General Permit and this SWPPP (check yes or no) **YES** **NO**

Description of Work:

description of work

Work Now in Progress:

work in progress

Work Planned for Next 12 Months:

work planned

"I certify under penalty of law that, during the past 12 months, the construction activities are in compliance with the requirements of the General Permit and this SWPPP. This Certification is based upon the site inspections required in Section B, Item 3 of the General Permit. This document was 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."

Owner (or Authorized Representative) Signature

Date

Name and Title

Telephone Number

Attachment N

Other Plans and Permits

Attachment O

Water Pollution Control Cost Breakdown

Project Name: _____

Project Number: _____

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
EC-3	Hydraulic Mulch	FT ²			
EC-4	Hydroseeding	FT ²			
EC-5	Soil Binders	FT ²			
EC-6	Straw Mulch	FT ²			
EC-7	Geotextiles & Mats	FT ²			
EC-8	Wood Mulching	FT ²			
EC-9	Earth Dikes & Drainage Swales	FT			
EC-10	Velocity Dissipation Devices	EA			
EC-11	Slope Drains	EA			
EC-12	Streambank Protection	LS			
EC-13	Polyacrylamide	LS			
SE-1	Silt Fence	FT			
SE-2	Sediment Basin	EA			
SE-3	Sediment Trap	EA			
SE-4	Check Dam	EA			
SE-5	Fiber Rolls	FT			
SE-6	Gravel Bag Berm	FT			
SE-7	Street Sweeping and Vacuuming	LS			
SE-8	Sandbag Barrier	FT			
SE-9	Straw Bale Barrier	FT			
SE-10	Storm Drain Inlet Protection	EA			
WE-1	Wind Erosion Control	LS			
TC-1	Stabilized Construction Entrance/Exit	EA			
TC-2	Stabilized Construction Roadway	EA			

Attachment O
Water Pollution Control Cost Breakdown

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
TC-3	Entrance/Outlet Tire Wash	EA			
NS-1	Water Conservation Practices	LS			
NS-2	Dewatering Operations	EA			
NS-3	Paving and Grinding Operations	LS			
NS-4	Temporary Stream Crossing	EA			
NS-5	Clear Water Diversion	EA			
NS-6	Illicit Connection/ Discharge	LS			
NS-7	Potable Water/Irrigation	LS			
NS-8	Vehicle and Equipment Cleaning	LS			
NS-9	Vehicle and Equipment Fueling	LS			
NS-10	Vehicle and Equipment Maintenance	LS			
NS-11	Pile Driving Operations	LS			
NS-12	Concrete Curing	LS			
NS-13	Material and Equipment Use Over Water	LS			
NS-14	Concrete Finishing	LS			
NS-15	Demolition Adjacent to Water	LS			
NS-16	Temporary Batch Plants	LS			
WM-1	Material Delivery and Storage	LS			
WM-2	Material Use	LS			
WM-3	Stockpile Management	LS			
WM-4	Spill Prevention and Control	LS			
WM-5	Solid Waste Management	LS			
WM-6	Hazardous Waste Management	LS			
WM-7	Contaminated Soil Management	LS			
WM-8	Concrete Waste Management	LS			
WM-9	Sanitary/Septic Waste Management	LS			
WM-10	Liquid Waste Management	LS			
			TOTAL		

Attachment P

Notice of Termination

Attachment Q

BMPs Selected for the Project

Attachment S

Pollutant Testing Guidance Table

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Asphalt Products	Hot Asphalt	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		
	Asphalt Emulsion				
	Liquid Asphalt (tack coat)				
	Cold Mix				
	Crumb Rubber	Yes – Black, solid material	Visually Observable - No Testing Required		
	Asphalt Concrete (Any Type)	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		
Cleaning Products	Acids	No	pH Acidity Anions (acetic acid, phosphoric acid, sulfuric acid, nitric acid, hydrogen chloride)	pH Meter Acidity Test Kit	EPA 150.1 (pH)
					SM 2310B (Acidity)
					EPA 300.0 (Anion)
	Bleaches	No	Residual Chlorine	Chlorine	SM 4500-CL G (Res. Chlorine)
	Detergents	Yes - Foam	Visually Observable - No Testing Required		
	TSP	No	Phosphate	Phosphate	EPA 365.3 (Phosphate)
	Solvents	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
SVOC			None	EPA 625 (SVOC)	

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Portland Concrete Cement & Masonry Products	Portland Cement (PCC)	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Masonry products	No	pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
			Alkalinity		SM 2320 (Alkalinity)
	Sealant (Methyl Methacrylate - MMA)	No	Methyl Methacrylate	None	EPA 625 (SVOC)
			Cobalt		EPA 200.8 (Metal)
			Zinc		
	Incinerator Bottom Ash Bottom Ash Steel Slag Foundry Sand Fly Ash Municipal Solid Waste	No	Aluminum Calcium Vanadium Zinc	Calcium Test	EPA 200.8 (Metal) EPA 200.7 (Calcium)
	Mortar	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Concrete Rinse Water	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Non-Pigmented Curing Compounds	No	Acidity	pH Meter Alkalinity or Acidity Test Kit	SM 2310B (Acidity)
			Alkalinity		SM 2320 (Alkalinity)
pH			EPA 150.1 (pH)		
VOC			EPA 601/602 or EPA 624 (VOC)		
SVOC			EPA 625 (SVOC)		

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory	
Landscaping and Other Products	Aluminum Sulfate	No	Aluminum	TDS Meter Sulfate	EPA 200.8 (Metal)	
			TDS		EPA 160.1 (TDS)	
			Sulfate		EPA 300.0 (Sulfate)	
	Sulfur-Elemental	No	Sulfate	Sulfate	EPA 300.0 (Sulfate)	
	Fertilizers-Inorganic ⁴	No	Nitrate	Nitrate	EPA 300.0 (Nitrate)	
			Phosphate	Phosphate	EPA 365.3 (Phosphate)	
			Organic Nitrogen	None	EPA 351.3 (TKN)	
			Potassium	None	EPA 200.8 (Metal)	
	Fertilizers-Organic	No	TOC	Nitrate	EPA 415.1 (TOC)	
			Nitrate		EPA 300.0 (Nitrate)	
			Organic Nitrogen		EPA 351.3 (TKN)	
			COD		EPA 410.4 (COD)	
	Natural Earth (Sand, Gravel, and Topsoil)	Yes - Cloudiness and turbidity	Visually Observable - No Testing Required			
	Herbicide	No	Herbicide	None	Check lab for specific herbicide or pesticide	
	Pesticide		Pesticide			
	Lime		Alkalinity	pH Meter Alkalinity or Acidity Test Kit	SM 2320 (Alkalinity)	
pH			EPA 150.1 (pH)			

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Painting Products	Paint	Yes	Visually Observable - No Testing Required		
	Paint Strippers	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
			SVOC	None	EPA 625 (SVOC)
	Resins	No	COD	None	EPA 410.4 (COD)
			SVOC		EPA 625 (SVOC)
	Sealants	No	COD	None	EPA 410.4 (COD)
	Solvents	No	COD	None	EPA 410.4 (COD)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)
	Lacquers, Varnish, Enamels, and Turpentine	No	COD	None	EPA 410.4 (COD)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)
	Thinners	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
			COD		EPA 410.4 (COD)
Portable Toilet Waste Products	Portable Toilet Waste	Yes	Visually Observable - No Testing Required		

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Contaminated Soil ⁵	Aerially Deposited Lead ³	No	Lead	None	EPA 200.8 (Metal)
	Petroleum	Yes – Rainbow Surface Sheen and Odor	Visually Observable - No Testing Required		
	Other	No	Contaminant Specific	Contaminant Specific	Contaminant Specific
Line Flushing Products	Chlorinated Water	No	Total chlorine	Chlorine	SM 4500-CL G (Res. Chlorine)
Adhesives	Adhesives	No	COD	None	EPA 410.4 (COD)
			Phenols	Phenol	EPA 420.1 (Phenol)
			SVOC	None	EPA 625 (SVOC)
Dust Palliative Products	Salts (Magnesium Chloride, Calcium Chloride, and Natural Brines)	No	Chloride	Chloride	EPA 300.0 (Chloride)
			TDS	TDS Meter	EPA 160.1 (TDS)
			Cations (Sodium, Magnesium, Calcium)	None	EPA 200.7 (Cations)
Vehicle	Antifreeze and Other Vehicle Fluids	Yes - Colored Liquid	Visually Observable - No Testing Required		
	Batteries	No	Sulfuric Acid	None	EPA 300.0 (Sulfate)
			Lead	None	EPA 200.8 (Metal)
			pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
Fuels, Oils, Lubricants	Yes - Rainbow Surface Sheen and Odor	Visually Observable - No Testing Required			

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Soil Amendment/Stabilization Products	Polymer/Copolymer ^{6, 7}	No	Organic Nitrogen	None	EPA 351.3 (TKN)
			BOD	None	EPA 405.1 (BOD)
			COD	None	EPA 410.4 (COD)
			DOC	None	EPA 415.1 (DOC)
			Nitrate	Nitrate	EPA 300.0 (Nitrate)
			Sulfate	Sulfate	EPA 300.0 (Sulfate)
			Nickel	None	EPA 200.8 (Metal)
	Straw/Mulch	Yes - Solids	Visually Observable - No Testing Required		
	Lignin Sulfonate	No	Alkalinity	Alkalinity	SM 2320 (Alkalinity)
			TDS	TDS Meter	EPA 160.1 (TDS)
	Psyllium	No	COD	None	EPA 410.4 (COD)
			TOC		EPA 415.1 (TOC)
	Guar/Plant Gums	No	COD	None	EPA 410.4 (COD)
			TOC		EPA 415.1 (TOC)
			Nickel		EPA 200.8 (Metal)
	Gypsum	No	pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
			Calcium	Calcium	EPA 200.7 (Calcium)
			Sulfate	Sulfate	EPA 300.0 (Sulfate)
			Aluminum	None	EPA 200.8 (Metal)
			Barium		
Manganese					
Vanadium					

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Treated Wood Products	Ammoniacal-Copper-Zinc-Arsenate (ACZA)	No	Arsenic	Total Chromium	EPA 200.8 (Metal)
	Copper-Chromium-Arsenic (CCA)		Total Chromium		
	Ammoniacal-Copper-Arsenate (ACA)		Copper		
	Copper Naphthenate		Zinc		
	Creosote	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		

Notes:

1. 1 If specific pollutant is known, analyze only for that specific pollutant. See MSDS to verify.
2. For each construction material, test for one of the pollutant indicators. Bolded pollutant indicates lowest analysis cost or best indicator. However, the composition of the specific construction material, if known, is the first criterion for selecting which analysis to use.
3. See www.hach.com, www.lamotte.com, www.ysi.com and www.chemetrics.com for some of the test kits
4. If the type of inorganic fertilizer is unknown, analyze for all pollutant indicators listed.
5. Only if special handling requirements are required in the contract documents for aerially deposited lead (ADL)
6. If used with a dye or fiber matrix, it is considered visually observable and no testing is required.
7. Based upon research conducted by the State of California Department of Transportation (Caltrans), the following copolymers/polymers do not discharge pollutants and water quality sampling and analysis is **not** required: Super Tak™, M-Binder™, Fish Stik™, Pro40dc™, Fisch-Bond™, and Soil Master WR™.

Storm Water Pollution Prevention Plan

For:

**SES SOLAR TWO, TRANSMISSION LINE
IMPERIAL COUNTY, CALIFORNIA**

Prepared for:

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**Project Site Location/Address:
Imperial County, CA**

Contractor's Storm Water Pollution Prevention Manager

**Robert G. Byall
(602) 957-1818**

SWPPP Prepared by:

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Matt Moore, Project Engineer**

SWPPP Preparation Date:

June 19, 2009

Estimated Project Dates:

Start of Construction: TBD Completion of Construction: TBD

WDID No.: _____

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**Storm Water Pollution Prevention Plan (SWPPP)
SES SOLAR TWO, TRANSMISSION LINE
IMPERIAL COUNTY, CALIFORNIA
Contract No.**

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Section 100

SWPPP Certifications and Approval

100.1 SWPPP Certification by Preparer

Project Name: SES SOLAR TWO, TRANSMISSION LINE
IMPERIAL COUNTY, CALIFORNIA

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

Preparer's Signature

Date

Matt Moore
Preparer's Name and Title

619-294-9400
Telephone Number

100.2 Owner Approval and Certification of SWPPP

**Owner's (or Authorized Representative)
Approval and Certification of the
Storm Water Pollution Prevention Plan**

Project Name: SES SOLAR TWO, TRANSMISSION LINE
IMPERIAL COUNTY, CALIFORNIA

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

Owner (or Authorized Representative) Signature

Date

Robert G. Byall
Name and Title

(602) 957-1818
Telephone Number

100.3 Annual Compliance Certification

By July 1 of each year, the Owner shall complete an Annual Certification of Compliance stating compliance with the terms and conditions of the Permit and the SWPPP. The blank Annual Certification of Compliance Form is included in Attachment M. Completed Annual Certifications of Compliance and Approvals can be found in the following pages.

Section 200

SWPPP Amendments

200.1 SWPPP Amendment Certification and Approval

This SWPPP shall be amended:

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

The following items will be included in each amendment:

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

The amendments for this SWPPP, along with the Owner's Certification and the Owner approval, can be found in the following pages. Amendments are listed in the Amendment Log in section 200.2

SWPPP Amendment No.

Project Name: SES SOLAR TWO, TRANSMISSION LINE
IMPERIAL COUNTY, CALIFORNIA

**Preparer Certification of the
Storm Water Pollution Prevention Plan Amendment**

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

<hr/> Preparer's Signature	<hr/> Date
<hr/> Matt Moore	<hr/> 619-294-9400
<hr/> Preparer's Name and Title	<hr/> Telephone Number

**Owner (or Owner's Authorized Representative) Approval of the
Storm Water Pollution Prevention Plan Amendment**

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

<hr/> Owner (or Authorized Representative) Signature	<hr/> Date
<hr/> Robert G. Byall	<hr/>
<hr/> Name and Title	<hr/> Telephone Number

Section 300

Introduction and Project Description

300.1 Introduction and Project Description

The offsite water improvement is a small part of the larger plan of development, which is known as Solar Two located approximately 14 miles west of City of El Centro. A separate SWPPP document will be prepared as needed for all onsite construction activities.

SES will construct an approximate 12-mile pipeline from the Seeley Waste Water Treatment Facility (SWWTF) to the SES water treatment plant along Evan Hewes Highway. The (SWWTF is located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Project site.

300.2 Unique Site Features

The pipeline will be buried within the Evan Hewes Highway ROW approximately 30" below the existing grade. The line will enter the SES property at the exact location as the previously identified line (approximately 1,000 yards east of Plaster City and then run due south to the Raw Water Storage Tank).

300.3 Construction Site Estimates

The following are estimates of the construction site:

Construction site area	<u>6</u>	acres
Percentage impervious area before construction	<u>0</u>	%
Runoff coefficient before construction ⁽¹⁾	<u>.4</u>	
Percentage impervious area after construction	<u>0</u>	%
Runoff coefficient after construction ⁽¹⁾	<u>.4</u>	
Anticipated storm water flow on to the construction site ⁽²⁾	<u>1.2</u>	cfs

⁽¹⁾ Calculations are shown in Attachment D

⁽²⁾ Calculations are shown in Attachment E

300.4 Project Schedule/Water Pollution Control Schedule

The project schedule will be provided at the time of the final engineering design.

300.5 Contact Information/List of Responsible Parties

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

Robert G. Byall

(602) 957-1818

Stirling Energy Systems, Inc.

4800 North Scottsdale Road, Suite 5500

Scottsdale, AZ 85251

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

- Ensuring full compliance with the SWPPP and the Permit
- Implementing all elements of the SWPPP, including but not limited to:
 - Implementation of prompt and effective erosion and sediment control measures
 - Implementing all non-storm water management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than storm water are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems; etc.
- Pre-storm inspections
- Storm event inspections
- Post-storm inspections
- Routine inspections as specified in the project's specifications or described in the SWPPP
- Updates/Amendments to the SWPPP, as needed
- Preparing annual compliance certification for owner's, or owner's authorized representative, signature
- Ensuring elimination of all unauthorized discharges

- The SWPPM shall be assigned authority by the Contractor to mobilize crews in order to make immediate repairs to the control measures
- Coordinate with the Contractor to assure all of the necessary corrections/repairs are made immediately, and that the project complies with the SWPPP, the Permit and approved plans at all times
- Submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges

Section 400 References

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

- Project plans and specifications No. TBD, dated (TBD) prepared by (TBD).
- State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity.
- California Stormwater BMP Handbook – Construction, January 2003

Section 500

Body of SWPPP

500.1 Objectives

This Storm Water Pollution Prevention Plan (SWPPP) has six main objectives:

- Identify all pollutant sources, including sources of sediment that may affect the quality of storm water discharges associated with construction activity (storm water discharges) from the construction site, and
- Identify non-storm water discharges, and
- Identify, construct, implement in accordance with a time schedule, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction, and
- Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs).
- Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharge directly into water bodies listed on Attachment 3 of the Permit (Clean Water Act Section 303(d) [303(d)] Water Bodies listed for Sedimentation).
- For all construction activity, identify a sampling and analysis strategy and sampling schedule for discharges that have been discovered through visual monitoring to be potentially contaminated by pollutants not visually detectable in the runoff.

This SWPPP conforms with the required elements of the General Permit No. CAS000002 issued by the State of California, State Water Resources Control Board (SWRCB). This SWPPP will be modified and amended to reflect any amendments to the Permit or any changes in construction or operations that may affect the discharge of pollutants from the construction site to surface waters, groundwaters, or the municipal separate storm sewer system (MS4). The SWPPP will also be amended if it is in violation of any condition of the Permit or has not achieved the general objective of reducing pollutants in storm water discharges. The SWPPP shall be readily available on-site for the duration of the project.

500.2 Vicinity Map

The construction project vicinity map showing the project location, surface water boundaries, geographic features, construction site perimeter, and general topography, is located in Attachment A. The project's Title Sheet provides more detail regarding the project location and is also included in Attachment A.

500.3 Pollutant Source Identification and BMP Selection

500.3.1 Inventory of Materials and Activities that May Pollute Storm Water

The following is a list of construction materials that will be used and activities that will be performed that will have the potential to contribute pollutants, other than sediment, to storm water runoff (control practices for each activity are identified in the Water Pollution Control Drawings (WPCDs) and/or in Sections 500.3.4 through 500.3.9:

- Vehicle fluids, including oil, grease, petroleum and coolants
- Base and subbase materials
- Mortar mix
- BMP materials
- General Litter

Construction activities that have the potential to contribute sediment to storm water discharges include:

- Clearing and grubbing operations
- Utility excavation operations

Attachment C lists all Best Management Practices (BMPs) that have been selected for implementation in this project. Implementation and location of BMPs are shown on the WPCDs in Attachment B. Narrative descriptions of BMPs to be used during the project are listed by category in each of the following SWPPP sections. Attachment Q includes a list, and/or copies of the fact sheets of all the BMPs selected for this project.

500.3.2 Existing (pre-construction) Control Measures

The following are existing (pre-construction) control measures encountered within the project site:

- None

500.3.3 Nature of Fill Material and Existing Data Describing the Soil

Existing site features that, as a result of past usage, may contribute pollutants to storm water (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site) include:

- The site is primarily a desert environment with sparse vegetation.

500.3.4 Erosion Control

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

- 1) Preserve existing vegetation where required and when feasible.
- 2) Apply temporary erosion control to remaining active and non-active areas as required by the California Stormwater BMPs Handbook – Construction, and the contract documents. Reapply as necessary to maintain effectiveness.
- 3) Implement temporary erosion control measures at regular intervals throughout the defined rainy season to achieve and maintain the contract’s disturbed soil area requirements. Implement erosion control prior to the defined rainy season.
- 4) Stabilize non-active areas as soon as feasible after the cessation of construction activities.
- 5) Control erosion in concentrated flow paths by applying erosion control blankets, erosion control seeding, and lining swales as required in the contract documents.
- 6) Apply seed to areas deemed substantially complete by the Owner during the defined rainy season.
- 7) At completion of construction, apply permanent erosion control to all remaining disturbed soil areas.

Sufficient erosion control materials will be maintained on-site to allow implementation in conformance with Permit requirements and described in this SWPPP. This includes

implementation requirements for active areas and non-active areas that require deployment before the onset of rain.

Implementation and locations of temporary erosion control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B and/or described in this section. The BMP Consideration Checklist in Attachment C indicates the BMPs that will be implemented to control erosion on the construction site; these are:

- EC-1, Scheduling
- EC-2, Preservation of Existing Vegetation
- EC-5, Soil Binders
- EC-9, Earth Dikes/Drainage Swales and Lined Ditches

Scheduling

Scheduling is the development of a written plan that includes sequencing of construction activities and the implementation of BMPs such as erosion control and sediment control while taking local climate (rainfall, wind, etc.) into consideration. The purpose is to reduce the amount and duration soil is exposed to erosion by wind, rain, runoff, and vehicle tracking, and to perform the construction activities and control practices in accordance with the planned schedule.

Preservation and Existing Vegetation

Carefully planned preservation of existing vegetation minimizes the potential of removing or injuring existing trees, vines, shrubs, and grasses that protect soil from erosion.

Soil Binders

Soil binders consist of applying and maintaining a soil stabilizer to exposed soil surfaces. Soil binders are materials applied to the soil surfaces. Soil binders are materials applied to the soil surface to temporarily prevent water induced erosion of exposed soils on construction sites. Soil binders also prevent wind erosion.

Earth Dikes and Drainage Swales

An earth dike is a temporary berm or ridge of compacted soil used to divert runoff or channel water to a desired location. A drainage swale is a shaped and sloped depression in the soil surface used to convey runoff to a desired location. Earth dikes and drainage swales are used to divert offsite runoff around the construction site, divert runoff from stabilized areas and disturbed areas, and direct runoff into sediment basins or traps.

500.3.5 Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate sediment control measures required by the contract documents, and other measures selected by the Contractor, SWPPP Manager, or Owner.

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

Implementation and locations of temporary sediment control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B. The BMP Consideration Checklist in Attachment C indicates all the BMPs that will be implemented to control sediment on the construction site; these are:

- SE-1, Silt Fence
- SE-4, Check Dam
- SE-7, Street Sweeping

Silt Fence

A silt fence is made of a filter fabric that has been entrenched, attached to supporting posts, and sometimes backed by a plastic or wire mesh for support. The silt fence detains sediment-laden water, promoting sedimentation behind the fence.

Silt fences are suitable for perimeter control, placed below areas where sheet flows discharge from the site. They should also be used as interior controls below disturbed areas where runoff may occur in the form of sheet and rill erosion. Silt fences are generally ineffective in locations where the flow is concentrated and are only applicable for sheet or overland flows. Silt fences are most effective when used in combination with erosion controls.

Check Dams

A check dam is a small barrier constructed of rock, gravel bags, sand bags, fiber rolls, or reusable products, placed across a constructed swale or drainage ditch. Check dams

reduce the effective slope of the channel, thereby reducing the velocity of flowing water, allowing sediment to settle and reducing erosion.

500.3.6 Tracking Control

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

- SE-7, Street Sweeping and Vacuuming

Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters.

500.3.7 Wind Erosion Control

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

- WE-1, Wind Erosion Control

Wind erosion or dust control consists of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. Covering small stockpiles or areas is an alternative to applying water or other dust palliatives.

500.3.8 Non-Storm Water Control

An inventory of construction activities and potential non-storm water discharges is provided in Section 5.3.1. The BMP Consideration Checklist in Attachment C and the following list indicates the BMPs that have been selected to control non-storm water pollution on the construction site. Implementation and locations of some non-storm water control BMPs are shown on the Water Pollution Control Drawings (WPCDs) in Attachment B. A narrative description of each BMP follows.

- NS-6, Illicit Connection/Illegal Discharge Detection and Reporting
- NS-8, Vehicle and Equipment Cleaning
- NS-9, Vehicle and Equipment Fueling

- NS-10, Vehicle and Equipment Maintenance

Vehicle and Equipment Cleaning

Vehicle and equipment cleaning procedures and practices eliminate or reduce the discharge of pollutants to stormwater from vehicle and equipment cleaning operations. Procedures and practices include but are not limited to the storm drain by infiltrating the wash water; and training employees and subcontractors in proper cleaning procedures.

Vehicle and Equipment Fueling

Vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.

Liquid Waste Management

Liquid waste management includes procedures and practices to prevent discharge of pollutants to the storm drain system or to watercourses as a result of the creation, collection, and disposal on non-hazardous liquid wastes.

Vehicle and Equipment Maintenance

Prevent or reduce the contamination of stormwater resulting from vehicle and equipment maintenance by running a "dry and clean site." The best option would be to perform maintenance activities at an offsite facility. If this option is not available then work should be performed in designated areas only, while providing cover for materials stored outside, checking for leaks and spills, and containing and cleaning up spills immediately. Employees and subcontractors must be trained in proper procedures.

500.3.9 Waste Management and Materials Pollution Control

An inventory of construction activities, materials, and wastes is provided in Section 5.3.1. The BMP Consideration Checklist in Attachment C and the following list indicates the BMPs that have been selected to handle materials and control construction site wastes. A narrative description of each BMP follows.

- WM-1, Material Delivery and Storage
- WM- 2, Material Use

- WM-3, Stockpile Management
- WM-4, Spill Prevention and Control
- WM-5, Solid Waste Management
- WM-9, Sanitary/Septic Waste Management

Material Delivery and Storage

Prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.

Material Use

Prevent or reduce the discharge of pollutants to the storm drain system or watercourses from material use by using alternative products, minimizing hazardous material use onsite, and training employees and subcontractors.

Spill Prevention

Prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the sources of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

Solid Waste Management

Solid waste management procedures and practices are designed to prevent or reduce the discharge of pollutants to stormwater from solid and construction waste by providing designated waste collection areas and containers, arranging for regular disposal and training employees and subcontractors.

Sanitary/Septic Waste Management

Proper sanitary and septic waste management prevent the discharge of pollutants to stormwater from sanitary and septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal.

Liquid Waste Management

Liquid waste management includes procedures and practices to prevent discharge of pollutants to the storm drain system or to watercourses as a result of the creation, collection, and disposal of non-hazardous liquid wastes.

500.3.10 Cost Breakdown for Water Pollution Control

A cost breakdown itemizing the contract lump sum for water pollution control will be developed for this project and included in Attachment O. The cost breakdown reflects the items of work, quantities and costs for BMPs shown in the SWPPP, except for those construction site BMPs and permanent BMPs that are shown on the project plans and for which there is a contract item of work.

500.4 Water Pollution Control Drawings (WPCDs)

The Water Pollution Control Drawings can be found in Attachment B of the SWPPP.

500.5 Construction BMP Maintenance, Inspection, and Repair

Inspections will be conducted as follows:

- Prior to a forecast storm
- after a rain event that causes runoff from the construction site
- at 24-hour intervals during extended rain events
- at any other time(s) or intervals of time specified in the contract documents

Completed inspection checklists will be kept with the SWPPP.

A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs. A program for Maintenance, Inspection and Repair of BMPs is shown in Attachment G.

500.6 Post-Construction Storm Water Management

500.6.1 Post-Construction Control Practices

The following are the post-construction BMPs that are to be used at this construction site after all construction is complete:

- Native planting and seeding.

500.6.2 Operation/Maintenance after Project Completion

The post-construction BMPs that are described above will be funded and maintained by (TBD)

500.7 Training

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

- To be included in final SWPPP.

The training log showing formal and informal training of various Contractor personnel is shown in Attachment I.

This SWPPP was prepared by URS Corporation.

500.8 List of Subcontractors

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

500.9 Other Plans/Permits

Attachment N includes copies of other local, state, and federal plans and permits. Following is a list of the plans and permits included in Attachment N:

- State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity.
- Other applicable permits to be included when finalized.

Section 600

Monitoring Program and Reports

600.1 Site Inspections

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

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

Assigned inspector: (TBD) Contact phone: (TBD)

600.2 Non-Compliance Reporting If a discharge occurs or if the project receives a written notice of non-compliance, the Contractor will immediately notify the Owner and will file a written report to the Owner within 7 days of the discharge or notice. The Owner is responsible for filing a written report to the Regional Water Quality Control Board (RWQCB) within 30 days of identification of non-compliance. Corrective measures will be implemented immediately following the discharge, notice or order. A sample Notice of Non-Compliance (NONC) form is provided in Attachment K. All discharges will be documented on a Discharge Reporting Log using the example form in Attachment T.

The report to the Owner and to the RWQCB will contain the following items:

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

600.3 Record Keeping and Reports

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

- Site inspections
- Compliance certifications

- Discharge reports
- Approved SWPPP document and amendments

600.4 Sampling and Analysis Plan for Sediment

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

600.5 Sampling and Analysis Plan for Non-Visible Pollutants

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

600.5.1 Scope of Monitoring Activities

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

- TBD

The following existing site features, as identified in Section 500.3.3, are potential sources of non-visible pollutants to storm water discharges from the project. Locations of existing site features contaminated with non-visible pollutants are shown on the WPCDs in Attachment B.

- TBD

The following soil amendments have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil and will be used on the project site. Locations of soil amendment application are shown on the WPCDs in Attachment B.

- TBD

The project has the potential to receive storm water run-on with the potential to contribute non-visible pollutants to storm water discharges from the project. Locations of such run-on to the project site are shown on the WPCDs in Attachment B.

- TBD

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

600.5.2 Monitoring Strategy

Sampling Schedule

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

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

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

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

- Storm water runoff from an area contaminated by historical usage of the site has been observed to combine with storm water runoff from the site, and there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.

Sampling Locations

Sampling locations are based on proximity to planned non-visible pollutant storage, occurrence or use; accessibility for sampling, personnel safety; and other factors in accordance with the applicable requirements in the Permit. Planned sampling locations are shown on the WPCDs in Attachment B and include the following:

- [Enter number of locations] sampling locations have been identified for the collection of samples of runoff that drain areas where soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil will be applied.
- If applicable Sample location number(s) is located .
- [Enter number of locations] sampling locations have been identified for the collection of samples of runoff that drain areas contaminated by historical usage of the site.
- If applicable Sample location number(s) is located .
- [Enter number of locations] sampling locations have been identified for the collection of samples of run-on to the project site with the potential to combine with discharges being sampled for non-visible pollutants. These samples are intended to identify sources of potential non-visible pollutants that originate off the project site.
- If applicable Sample location number(s) is located .
- A location has been identified for the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. This location was selected such that the sample will not have come in contact with (1) operational or storage areas associated with the materials, wastes, and activities identified in Section 500.3.1; (2) potential non-visible pollutants due to historical use of the site as identified in Section 500.3.3; (3) areas in which soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied; or (4) disturbed soils areas.
- If applicable Sample location number(s) is located .

If an operational activity or storm water inspection conducted 24 hours prior to or during a rain event identifies the presence of a material storage, waste storage, or operations area with spills or the potential for the discharge of non-visible pollutants to surface waters or a

storm sewer system that was an unplanned location and has not been identified on the WPCDs, sampling locations will be selected using the same rationale as that used to identify planned locations.

600.5.3 Monitoring Preparation

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

Name/Telephone Number:

Name/Telephone Number:

Alternate(s)/Telephone

Number:

Alternate(s)/Telephone

Number:

Prior to the rainy season, all sampling personnel and alternates will review the SAP. Qualifications of designated Contractor personnel describing environmental sampling training and experience are provided in Attachment I.

An adequate stock of monitoring supplies and equipment for monitoring non-visible pollutants will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool-temperature environment that will not come into contact with rain or direct sunlight. Sampling personnel will be available to collect samples in accordance with the sampling schedule.

Supplies maintained at the project site will include, but are not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, Sampling Activity Log forms, and Chain of Custody (COC) forms. The Contractor will obtain and maintain the field-testing instruments, as identified in Section 600.5.6, for analyzing samples in the field by Contractor sampling personnel.

Safety practices for sample collection will be in accordance with the [ENTER TITLE AND PUBLICATION DATE OF CONTRACTOR'S HEALTH AND SAFETY PLAN FOR THE PROJECT OR PROVIDE SPECIFIC REQUIREMENTS HEREIN].

Samples on the project site will be collected by the following [specify laboratory or environmental consultant]:

Company Name:

Address:

Telephone Number:

Point of Contact:

Qualifications of designated Contractor personnel describing environmental sampling training and experience are provided in Attachment I.

SWPPM will contact [specify name of laboratory or environmental consultant] [enter number of hours] hours prior to a predicted rain event and if one of the triggering conditions is identified during an inspection before, during, or after a storm event to ensure that adequate sample collection personnel, supplies and field test equipment for monitoring non-visible pollutants are available and will be mobilized to collect samples on the project site in accordance with the sampling schedule.

[Specify name of laboratory or environmental consultant] will obtain and maintain the field-testing instruments, as identified in Section 600.5.6, for analyzing samples in the field by their sampling personnel.

600.5.4 Analytical Constituents

Identification of Non-Visible Pollutants

Table 600-2 lists the specific sources and types of potential non-visible pollutants on the project site and the applicable water quality indicator constituent(s) for that pollutant.

Table 600-2

Potential Non-Visible Pollutants and Water Quality Indicator Constituents

Pollutant Source	Pollutant	Water Quality Indicator Constituent
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600.5.5 Sample Collection and Handling

Sample Collection Procedures

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

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

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

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

- Wear a clean pair of surgical gloves prior to the collection and handling of each sample at each location.
- Not contaminate the inside of the sample bottle by not allowing it to come into contact with any material other than the water sample.
- Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection.
- Not leave the cooler lid open for an extended period of time once samples are placed inside.
- Not sample near a running vehicle where exhaust fumes may impact the sample.
- Not touch the exposed end of a sampling tube, if applicable.

- Avoid allowing rainwater to drip from rain gear or other surfaces into sample bottles.
- Not eat, smoke, or drink during sample collection.
- Not sneeze or cough in the direction of an open sample bottle.
- Minimize the exposure of the samples to direct sunlight, as sunlight may cause biochemical transformation of the sample to take place.
- Decontaminate sampling equipment prior to sample collection using a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water.
- Dispose of decontamination water/soaps appropriately; i.e., not discharge to the storm drain system or receiving water.

Sample Handling Procedures

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

Laboratory Name:

Address:

Telephone Number:

Point of Contact:

Immediately following collection, samples for field analysis will be tested in accordance with the field instrument manufacturer's instructions and results recorded on the Sampling Activity Log.

Sample Documentation Procedures

All original data documented on sample bottle identification labels, Chain of Custody forms, Sampling Activity Logs, and Inspection Checklists will be recorded using waterproof ink. These will be considered accountable documents. If an error is made on an accountable document, the individual will make corrections by lining through the error

and entering the correct information. The erroneous information will not be obliterated. All corrections will be initialed and dated. Copies of the Sampling Activity Log and Chain of Custody form are provided in Attachment R.

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

- Sample Bottle Identification Labels: Sampling personnel will attach an identification label to each sample bottle. At a minimum, the following information will be recorded on the label, as appropriate:
 - Project name
 - Project number
 - Unique sample identification number and location.
[Project Number]-[Six digit sample collection date]-[Location]
(Example: 0G5304-081801-Inlet472).
Quality assurance/quality control (QA/QC) samples shall be identified similarly using a unique sample number or designation
(Example: 0G5304-081801-DUP1).
 - Collection date/time (No time applied to QA/QC samples)
 - Analysis constituent

- Sampling Activity Logs: A log of sampling events will identify:
 - Sampling date
 - Separate times for collected samples and QA/QC samples recorded to the nearest minute
 - Unique sample identification number and location
 - Analysis constituent
 - Names of sampling personnel
 - Weather conditions (including precipitation amount)
 - Field analysis results
 - Other pertinent data

- Chain of Custody (COC) forms: All samples to be analyzed by a laboratory will be accompanied by a COC form provided by the laboratory. Only the sample collectors will sign the COC form over to the lab. COC procedures will be strictly adhered to for QA/QC purposes.

- Storm Water Quality Construction Inspection Checklists: When applicable, the Contractor's storm water inspector will document on the checklist that samples for non-visible pollutants were taken during a rain event.

600.5.6 Sample Analysis

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

For samples collected for field analysis, collection, analysis and equipment calibration will be in accordance with the field instrument manufacturer's specifications.

The following field instrument(s) will be used to analyze the following constituents:

Field Instrument	Constituent

- The instrument(s) will be maintained in accordance with manufacturer's instructions.
- The instrument(s) will be calibrated before each sampling and analysis event.
- Maintenance and calibration records will be maintained with the SWPPP.

600.5.7 Quality Assurance/Quality Control

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

600.5.8 Data Management and Reporting

A copy of all water quality analytical results and QA/QC data will be included in the on-site SWPPP within 5 days of sampling (for field analyses) and within 30 days (for laboratory analyses).

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

600.5.9 Data Evaluation

An evaluation of the water quality sample analytical results, including figures with sample locations, the water quality analytical results, and the QA/QC data, will be included in the on-site SWPPP.

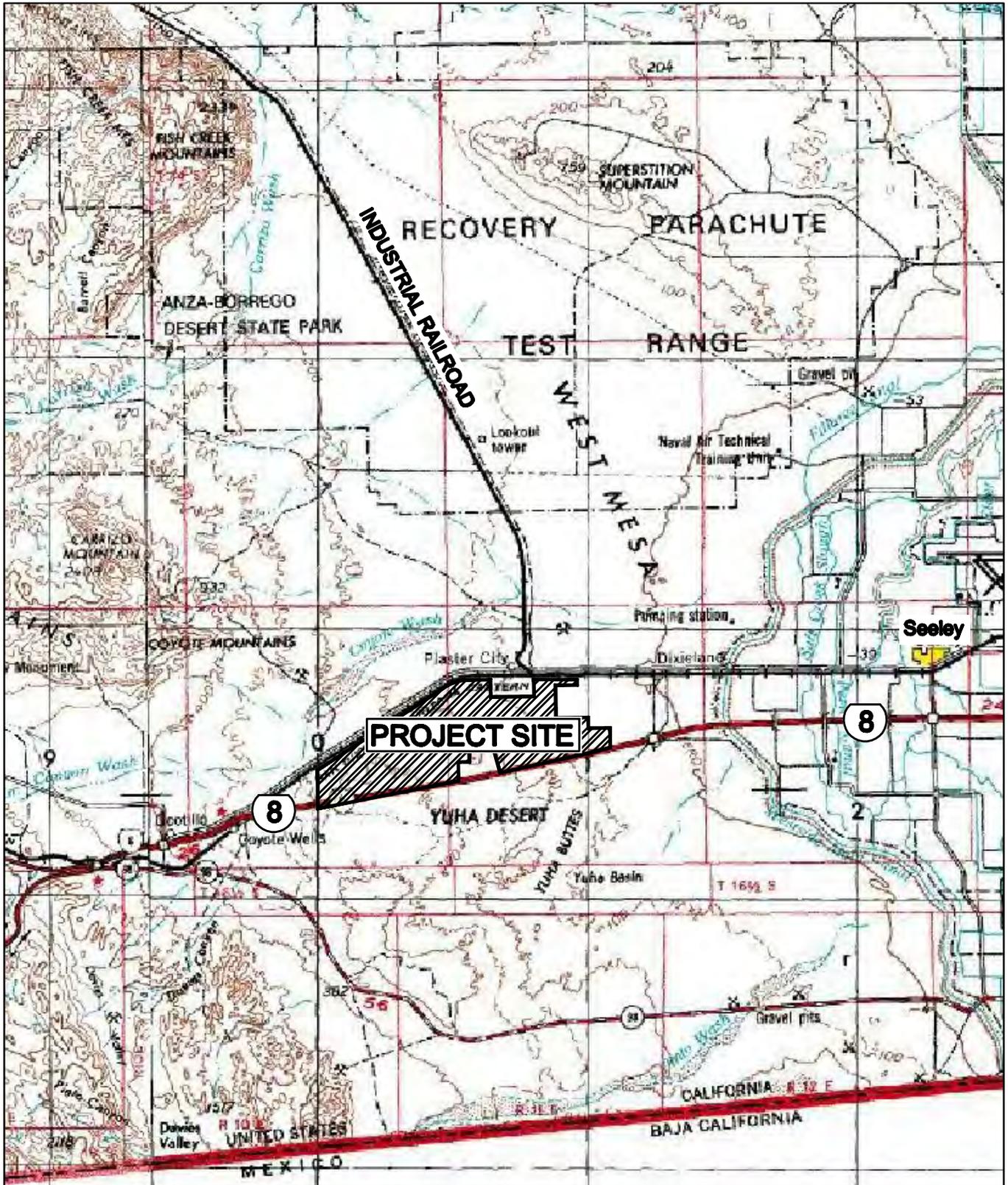
Should the runoff/ downgradient sample show an increased level of the tested analyte relative to the background sample, the BMPs, site conditions, and surrounding influences will be assessed to determine the probable cause for the increase. As determined by the site and data evaluation, appropriate BMPs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

600.5.10 Change of Conditions

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

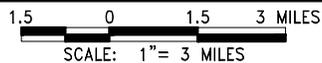
Attachment A

Vicinity Map



**SOLAR TWO PROJECT
VICINITY MAP**

URS



CHECKED BY: MM

DATE: 05-15-2009

EXHIBIT

PM:

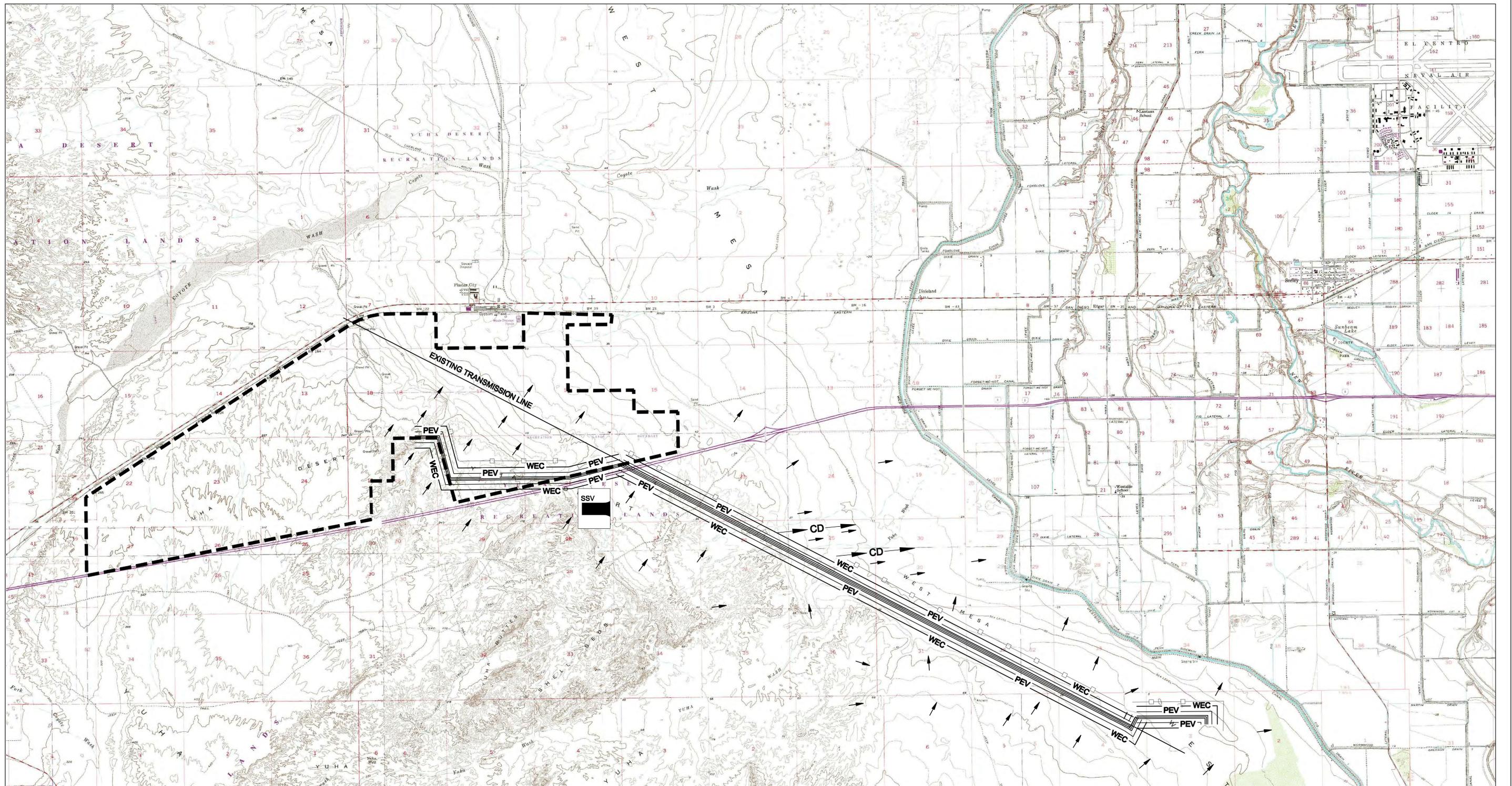
PROJ. NO: 27657106

A

Attachment B

Water Pollution Control Drawings (WPCDs)

Drawings were submitted as Appendix A of the DESCP/
SWPP - Volume 1.



LEGEND

- | | | | | | | | | | | | |
|--|-------------------------------------|--|------------------------------|--|--------------------------------|--|-----------------------------------|--|----------------------------------|--|---------------------------------|
| | Proposed Transmission Line | | Project Boundary | | Street Sweeping and Vacuuming | | Vehicle and Equipment Fueling | | Sanitary Septic Waste Management | | Earth Dikes and Drainage Swales |
| | Preservation of Existing Vegetation | | Scheduling | | Silt Fence | | Vehicle and Equipment Maintenance | | Storm Water Management | | Check Dams |
| | Wind Erosion Controls | | Spill Prevention and Control | | Vehicle and Equipment Cleaning | | Liquid Waste Management | | Material Use | | |
| | Flow Direction | | Soil Binders | | Material Delivery and Storage | | | | | | |

**SOLAR TWO PROJECT
WATER POLLUTION CONTROL DRAWING
TRANSMISSION LINE**

URS CHECKED BY: MM DATE: 05-12-2009 EXHIBIT B
SCALE: 1" = 800' PM: PROJ. NO: 27657106

Attachment C

BMP Consideration Checklist

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
EROSION CONTROL BMPs					
BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
EC-1	Scheduling				
EC-2	Preservation of Existing Vegetation				
EC-3	Hydraulic Mulch				
EC-4	Hydroseeding				
EC-5	Soil Binders				
EC-6	Straw Mulch				
EC-7	Geotextiles & Mats				
EC-8	Wood Mulching				
EC-9	Earth Dikes & Drainage Swales				
EC-10	Velocity Dissipation Devices				
EC-11	Slope Drains				
EC-12	Streambank Stabilization				
EC-13	Polyacrylamide				

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

SEDIMENT CONTROL BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
SE-1	Silt Fence				
SE-2	Sediment Basin				
SE-3	Sediment Trap				
SE-4	Check Dam				
SE-5	Fiber Rolls				
SE-6	Gravel Bag Berm				
SE-7	Street Sweeping and Vacuuming				
SE-8	Sand Bag Barrier				
SE-9	Straw Bale Barrier				
SE-10	Storm Drain Inlet Protection				
SE-11	Chemical Treatment				

WIND EROSION CONTROL BMPs

WE-1	Wind Erosion Control				
------	----------------------	--	--	--	--

TRACKING CONTROL BMPs

TR-1	Stabilized Construction Entrance/Exit				
TR-2	Stabilized Construction Roadway				
TR-3	Entrance/Outlet Tire Wash				

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

NON-STORM WATER MANAGEMENT BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
NS-1	Water Conservation Practices				
NS-2	Dewatering Operations				
NS-3	Paving and Grinding Operations				
NS-4	Temporary Stream Crossing				
NS-5	Clear Water Diversion				
NS-6	Illicit Connection/ Discharge				
NS-7	Potable Water/Irrigation				
NS-8	Vehicle and Equipment Cleaning				
NS-9	Vehicle and Equipment Fueling				
NS-10	Vehicle and Equipment Maintenance				
NS-11	Pile Driving Operations				
NS-12	Concrete Curing				
NS-13	Concrete Finishing				
NS-14	Material and Equipment Use Over Water				
NS-15	Demolition Adjacent to Water				
NS-16	Temporary Batch Plants				

**CONSTRUCTION SITE BMPs
 CONSIDERATION CHECKLIST**

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
WM-1	Material Delivery and Storage				
WM-2	Material Use				
WM-3	Stockpile Management				
WM-4	Spill Prevention and Control				
WM-5	Solid Waste Management				
WM-6	Hazardous Waste Management				
WM-7	Contaminated Soil Management				
WM-8	Concrete Waste Management				
WM-9	Sanitary/Septic Waste Management				
WM-10	Liquid Waste Management				

Attachment D

Computation Sheet for Determining Runoff Coefficients

$$\text{Total Site Area} = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{A})$$

Existing Site Conditions

$$\text{Impervious Site Area}^1 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{B})$$

$$\text{Impervious Site Area Runoff Coefficient}^{2,4} = \underline{\hspace{2cm}} \quad (\text{C})$$

$$\text{Pervious Site Area}^3 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{D})$$

$$\text{Pervious Site Area Runoff Coefficient}^4 = \underline{\hspace{2cm}} \quad (\text{E})$$

$$\text{Existing Site Area Runoff Coefficient} \frac{(B \times C) + (D \times E)}{(A)} = \underline{\hspace{2cm}} \quad (\text{F})$$

Proposed Site Conditions (after construction)

$$\text{Impervious Site Area}^1 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{G})$$

$$\text{Impervious Site Area Runoff Coefficient}^{2,4} = \underline{\hspace{2cm}} \quad (\text{H})$$

$$\text{Pervious Site Area}^3 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{I})$$

$$\text{Pervious Site Area Runoff Coefficient}^4 = \underline{\hspace{2cm}} \quad (\text{J})$$

$$\text{Proposed Site Area Runoff Coefficient} \frac{(G \times H) + (I \times J)}{(A)} = \underline{\hspace{2cm}} \quad (\text{K})$$

1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
2. Use 0.95 unless lower or higher runoff coefficient can be verified.
3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
4. Refer to local Hydrology Manual for typical C values.

Attachment E

Computational Sheet for Determining Run-on Discharges

Existing Site Conditions

Area Runoff Coefficient = _____ (A)

Area Rainfall Intensity = _____ in/hr (B)

Drainage Area = _____ Acres (C)

Site Area Run-on Discharge (A) x (B) x (C) = _____ ft³/sec (D)

Attachment F

Notice of Intent (NOI)



NOTICE OF INTENT
 TO COMPLY WITH THE TERMS OF THE
 GENERAL PERMIT TO DISCHARGE STORM WATER
 ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER No. 99-08-DWQ)

I. NOI STATUS (SEE INSTRUCTIONS)

MARK ONLY ONE ITEM	1. <input type="checkbox"/> New Construction	2. <input type="checkbox"/> Change of Information for WDID#
--------------------	--	---

II. PROPERTY OWNER

Name	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone () --

III. DEVELOPER/CONTRACTOR INFORMATION

Developer/Contractor	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone () --

IV. CONSTRUCTION PROJECT INFORMATION

Site/Project Name		Site Contact Person		
Physical Address/Location		Latitude _____°	Longitude _____°	County
City (or nearest City)		Zip	Site Phone Number () --	Emergency Phone Number () --
A. Total size of construction site area: _____ Acres	C. Percent of site imperviousness (including rooftops):		D. Tract Number(s): _____, _____	
B. Total area to be disturbed: _____ Acres (% of total _____)	Before Construction: _____%		E. Mile Post Marker: _____	
F. Is the construction site part of a larger common plan of development or sale? <input type="checkbox"/> YES <input type="checkbox"/> NO		G. Name of plan or development:		
H. Construction commencement date: ____/____/____		J. Projected construction dates: Complete grading: ____/____/____ Complete project: ____/____/____		
I. % of site to be mass graded: _____				
K. Type of Construction (Check all that apply):				
1. <input type="checkbox"/> Residential 2. <input type="checkbox"/> Commercial 3. <input type="checkbox"/> Industrial 4. <input type="checkbox"/> Reconstruction 5. <input type="checkbox"/> Transportation				
6. <input type="checkbox"/> Utility Description: _____ 7. <input type="checkbox"/> Other (Please List): _____				

V. BILLING INFORMATION

SEND BILL TO: <input type="checkbox"/> OWNER (as in II. above)	Name	Contact Person	
<input type="checkbox"/> DEVELOPER (as in III. above)	Mailing Address	Phone/Fax	
<input type="checkbox"/> OTHER (enter information at right)	City	State	Zip

VI. REGULATORY STATUS

A. Has a local agency approved a required erosion/sediment control plan?..... YES NO
Does the erosion/sediment control plan address construction activities such as infrastructure and structures?..... YES NO
Name of local agency: _____ Phone: () --

B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification?..... YES NO
If yes, provide details: _____

VII. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (Check all that apply):
1. Indirectly to waters of the U.S.
2. Storm drain system - Enter owner's name: _____
3. Directly to waters of U.S. (e.g., river, lake, creek, stream, bay, ocean, etc.)
B. Name of receiving water: (river, lake, creek, stream, bay, ocean): _____

VIII. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)
 A SWPPP has been prepared for this facility and is available for review: Date Prepared: ___/___/___ Date Amended: ___/___/___
 A SWPPP will be prepared and ready for review by (enter date): ___/___/___
 A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.

B. MONITORING PROGRAM
 A monitoring and maintenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.
If checked above: A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes..... YES NO
Name: _____ Phone: ()

C. PERMIT COMPLIANCE RESPONSIBILITY
A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Water Pollution Prevention Plan including:
1. Preparing an annual compliance evaluation..... YES NO
Name: _____ Phone: () --
2. Eliminating all unauthorized discharges..... YES NO

IX. VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)

Have you included a vicinity map with this submittal? YES NO
Have you included payment of the annual fee with this submittal?..... YES NO

X. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."
Printed Name: _____
Signature: _____ Date: _____
Title: _____

Attachment G

Program for Maintenance, Inspection, and Repair of Construction Site BMPs

<i>The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP</i>		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
TEMPORARY EROSION CONTROL BMPs		
Soil Binders	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Reapply the selected soil binder as needed to maintain effectiveness.
Earth Dikes/Drainage Swales & Lined Ditches	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Inspect ditches and berms for washouts. ■ Replace lost riprap, damage linings or soil stabilizers as needed. ■ Remove debris and sediment. ■ Temporary conveyance should be completely removed as soon as the surrounding drainage area has been stabilized or at the completion of construction.
TEMPORARY SEDIMENT CONTROL BMPs		
Silt Fences	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Repair undercut silt fences. ■ Repair or replace split, torn, slumping, or weathered fabric. The lifespan of silt fence fabric is generally 5 to 8 months. ■ Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height.
Check Dam	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Replace missing rock, bags, bales, etc. Replace bags or bales that have degraded or have become damaged. ■ Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. ■ If the check dam is used as a grade control structure, sediment removal is not required as long as the system continues to control the grade.

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Street Sweeping	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ When actively in use, points of ingress and egress must be inspected daily. ■ When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. ■ After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.
WIND EROSION CONTROL BMPs		
Wind Erosion Control	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Check areas protected to ensure coverage. ■ Most dust control measures require frequent, often daily, or multiple times per day attention.
TRACKING CONTROL BMPs		
Street Sweeping and Vacuuming	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ When actively in use, points of ingress and egress must be inspected daily. ■ When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. ■ After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.
NON-STORM WATER MANAGEMENT BMPs		
Vehicle and Equipment Cleaning	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur. ■ Inspection and maintenance is minimal, although some berm repair may be necessary. ■ Monitor employees and subcontractors throughout the duration of the construction project to ensure appropriate practices are being implemented. ■ Inspect sump regularly and remove liquids and sediment as needed. ■ Prohibit employees and subcontractors from washing personal vehicles and equipment on the construction site./

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Vehicle and Equipment Fueling	<ul style="list-style-type: none"> ■ Vehicles and equipment should be inspected each day of use for leaks. Leaks should be repaired immediately or problem vehicles or equipment should be removed from the project site. 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill cleanup materials onsite. ■ Immediately clean up spills and properly dispose of contaminated soil and cleanup materials.
Vehicle and Equipment Maintenance	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill cleanup materials onsite. ■ Maintain waste fluid containers in leak proof condition. ■ Vehicles and equipment should be inspected on each day of use. Leaks should be repaired immediately or the problem vehicle(s) or equipment should be removed from the project site. ■ Inspect equipment for damaged hoses and leaky gaskets routinely. Repair or replace as needed.
Material and Equipment Use Over Water	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Ensure that employees and subcontractors implement the appropriate measures for storage and use of materials and equipment. ■ Inspect and maintain all associated BMPs and perimeter controls to ensure continuous protection of the water courses, including waters of the United States.
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs		
Material Delivery and Storage	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep an ample supply of spill cleanup materials near the storage area. ■ Keep storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. ■ Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.

<i>The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP</i>		
BEST MANAGEMENT PRACTICES (BMPs)	INSPECTION FREQUENCY (all controls)	MAINTENANCE/REPAIR PROGRAM
Material Use	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Maintenance of this best management practice is minimal. ■ Spot check employees and subcontractors throughout the job to ensure appropriate practices are being employed.
Stockpile Management		<ul style="list-style-type: none"> ■
Spill Prevention and Control	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Keep ample supplies of spill control and cleanup materials onsite, near storage, unloading, and maintenance areas. ■ Update your spill prevention and control plan and stock cleanup materials as changes occur in the types of chemicals onsite.
Solid Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Arrange for regular waste collection.
Sanitary/Septic Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Arrange for regular waste collection. ■ If high winds are expected, portable sanitary facilities must be secured with spikes or weighed down to prevent over turning.
Liquid Waste Management	<ul style="list-style-type: none"> ■ Prior to forecast rain ■ Daily during extended rain events ■ After rain events ■ Weekly during the rainy season ■ Two-week intervals during the non-rainy season 	<ul style="list-style-type: none"> ■ Remove deposited solids in containment areas and capturing devices as needed and at the completion of the task.

Attachment H

Storm Water Quality Construction Site Inspection Checklist

GENERAL INFORMATION				
Project Name				
Project N°				
Contractor				
Inspector's Name				
Inspector's Title				
Signature				
Date of Inspection				
Inspection Type (Check Applicable)	<input type="checkbox"/> Prior to forecast rain		<input type="checkbox"/> After a rain event	
	<input type="checkbox"/> 24-hr intervals during extended rain		<input type="checkbox"/> Other _____	
Season (Check Applicable)	<input type="checkbox"/> Rainy		<input type="checkbox"/> Non-Rainy	
Storm Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (inches)	

PROJECT AREA SUMMARY AND DISTURBED SOIL AREA (DSA) SIZE	
Total Project Area	_____ Acres
Field Estimate of Active DSAs	_____ Acres
Field Estimate of Non-Active DSAs	_____ Acres

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Preservation of Existing Vegetation				
Is temporary fencing provided to preserve vegetation in areas where no construction activity is planned?				
Location:				
Erosion Control				
Does the applied temporary erosion control provide 100% coverage for the affected areas?				
Are any non-vegetated areas that may require temporary erosion control?				
Is the area where erosion controls are used required free from visible erosion?				
Location:				
Temporary Linear Sediment Barriers (Silt Fence, Fiber Rolls, Sandbag Barriers, etc.)				
Are temporary linear sediment barriers properly installed, functional and maintained?				
Are temporary linear sediment barriers free of accumulated litter?				
Is the built-up sediment less than 1/3 the height of the barrier?				
Are cross barriers installed where necessary and properly spaced?				
Location:				
Storm Drain Inlet Protection				
Are storm drain inlets internal to the project properly protected?				
Are storm drain inlet protection devices in working order and being properly maintained?				
Location:				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Sediment Basins				
Are basins designed in accordance with the requirements of the General Permit?				
Are basins maintained to provide the required retention/detention?				
Are basin controls (inlets, outlets, diversions, weirs, spillways, and racks) in working order?				
Location:				
Stockpiles				
Are all locations of temporary stockpiles, including soil, hazardous waste, and construction materials in approved areas?				
Are stockpiles protected from run-on, run-off from adjacent areas and from winds?				
Are stockpiles located at least 15 m from concentrated flows, downstream drainage courses and storm drain inlets?				
Are required covers and/or perimeter controls in place?				
Location:				
Concentrated Flows				
Are concentrated flow paths free of visible erosion?				
Location:				
Tracking Control				
Is the entrance stabilized to prevent tracking				
Is the stabilized entrance inspected daily to ensure that it is working properly				
Are points of ingress/egress to public/private roads inspected and swept and vacuumed as needed?				
Are all paved areas free of visible sediment tracking or other particulate matter?				
Location:				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Wind Erosion Control				
Is dust control implemented?				
Location:				
Dewatering Operations				
Are all one-time dewatering operations covered by the General Permit inspected before and as they occur and BMPs implemented as necessary during discharge?				
Is ground water dewatering handled in conformance with the dewatering permit issued by the RWQCB?				
Is required treatment provided for dewatering effluent?				
Location:				
Vehicle & Equipment Fueling, Cleaning, and Maintenance				
Are vehicle and equipment fueling, cleaning and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious material?				
Are vehicle and equipment fueling, cleaning and maintenance activities performed on an impermeable surface in dedicated areas?				
If no, are drip pans used?				
Are dedicated fueling, cleaning, and maintenance areas located at least 15 m away from downstream drainage facilities and watercourses and protected from run-on and runoff?				
Is wash water contained for infiltration/ evaporation and disposed of appropriately?				
Is on-site cleaning limited to washing with water (no soap, soaps substitutes, solvents, or steam)?				
On each day of use, are vehicles and equipment inspected for leaks and if necessary, repaired?				
Location:				
Waste Management & Materials Pollution Control				
Are material storage areas and washout areas protected from run-on and runoff, and located at least 15 m from concentrated flows and downstream drainage facilities?				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Are all material handling and storage areas clean; organized; free of spills, leaks, or any other deleterious material; and stocked with appropriate clean-up supplies?				
Are liquid materials, hazardous materials, and hazardous wastes stored in temporary containment facilities?				
Are bagged and boxed materials stored on pallets?				
Are hazardous materials and wastes stored in appropriate, labeled containers?				
Are proper storage, clean-up, and spill-reporting procedures for hazardous materials and wastes posted in open, conspicuous and accessible locations adjacent to storage areas?				
Are temporary containment facilities free of spills and rainwater?				
Are temporary containment facilities and bagged/boxed materials covered?				
Are temporary concrete washout facilities designated and being used?				
Are temporary concrete washout facilities functional for receiving and containing concrete waste and are concrete residues prevented from entering the drainage system?				
Do temporary concrete washout facilities provide sufficient volume and freeboard for planned concrete operations?				
Are concrete wastes, including residues from cutting and grinding, contained and disposed of off-site or in concrete washout facilities?				
Are spills from mobile equipment fueling and maintenance properly contained and cleaned up?				
Is the site free of litter?				
Are trash receptacles provided in the yard, field trailer areas, and at locations where workers congregate for lunch and break periods?				
Is litter from work areas collected and placed in watertight dumpsters?				
Are waste management receptacles free of leaks?				
Are the contents of waste management receptacles properly protected from contact with storm water or from being dislodged by winds?				
Are waste management receptacles filled at or beyond capacity?				
Location:				
Temporary Water Body Crossing or Encroachment				
Are temporary water body crossings and encroachments constructed appropriately?				
Does the project conform to the requirements of the 404 permit and/or 1601 agreement?				
Location:				

Attachment H
Storm Water Quality Construction Inspection Checklist

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
Location:				
Location:				
Location:				
Illicit Connection/ Discharge				
Is there any evidence of illicit discharges or illegal dumping on the project site?				
If yes, has the Owner/Operator been notified?				
Location:				
Discharge Points				
Are discharge points and discharge flows free from visible pollutants?				
Are discharge points free of any significant sediment transport?				
Location:				
SWPPP Update				
Does the SWPPP and Project Schedule adequately reflect the current site conditions and contractor operations?				
Are all BMPs shown on the water pollution control drawings installed in the proper location(s) and according to the details in the SWPPP?				
Location:				
General				
Are there any other potential concerns at the site?				
Location:				
Storm Water Monitoring				
Does storm water discharge directly to a water body listed in the General Permit as impaired for sediment/sedimentation or turbidity?				

INSPECTION OF BMPs				
BMP	Yes	No	N/A	Corrective Action
If yes, were samples for sediment/sedimentation or turbidity collected pursuant to the sampling and analysis plan in the SWPPP?				
Did the sampling results indicate that the discharges are causing or contributing to further impairment?				
If yes, were the erosion/sediment control BMPs improved or maintained to reduce the discharge of sediment to the water body?				
Were there any BMPs not properly implemented or breaches, malfunctions, leakages or spills observed which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				
If sampling indicated pollution of the storm water, were the leaks, breaches, spills, etc. cleaned up and the contaminated soil properly disposed of?				
Were the BMPs maintained or replaced?				
Were soil amendments (e.g., gypsum, lime) used on the project?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan in the SWPPP?				
If sampling indicated pollution of the storm water by the use of the soil amendments, is there a contingency plan for retention onsite of the polluted storm water?				
Did storm water contact stored materials or waste and run off the construction site? (Materials not in watertight containers, etc.)				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan in the SWPPP?				

*Attachment I
Trained Contractor Personnel Log*

Name	Company	Phone

COMMENTS:

Attachment J

Subcontractor Notification Letter and Notification Log

SWPPP Notification

Company
Address
City, State, ZIP

Dear Sir/Madam,

Please be advised that the California State Water Resources Control Board has adopted the General Permit (General Permit) for Storm Water Discharges Associated with Construction Activity (CAS000002). The goal of these permits is prevent the discharge of pollutants associated with construction activity from entering the storm drain system, ground and surface waters.

[Owner] has developed a Storm Water Pollution Prevention Plan (SWPPP) in order to implement the requirements of the Permits.

As a subcontractor, you are required to comply with the SWPPP and the Permits for any work that you perform on site. Any person or group who violates any condition of the Permits may be subject to substantial penalties in accordance with state and federal law. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP and the Permits. A copy of the Permits and the SWPPP are available for your review at the construction office. Please contact me if you have further questions.

Sincerely,

Name
Title

Attachment K

Notice of Non-Compliance

To: Name of Owner [City/Agency Engineer]/Regional Board Staff
Insert Date

Date:

Subject: Notice of Non-Compliance

Project Name: Insert Project Name

Project Number/Location: Project number

In accordance with the NPDES Statewide Permit for Storm Water Discharges Associated with Construction Activity, the following instance of discharge is noted:

Date, time, and location of discharge

Insert description and date of event

Nature of the operation that caused the discharge

insert description of operation

Initial assessment of any impact cause by the discharge

insert assessment

Existing BMP(s) in place prior to discharge event

list BMPs in place

Date of deployment and type of BMPs deployed after the discharge.

BMPs deployed after the discharge (with dates)

Steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

insert steps taken to prevent recurrence

Implementation and maintenance schedule for any affected BMPs

insert implementation and maintenance schedule

If further information or a modification to the above schedule is required, notify the contact person below.

Name of Contact Person

Title

Company

Telephone Number

Signature

Date

Attachment L

Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program Checklist

CONSTRUCTION PROJECT: _____

PREPARER: _____

CONTRACT NO: _____

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	100	<i>SWPPP Certification and Approval</i>	C.10	
	100.1	SWPPP Certification	C.10	
	100.2	SWPPP Approval	C.10	
	200	<i>SWPPP Amendments</i>	A.4.a, A.16	
	200.1	Amendment number and date entered into SWPPP – Amendment Log	A.4.a, A.16	
	200.2	Amendment Certification and Approval	A.4.a, A.16	
	300	<i>Introduction/Project Description</i>		
	300.1	Project Description and Location (narrative)	A.5.a.1	
	300.2	Unique Site Features (narrative)	A.5.a.1	
	300.4	<i>Project Schedule (narrative and graphical)</i>	A.5.c.5	
	400	<i>References</i>	A.14	
	500.2	<i>Vicinity Map (narrative or graphic)</i>	A.5.a.1	
	500.2	Site perimeter	A.5.a.1	
	500.2	Geographic Features	A.5.a.1	
	500.2	General topography	A.5.a.1	
	500.4	<i>Water Pollution Control Drawings (WPCDs) (graphic or narrative)</i>	A.5.a.2	
	500.4	Site perimeter	A.5.a.2	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	500.4	Existing and proposed buildings, lots, and roadways	A.5.a.2	
	500.4	Storm water collection and discharge points	A.5.a.2	
	500.4	General topography before and after construction	A.5.a.2	
	500.4	Anticipated discharge location(s)	A.5.a.2	
	500.4	Drainage patterns including the entire relevant drainage areas	A.5.a.2	
	500.4	Temporary on-site drainage(s)	A.5.a.2	
	500.3	<i>Pollutant Source and BMP Identification (narrate/ or indicate on site map)</i>	A.5.b	
		<i>Drainage</i>	A.5.b.1	
	500.4	Drainage patterns after major grading	A.5.b.1	
	500.4	Slopes after major grading	A.5.b.1	
	Attach. E	Calculations for storm water run-on	A.5.b.1	
	500.4	BMPs that divert off-site drainage from passing through site	A.5.b.1	
	500.4	<i>Storm Water Inlets</i>	A.5.b.2	
	500.4	Drainage patterns to storm water inlets or receiving water	A.5.b.2	
	500.4	BMPs that protect storm water inlets or receiving water	A.5.b.2	
		<i>Site History (narrative; if possible, indicate location(s) on the Water Pollution Control Drawings)</i>	A.5.b	
	500.3.3	Nature of fill material and data describing the soil. Description of toxic materials treated, stored, disposed, spilled or leaked on site	A.5.b.3	
	500.3.8 & 500.3.9	BMPs that minimize contact of contaminants with storm water	A.5.b.3	
		<i>Location of Areas Designated for:</i>	A.5.b.4	
	500.3.8 & 500.4	Vehicle storage & service	A.5.b.4	
	500.3.8 & 500.4	Equipment storage, cleaning, maintenance	A.5.b.4	
	500.3.9 & 500.4	Soil or waste storage	A.5.b.4	
	500.3.9 & 500.4	Construction material loading, unloading, storage and access	A.5.b.4	
	500.3.8 & 500.3.9	Areas outside of physical site (yards, borrow areas, etc.)		
		<i>BMP Locations or Descriptions for:</i>	A.5.b.5	
	500.3.9 & 500.4	Waste handling and disposal areas	A.5.b.5	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	500.3.9 & 500.4	On-site storage and disposal of construction materials and waste	A.5.b.5	
	500.3.8, 500.3.9 & 500.4	Minimum exposure of storm water to construction materials, equipment, vehicles, waste	A.5.b.5	
	500.6	Post Construction BMPs	A.5.b.6	
	500.6.1	Listing or Description of Post-construction BMPs	A.5.b.6	
	500.4	Location of post-construction BMPs	A.5.b.6	
	500.6.2	Parties responsible for long-term maintenance	A.5.b.6	
		Additional Information	A.5.c	
	500.3.1	Description of other pollutant sources and BMPs	A.5.c.1	
	500.3.2	Pre-construction control practices	A.5.c.1	
	500.3.1	Inventory of materials and activities that may pollute storm water	A.5.c.2	
	500.3.8 & 500.3.9	BMPs to reduce/eliminate potential pollutants listed in the inventory	A.5.c.2	
	300.4	Runoff coefficient (before & after)	A.5.c.3	
	300.4	Percent impervious (before & after)	A.5.c.3	
	Attach. F	Copy of the NOT	A.5.c.4	
	300.3	Construction activity schedule	A.5.c.5	
	300.5	Contact information	A.5.c.6	
	500.4.1	SOIL STABILIZATION (EROSION CONTROL)	A.6	
		<i>The SWPPP shall include:</i>	A.6.a-c	
	500.4	Areas of vegetation on site	A.6.a.1	
	500.4	Areas of soil disturbance that will be stabilized during rainy season	A.6.a.2	
	500.4	Areas of soil disturbance which will be exposed during any part of the rainy season	A.6.a.3	
	300.4	Implementation schedule for erosion control measures	A.6.a.4	
	500.3.4	BMPs for erosion control	A.6.b	
	500.3.7	BMPs to control wind erosion	A.6.c	
	500.3.5	SEDIMENT CONTROL	A.8	
	500.3.5 & 500.4	Description/Illustration of BMPs to prevent increase of sediment load in discharge	A.8	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	300.4, 500.3.5	Implementation schedule for sediment control measures	A.8	
	500.3.6	BMPs to control sediment tracking	A.8	
	500.3.8 & 500.3.9	NON-STORM WATER MANAGEMENT	A.9	
	500.3.8 & 500.3.9	Description of non-storm water discharges to receiving waters	A.9	
	500.3.8 & 500.3.9	Locations of discharges	A.9	
	500.3.8 & 500.3.9	Description of BMPs	A.9	
	300.5	Name and phone number of person responsible for non-storm water management	A.9	
	500.6	POST-CONSTRUCTION	A.10	
	500.6.1	Description of post-construction BMPs	A.10	
	500.6.2	Operation/Maintenance of BMPs after project completion (including short-term funding, long-term funding and responsible party)	A.10	
	500.5	MAINTENANCE, INSPECTIONS, AND REPAIR	A.11	
	300.5, 600.1	Name and phone number of person(s) responsible for inspections	A.11	
	600.1, Attach. H	Complete inspection checklist: date, weather, inadequate BMPs, visual observations of BMPs, corrective action, inspector's name, title, signature	A.11.a-f	
		OTHER REQUIREMENTS	A.12-16	
	500.7	Documentation of all training	A.12	
	500.8	List of Contractors/Subcontractors	A.13	

SECTION B: MONITORING AND REPORTING REQUIREMENTS				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	600.1	Description of Site Inspection Plans	B.3	
	100.3	Compliance certification (annually 7/1)	B.4	
	600.2	Discharge reporting	B.5	
	600.3	Keep records of all inspections, compliance certifications, and noncompliance reports on site for a period of at least three years	B.6	
	600.4	Sampling and Analysis Plan for Sediment	B.7	

SECTION B: MONITORING AND REPORTING REQUIREMENTS				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	600.5	Sampling and Analysis Plan for Non-Visible Pollutants	B.8	

SECTION C: STANDARD PROVISIONS FOR CONSTRUCTION ACTIVITIES				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	SWPPP Section	ITEM	GENERAL PERMIT REF.	COMMENTS
	100.1	Signed SWPPP Certification	C.9,10	

Attachment M

Annual Certification of Compliance Form

Project Name: _____

Project Number: _____

Company Name: _____

Address: _____

Construction Start Date: _____ **Completion Date:** _____

This project is in compliance with the General Permit and this SWPPP (check yes or no) **YES** **NO**

Description of Work:

description of work

Work Now in Progress:

work in progress

Work Planned for Next 12 Months:

work planned

"I certify under penalty of law that, during the past 12 months, the construction activities are in compliance with the requirements of the General Permit and this SWPPP. This Certification is based upon the site inspections required in Section B, Item 3 of the General Permit. This document was 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."

Owner (or Authorized Representative) Signature

Date

Name and Title

Telephone Number

Attachment N

Other Plans and Permits

Attachment O

Water Pollution Control Cost Breakdown

Project Name: _____

Project Number: _____

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
EC-3	Hydraulic Mulch	FT ²			
EC-4	Hydroseeding	FT ²			
EC-5	Soil Binders	FT ²			
EC-6	Straw Mulch	FT ²			
EC-7	Geotextiles & Mats	FT ²			
EC-8	Wood Mulching	FT ²			
EC-9	Earth Dikes & Drainage Swales	FT			
EC-10	Velocity Dissipation Devices	EA			
EC-11	Slope Drains	EA			
EC-12	Streambank Protection	LS			
EC-13	Polyacrylamide	LS			
SE-1	Silt Fence	FT			
SE-2	Sediment Basin	EA			
SE-3	Sediment Trap	EA			
SE-4	Check Dam	EA			
SE-5	Fiber Rolls	FT			
SE-6	Gravel Bag Berm	FT			
SE-7	Street Sweeping and Vacuuming	LS			
SE-8	Sandbag Barrier	FT			
SE-9	Straw Bale Barrier	FT			
SE-10	Storm Drain Inlet Protection	EA			
WE-1	Wind Erosion Control	LS			
TC-1	Stabilized Construction Entrance/Exit	EA			
TC-2	Stabilized Construction Roadway	EA			

Attachment O
Water Pollution Control Cost Breakdown

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
TC-3	Entrance/Outlet Tire Wash	EA			
NS-1	Water Conservation Practices	LS			
NS-2	Dewatering Operations	EA			
NS-3	Paving and Grinding Operations	LS			
NS-4	Temporary Stream Crossing	EA			
NS-5	Clear Water Diversion	EA			
NS-6	Illicit Connection/ Discharge	LS			
NS-7	Potable Water/Irrigation	LS			
NS-8	Vehicle and Equipment Cleaning	LS			
NS-9	Vehicle and Equipment Fueling	LS			
NS-10	Vehicle and Equipment Maintenance	LS			
NS-11	Pile Driving Operations	LS			
NS-12	Concrete Curing	LS			
NS-13	Material and Equipment Use Over Water	LS			
NS-14	Concrete Finishing	LS			
NS-15	Demolition Adjacent to Water	LS			
NS-16	Temporary Batch Plants	LS			
WM-1	Material Delivery and Storage	LS			
WM-2	Material Use	LS			
WM-3	Stockpile Management	LS			
WM-4	Spill Prevention and Control	LS			
WM-5	Solid Waste Management	LS			
WM-6	Hazardous Waste Management	LS			
WM-7	Contaminated Soil Management	LS			
WM-8	Concrete Waste Management	LS			
WM-9	Sanitary/Septic Waste Management	LS			
WM-10	Liquid Waste Management	LS			
			TOTAL		

Attachment P

Notice of Termination

Attachment Q

BMPs Selected for the Project

Attachment S

Pollutant Testing Guidance Table

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Asphalt Products	Hot Asphalt	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		
	Asphalt Emulsion				
	Liquid Asphalt (tack coat)				
	Cold Mix				
	Crumb Rubber	Yes – Black, solid material	Visually Observable - No Testing Required		
	Asphalt Concrete (Any Type)	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		
Cleaning Products	Acids	No	pH Acidity Anions (acetic acid, phosphoric acid, sulfuric acid, nitric acid, hydrogen chloride)	pH Meter Acidity Test Kit	EPA 150.1 (pH)
					SM 2310B (Acidity)
					EPA 300.0 (Anion)
	Bleaches	No	Residual Chlorine	Chlorine	SM 4500-CL G (Res. Chlorine)
	Detergents	Yes - Foam	Visually Observable - No Testing Required		
	TSP	No	Phosphate	Phosphate	EPA 365.3 (Phosphate)
	Solvents	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
SVOC			None	EPA 625 (SVOC)	

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Portland Concrete Cement & Masonry Products	Portland Cement (PCC)	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Masonry products	No	pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
			Alkalinity		SM 2320 (Alkalinity)
	Sealant (Methyl Methacrylate - MMA)	No	Methyl Methacrylate	None	EPA 625 (SVOC)
			Cobalt		EPA 200.8 (Metal)
			Zinc		
	Incinerator Bottom Ash Bottom Ash Steel Slag Foundry Sand Fly Ash Municipal Solid Waste	No	Aluminum Calcium Vanadium Zinc	Calcium Test	EPA 200.8 (Metal) EPA 200.7 (Calcium)
	Mortar	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Concrete Rinse Water	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Non-Pigmented Curing Compounds	No	Acidity	pH Meter Alkalinity or Acidity Test Kit	SM 2310B (Acidity)
			Alkalinity		SM 2320 (Alkalinity)
pH			EPA 150.1 (pH)		
VOC			EPA 601/602 or EPA 624 (VOC)		
SVOC			EPA 625 (SVOC)		

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory	
Landscaping and Other Products	Aluminum Sulfate	No	Aluminum	TDS Meter Sulfate	EPA 200.8 (Metal)	
			TDS		EPA 160.1 (TDS)	
			Sulfate		EPA 300.0 (Sulfate)	
	Sulfur-Elemental	No	Sulfate	Sulfate	EPA 300.0 (Sulfate)	
	Fertilizers-Inorganic ⁴	No	Nitrate	Nitrate	EPA 300.0 (Nitrate)	
			Phosphate	Phosphate	EPA 365.3 (Phosphate)	
			Organic Nitrogen	None	EPA 351.3 (TKN)	
			Potassium	None	EPA 200.8 (Metal)	
	Fertilizers-Organic	No	TOC	Nitrate	EPA 415.1 (TOC)	
			Nitrate		EPA 300.0 (Nitrate)	
			Organic Nitrogen		EPA 351.3 (TKN)	
			COD		EPA 410.4 (COD)	
	Natural Earth (Sand, Gravel, and Topsoil)	Yes - Cloudiness and turbidity	Visually Observable - No Testing Required			
	Herbicide	No	Herbicide	None	Check lab for specific herbicide or pesticide	
	Pesticide		Pesticide			
	Lime		Alkalinity	pH Meter Alkalinity or Acidity Test Kit	SM 2320 (Alkalinity)	
pH			EPA 150.1 (pH)			

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Painting Products	Paint	Yes	Visually Observable - No Testing Required		
	Paint Strippers	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
			SVOC	None	EPA 625 (SVOC)
	Resins	No	COD	None	EPA 410.4 (COD)
			SVOC		EPA 625 (SVOC)
	Sealants	No	COD	None	EPA 410.4 (COD)
	Solvents	No	COD	None	EPA 410.4 (COD)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)
	Lacquers, Varnish, Enamels, and Turpentine	No	COD	None	EPA 410.4 (COD)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)
	Thinners	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
			COD		EPA 410.4 (COD)
Portable Toilet Waste Products	Portable Toilet Waste	Yes	Visually Observable - No Testing Required		

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Contaminated Soil ⁵	Aerially Deposited Lead ³	No	Lead	None	EPA 200.8 (Metal)
	Petroleum	Yes – Rainbow Surface Sheen and Odor	Visually Observable - No Testing Required		
	Other	No	Contaminant Specific	Contaminant Specific	Contaminant Specific
Line Flushing Products	Chlorinated Water	No	Total chlorine	Chlorine	SM 4500-CL G (Res. Chlorine)
Adhesives	Adhesives	No	COD	None	EPA 410.4 (COD)
			Phenols	Phenol	EPA 420.1 (Phenol)
			SVOC	None	EPA 625 (SVOC)
Dust Palliative Products	Salts (Magnesium Chloride, Calcium Chloride, and Natural Brines)	No	Chloride	Chloride	EPA 300.0 (Chloride)
			TDS	TDS Meter	EPA 160.1 (TDS)
			Cations (Sodium, Magnesium, Calcium)	None	EPA 200.7 (Cations)
Vehicle	Antifreeze and Other Vehicle Fluids	Yes - Colored Liquid	Visually Observable - No Testing Required		
	Batteries	No	Sulfuric Acid	None	EPA 300.0 (Sulfate)
			Lead	None	EPA 200.8 (Metal)
			pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
Fuels, Oils, Lubricants	Yes - Rainbow Surface Sheen and Odor	Visually Observable - No Testing Required			

Attachment S
Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Soil Amendment/Stabilization Products	Polymer/Copolymer ^{6, 7}	No	Organic Nitrogen	None	EPA 351.3 (TKN)
			BOD	None	EPA 405.1 (BOD)
			COD	None	EPA 410.4 (COD)
			DOC	None	EPA 415.1 (DOC)
			Nitrate	Nitrate	EPA 300.0 (Nitrate)
			Sulfate	Sulfate	EPA 300.0 (Sulfate)
			Nickel	None	EPA 200.8 (Metal)
	Straw/Mulch	Yes - Solids	Visually Observable - No Testing Required		
	Lignin Sulfonate	No	Alkalinity	Alkalinity	SM 2320 (Alkalinity)
			TDS	TDS Meter	EPA 160.1 (TDS)
	Psyllium	No	COD	None	EPA 410.4 (COD)
			TOC		EPA 415.1 (TOC)
	Guar/Plant Gums	No	COD	None	EPA 410.4 (COD)
			TOC		EPA 415.1 (TOC)
			Nickel		EPA 200.8 (Metal)
	Gypsum	No	pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
			Calcium	Calcium	EPA 200.7 (Calcium)
			Sulfate	Sulfate	EPA 300.0 (Sulfate)
			Aluminum	None	EPA 200.8 (Metal)
			Barium		
Manganese					
Vanadium					

Attachment S Pollutant Testing Guidance Table ¹

Category	Construction Site Material	Visually Observable?	Pollutant Indicators ²	Suggested Analyses Field ³	Laboratory
Treated Wood Products	Ammoniacal-Copper-Zinc-Arsenate (ACZA)	No	Arsenic	Total Chromium	EPA 200.8 (Metal)
	Copper-Chromium-Arsenic (CCA)		Total Chromium		
	Ammoniacal-Copper-Arsenate (ACA)		Copper		
	Copper Naphthenate		Zinc		
	Creosote	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		

Notes:

1. 1 If specific pollutant is known, analyze only for that specific pollutant. See MSDS to verify.
2. For each construction material, test for one of the pollutant indicators. Bolded pollutant indicates lowest analysis cost or best indicator. However, the composition of the specific construction material, if known, is the first criterion for selecting which analysis to use.
3. See www.hach.com, www.lamotte.com, www.yei.com and www.chemetrics.com for some of the test kits
4. If the type of inorganic fertilizer is unknown, analyze for all pollutant indicators listed.
5. Only if special handling requirements are required in the contract documents for aerially deposited lead (ADL)
6. If used with a dye or fiber matrix, it is considered visually observable and no testing is required.
7. Based upon research conducted by the State of California Department of Transportation (Caltrans), the following copolymers/polymers do not discharge pollutants and water quality sampling and analysis is **not** required: Super Tak™, M-Binder™, Fish Stik™, Pro40dc™, Fisch-Bond™, and Soil Master WR™.

