

Guidance Manual for Construction Storm Water Pollution Prevention



- PART 1 Construction Storm Water Pollution Prevention Plan (SWPPP)
- PART 2 Water Pollution Control for Projects that Disturb Less Than One Acre
- PART 3 Construction Project Storm Water Compliance Review Program (CSWCRP)



Acknowledgments

This manual was prepared by CASC Engineering and Consulting, a certified Small Business Enterprise (SBE) subcontractor to URS Corporation on LAWA Contract DA-4810.

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Guidance Manual for Construction Storm Water Pollution Prevention Part 1: Storm Water Pollution Prevention Plan (SWPPP)

PART 1:

Storm Water Pollution Prevention Plan (SWPPP)

For use with: CASQA Storm Water Pollution Prevention Plan Template (For Traditional Sites)



Introduction

Los Angeles World Airports (LAWA) has selected the California Storm Water Quality Association (CASQA) Construction Storm Water Pollution Prevention Plan (SWPPP) Template for Traditional Sites to be the preferred template for all SWPPPs prepared for LAWA projects. It is the responsibility of the Qualified SWPPP Developer (QSD) to download the most current version of the CASQA Template for preparation of each Los Angeles World Airports Project SWPPP, in accordance with CASQA policy and copyright requirements. The CASQA Template can be downloaded from their site located at https://www.casqa.org/. Any SWPPP provided in different format will be returned and must be revised to follow the CASQA template and the direction of the Guidance Manual.

This document is intended for use in conjunction with the CASQA Template, and will serve as an additional resource providing information preferential to Los Angeles World Airports regarding the preparation and implementation of all Los Angeles World Airports Project SWPPPs. In many instances throughout this document, it is advised to use language from the CASQA Template. If for any reason the Project-specific conditions necessitate deviation from advised CASQA Template language, each change and reason for the change should be documented in the SWPPP Checklist in Attachment 1.

The timeline for SWPPP review is shown graphically in Figure 1. Upon issuance of the Waste Discharger Identification (WDID) number from the SWRCB to LAWA, the project team will be given the notification that Los Angeles World Airports has lifted the storm water permitting restriction from the authorization to proceed.





Figure 1. LAWA Timeline for SWPPP Review Process.



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Attachments

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Attachment 2 - Los Angeles World Airports SWPPP Spill Response Plan Template
Attachment 3 – Contractors and Subcontractor Form (EXAMPLE)



Title Page & Project General Information

Title Page

Update each field on Title Page per CASQA Template. Address the following fields, specific to Los Angeles World Airports construction sites:

- Project LRP: COO or Executive Director/Los Angeles World Airports
- LRP Address and Telephone Number: 1 World Way West 3rd Floor. Los Angeles, CA 90045; (424) 646-6500 (Check with LAWA Project Manager or designee to verify current LRP information)
- Authorized Signatory: Roger Johnson for ADG projects; Robert Freeman for all other projects.
- Estimated dates for start and end of construction: Obtain from Project Manager at Los Angeles World Airports. This is a general project begin/end date. No details necessary. The end date shall include all time necessary to achieve final site stabilization/revegetation.
- SWPPP preparation date: Date SWPPP was prepared. SWPPP preparation date must be prior to construction start date.

QSD Certification Page

See CASQA Template for QSD Certification Statement. Upon LAWA approval of SWPPP the LRP will wet sign page for QSD to insert into the SWPPP that will be kept at the project site.

LRP Certification Page

See CASQA Template for LRP Certification Statement.

Amendment Log

See CASQA Template for Amendment Log table.



Section 1 SWPPP Requirements

1.1 Introduction

Include statement from CASQA Template.

1.2 Permit Registration Documents (PRDs)

Include statement from CASQA Template.

1.3 SWPPP Availability and Implementation

Include statement from CASQA Template.

1.4 SWPPP Amendments

Include statement from CASQA Template. The required standards for amending the SWPPP include:

- Submit sections of the SWPPP that are changed using redline/strikeout format for changing or updating the text, per LAWA requirement.
- When a Change-of-Information (COI) is required (i.e., adding or removing acreage, revising the dates, new ownership, etc.), the information (including the amendment language) needs to be submitted to LAWA PM for uploading into the SMARTS database and obtaining the LRP certification for submission prior to Board approval. Other amendments that do not trigger a COI, do not require LRP approval.
- Update the amendment log (Appendix D). Place the appropriate notice of approval(s) into Appendix D along with the amendment.
- Each amendment shall be a single line item on the Amendment Log Form in Appendix D. Following the amendment log shall be the information supporting the sections listed in the "brief description of Amendment, include section and page number" column of the log.

1.5 Retention of Records

Include statement from CASQA Template. At the completion of the project the SWPPP documents shall be submitted to the LAWA PM for retention.

1.6 Required Non-Compliance Reporting

Include statement from CASQA Template that applies for All Projects regardless of Risk Level.

- Risk Level 1 include statement from CASQA Template for All Projects; no other information required.
- Risk Level 2 include statement from CASQA Template for All Projects, and include the additional Risk Level 2 information from CASQA Template.
- Risk Level 3 include statement from CASQA Template for All Projects, and include



the additional Risk Level 3 information from CASQA Template.

1.7 Annual Report

Include statement from CASQA Template. The Contractor will submit the Annual Report information in SMARTS for review and certification. The following information, at a minimum, shall be provided to the LRP's Data Submitter prior to August 15 or prior to filing the NOT, for the annual reporting purposes:

- A digital copy of all required inspection reports including weekly and quarterly inspections, as well as storm inspections (pre-storm, during-storm, post-storm as applicable).
- If any inspections were performed by a person other than the designated QSP, provide a copy of the training log identifying the inspector as properly trained by the QSP.
- If applicable, explanations for any of the following conditions:
 - Any Permit-required inspections that were not performed
 - BMP maintenance/repair or design changes that were not initiated within 72 hours of being identified/reported
 - Non-visible pollutant or non-storm water sampling occurrences (include all laboratory data reports)
- Report of any authorized or unauthorized non-storm water discharge; include date and time of observation.
- By August 1 each year and at project completion, submit to the LAWA PM, a completed hand marked version of the SMARTS Annual Report. Also include digital copies of the summary and evaluation of all sampling and analysis results, original laboratory reports, chain of custody forms, a summary of all corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.

1.8 Changes to Permit Coverage

Include statement from CASQA Template.

1.9 Notice of Termination

Include narrative from CASQA Template.



Section 2 Project Information

2.1 Project and Site Description

Include a project specific narrative by modifying the CASQA Template for each section.

2.1.1 Site Description

Items to include (but are not limited to):

- Name of Project
- Size of Project (Include total of disturbed soil area and the total area within the project limits)
- Address or description of location including nearby major roads
- Description of nearby water bodies
- Project's Latitude/Longitude

2.1.2 Existing Conditions

Items to include (but are not limited to):

- Description of site existing land use
- Description of site proposed land use
- Percentage of impervious area for existing site
- Description of potential or known soil contamination sources

2.1.3 Existing Drainage

Items to include (but are not limited to):

- Description of site topography
- Description of site elevation range
- Description of surface drainage courses and conveyance systems; describe the entire drainage pathway from the appropriate site to the receiving waters.
 - Van Nuys Airport (VNY) with the exception of Drainage Basin #2, each drainage basin enters the City of Los Angeles MS4 system, flows to the Los Angeles River, and discharges to the Los Angeles Harbor.
 - <u>Drainage Basin #1</u> includes the northeast portion of runway 16L-34R and leaseholds in the northeast portion of VNY. Basin #1 primarily drains to the east towards Woodley Avenue. Storm water runoff from the airport merges with upstream flows on Woodley Avenue prior to discharging into one of two catch basins near Woodley Avenue or into the street curb and gutter. The flow continues south on Woodley Avenue and intersects discharge point #1 at Waterman Drive



- <u>Drainage Basin #2</u> includes storm water runoff from the northwest portion of VNY. Due to the topography of the basin, the runoff flows to Bull Creek in a variety of patterns. Bull Creek leaves VNY after receiving flows from several outfalls. Discharge point #2 is located further downstream at the intersection of Bull Creek and Stagg Street. Runoff from the adjacent Southern Pacific Railroad right-of-way can also drain onto airport property and discharge into Bull Creek. Bull Creek subsequently flows into the Los Angeles River.
- <u>Drainage Basin #3</u> includes the airport property located between Roscoe Boulevard and Napa Street. Storm water runoff from this area flows south to several catch basins along Roscoe Boulevard.
- <u>Drainage Basin #4</u> storm water runoff from the central western portion of VNY sheet flows west onto Hayvenhurst Place and drains south into discharge point #4. There are two parallel swales that run north/south and drain south towards Hayvenhurst Avenue. Discharge point #4 is located at Hayvenhurst Avenue and Sherman Way.
- Drainage Basin #5 storm water runoff in drainage basin #5 is comprised of drainage from the southwestern portion of VNY. This basin includes surface runoff from the western portion of the golf course, a swale which runs parallel to Runway 16R-34L and drains into a subsurface pipe at the south end of the runway, and discharge point #4 (which includes drainage basin #4). The runoff in Basin #5 flows from southern and northern areas of the basin onto Vanowen Street and discharges into discharge point #5.
- Drainage Basin #6 receives storm water runoff from the eastern portion of the golf course, the southeastern portion of Runway 16R-34L, leaseholds and tie down areas, and the tunnel area along Sherman Way. The Sherman Way tunnel is a vehicle passage area under the airport runway, which is oriented east west along Sherman Way below VNY.

The runoff from Runway 16R-34L flows to a culvert parallel to the runway and drains south to the Sherman Way tunnel. The runoff collected in the Sherman Way tunnel is pumped up onto the airport property and into a culvert which flows south towards discharge point #6. Runoff from the golf course flows north on Sophia Avenue and discharges from the airport property at Vanowen Street.

- <u>Drainage Basin #7</u> surface water runoff from the central eastern portion of VNY drains both east and west to several catch basins located near Woodley Avenue.
- Ontario Airport (ONT) each drainage area enters the Prado Flood Control Basin which discharges into the Santa Ana River, and finally discharging to the Pacific Ocean.
 - <u>West Cucamonga Channel Drainage Area</u> The West Cucamonga Channel receives runoff from 134 acres of the western portion of



ONT. This area includes a paved parking lot, unpaved dirt area, runways and taxiways. The surface storm water flow pattern from the parking lot drains from north to south onto Mission Boulevard (City of Ontario's MS4), and continues east to the channel.

The airfield surface area drainage flows south and west into catch basins along runways 8L and 8R; this runoff discharges into West Cucamonga Channel at the intersection of Mission Boulevard.

The West Cucamonga Channel is an MS4 covered water body by the County of San Bernardino and subject to the discharge limitations and requirements of that Permit. The West Cucamonga Channel drains to the Ely Settling Basins which flow into the Cucamonga Channel. The Cucamonga Channel is an MS4 covered water body by the County of San Bernardino and flows to the Prado Flood Control Basin. The Prado Flood Control Basin discharges to the Santa Ana River which discharges into the Pacific Ocean.

<u>Cucamonga Channel Drainage Area</u> – The Cucamonga Channel extends along a north/south transect across ONT, between Airport Drive and Mission Boulevard.

Landside drainage into the channel includes the parking lot areas north of terminals 2 and 4 as well as several arteries that drain northerly into a header from the airfield side of the terminal areas.

Air-side drainage includes a set of 4 separators that provide surge retention capacity prior to discharge into another header that leads into the Channel. At the intersection of the Cucamonga Channel and runway 8L-26R the open channel flows beneath the runways through a dual box culvert and continues via a concrete culvert off the airport property. This channel drains the majority of the industrial areas of ONT. The drainage area discharging into Cucamonga Channel covers 928 acres of industrial and commercial tenant facilities, runways and taxiways at ONT. Storm water runoff flows into dozens of catch basins near the former Lockheed Aircraft Services leasehold, Terminal 1, Runway 8L-26R, and the LAWA maintenance yard.

Runoff from two open ditches, located directly east of the LAWA maintenance yard near the former General Electric (GE) Engine Test Cell facility also discharges into Cucamonga Channel. One ditch collects runoff from the swale behind the maintenance buildings and runs parallel to Mission Boulevard along the south side of the former GE Test Cell facility. The second ditch receives drainage from a series of catch basins on the southern portion of the airport. The Cucamonga Channel is an MS4 covered water body by the County of San Bernardino and flows to the Prado Flood Control Basin. The Prado Flood Control Basin discharges to the Santa Ana River which discharges into the Pacific Ocean.

<u>Deer Creek Drainage Area</u> – This area receives runoff from the generally underdeveloped eastern end of the airfield. The flows from



the airport directly discharge to the Creek and flows to the Cucamonga Channel. The Cucamonga Channel is an MS4 covered water body by the County of San Bernardino and flows to the Prado Flood Control Basin.

• Los Angeles Airport (LAX).

- Argo Drain Sub-basin the Argo storm drain carries runoff from 1,082 acres of the northern portion of LAX as well as a smaller portion of the south central portion of the airport. Storm water runoff initially drains into a grassy drainage swale via catch basins, flows west to the Argo storm drain (or sometimes referred to as the Argo Ditch) and continues several miles off-shore through a 10-foot diameter pipe into the Pacific Ocean. The offsite storm runoff from north of the airport enters the Argo Ditch through a large dual box culvert and continues in the subsurface under Pershing Drive and off the airport. Storm water collected within the Argo Ditch consists primarily of nonindustrial runoff from runways and taxiways, and the northern greenbelt and golf course north of Westchester Parkway. Storm water runoff from a 95-acre portion of runways 25R-7L and 25L-7R at the south central portion of the airport near Sepulveda Boulevard is pumped north, through a subsurface storm drain passing through the Sepulveda tunnel, and eventually into the Argo Ditch.
- Imperial Drain Sub-Basin storm water runoff discharged to the Imperial Storm Drain is collected by catch basins covering the central and southwest portion of LAX. This system drains runoff from a majority of the identified industrial areas at LAX. Two main interceptor storm sewers form the main arteries of this drainage basin: one which runs west along World Way West and then south along Pershing Drive, and the second which drains the Central Terminal area and flows southwest under the southern runways. These interceptors merge near the southwestern property boundary. These two interceptors convey flow from a total drainage area encompassing 1,299 acres. During low flow (dry weather) conditions and the first surge (approximately 1 million gallons) from a storm event, drainage from the two interceptors flows directly to a concrete-lined 2 milliongallon capacity detention basin. The runoff that accumulates within the detention basin is pumped at a rate of approximately 150 gallons per minute (gpm) through a 36' x 10' x 6' clarifier to the nearby Hyperion Wastewater Treatment Plant (operated by the City of Los Angeles). Under high flow (wet weather) conditions when influent to the basin exceeds the 150 gpm pumping capacity to Hyperion, the storm water detention basin fills, triggers closure of sluice gates, and diverts the excess flow directly to the Santa Monica Bay via the Imperial Storm Drain.
- <u>Dominguez Channel Sub-basin (South)</u> drainage on the southeast side of LAX is collected in surface swales and catch basins and is discharged to a main concrete-lined surface culvert. The culvert runs

east along Century Boulevard, diverts southbound at Aviation Boulevard and eventually discharges to the Dominguez Channel. This part of the sub-basin comprises approximately 964 acres and drains the southeastern portion of runways 25R-7L and 25L-7R, the freight handling facilities, as well as several commercial airline maintenance facilities. The discharge point for this sub-basin's industrial use area is at Aviation Boulevard and 111th Street.

Storm water runoff from three exposed drainage areas described above (Argo Drain, Imperial Drain, and Dominguez Channel South) are collected in catch basins located throughout the airport. The runoff flows through a non-municipal underground storm drain system owned and operated by LAWA and discharges into one of three main storm water conveyances: Argo Ditch, Imperial Channel Outfall, or Dominguez Channel.

- Dominguez Channel Sub-basin (North) the runoff from the eastern side of LAX, north of Century Boulevard and east of Sepulveda Boulevard, is conveyed through a system of storm drain pipes south and east to a 10 foot by 11 foot box drain at the corner of Century Boulevard and Aviation Boulevard. The box drain continues east on Century Boulevard to La Cienega Boulevard where it turns south and collects drainage from other off airport properties. This part of the sub-basin comprises approximately 178 acres and drains the long-term parking lot C, a youth park, and former and current rental car tenant locations. The drain eventually connects to Dominguez Channel at Inglewood Avenue. This sub-basin is governed by the LA County MS4 Permit as run-off is conveyed by City of Los Angeles Department of Sanitation storm drain lines.
- Culver Drain Sub-basin drainage on the northwest corner of LAX, east of the Vista Del Mar Basin, on property adjacent to and on either side of Pershing Boulevard/Drive is collected by a storm drain on Pershing Drive. This drain continues north to Culver Boulevard and then west to an outfall in the Santa Monica Bay at the western end of Culver Boulevard. On LAX, this sub-basin comprises approximately 48 acres and drains mainly unoccupied land. The discharge point from LAX is the Pershing Drive Storm Drain on the north end of LAX at Pershing Drive.
- <u>Vista Del Mar Sub-basin</u> drainage on the western dune slope of LAX, adjacent to Dockweiler State Beach, is conveyed by local drains to outfalls leading into the Santa Monica Bay. This sub-basin includes LAX property west of the dune peaks and comprises approximately 176 acres. This sub-basin drains, with the exception of Federal Aviation Administration navigational aids, an unoccupied former residential area on and north of the El Segundo Blue Butterfly Preserve.





Figure 2. LAX Drainage Basins.





Figure 3. VNY Drainage Basins.





Figure 4. ONT Drainage Basins.



2.1.4 Geology and Groundwater

Items to include (but are not limited to):

- Description of underlying soil, type, thicknesses and geologic conditions
- Description of ground water depth

2.1.5 Project Description

Items to include (but are not limited to):

- Description of construction activities
- Description of limits of grading (with locations delineated on site map)
- Description of stockpiling locations (with locations delineated on site map)
- Descriptions of construction offices, staging/laydown areas (with locations delineated on site map)
- Description of construction phasing
- Percentage of Impervious area of completed project

2.1.6 Developed Condition

Items to include (but are not limited to):

- Description of post-construction surface drainage
- Description of post-construction conveyance systems
- Description of post-construction discharge locations
- Owner of Municipal Separate Storm Sewer System (MS4) discharged to (if applicable)

2.2 Permits and Governing Documents

Include list from CASQA Template and modify accordingly, for example:

- Regional Water Board requirements
- Basin Plan requirements
- Contract Documents
- Air Quality Regulations and Permits
- Federal Endangered Species Act
- National Historic Preservation Act/Requirements of the State Historic Preservation Office
- State of California Endangered Species Act
- Clean Water Act Section 401 Water Quality Certifications and 404 Permits
- CA Department of Fish and Wildlife 1600 Streambed Alteration Agreement



2.3 Storm Water Run-on from Offsite Areas

Include appropriate narrative from CASQA Template, depending on whether or not offsite run-on is anticipated. It is preferable to prevent run-on to the active construction areas prior to a storm event by diverting the source. Methods include the use of dikes (or berms) and swales (see BMP EC-9 -Earth Dike and Drainage Swales).

2.4 Findings of Risk Determination

Show all calculations in Appendix A – Calculations.

- Complete and include Part A per CASQA Template for all SWPPPs. Part B is an optional summary of risk level assessment.
- Include additional Risk Level narrative from CASQA Template for all SWPPPs. •
- Show all calculations for Risk Assessment and include them in Appendix C (PRDs). •
- Calculations for R factor must be done using the EPA's online calculator located at their website:

http://water.epa.gov/polwaste/npdes/stormwater/Welcome-to-the-Rainfall-Erosivity-Factor-Calculator.cfm. No custom or manual calculations are to be used.

Calculations for K factor should be from SWRCB/RWQBs RUSLE K values map found on their website: http://www.waterboards.ca.gov/water issues/programs/stormwater/constpermits.shtml.

- Calculations for LS factor must be site-specific based on combination of average watershed slope (%) and sheet flow length (ft) as derived from "LS Factors for Construction Sites - Table from Renard et. al., 1997", and found in the CGP – Appendix 1. Do not rely on the geographical topography maps provided by SWRCB as they are too general in coverage.
 - If the project has multiple locations use area weighted calculations.

For example:

Area 1 is a 3 acre site with LS factor of 0.13; Area 2 is a 2 acre site with LS factor of 0.25: and Area 3 is a 5 acre site with LS factor of 0.06; then LS total = [(3ac*0.13) + (2ac*0.25) + (5ac*0.06)] / [3ac+ 2ac+ 5ac] = 0.119 Result: Weighted LS Factor = 0.119

2.5 Construction Schedule

Include narrative from CASQA Template. There may be variability or uncertainty regarding the initial schedule, but this section can be modified later if necessary. Address the four (4) main phases as required by the Construction General Permit:

- Demolition' Grading, and Land Development Phase (Date Start) •
- Streets and Utilities Phase •
- Vertical Construction Phase
- Final Landscaping and Site Stabilization Phase (Date Complete when the project



qualifies for NOT)

For example:

- Demolition 1/1/16 2/15/16
- Grading 1/15/16 4-1/16
- Utilities 4/1/16 8/31/16
- Vertical 5/1/16 5/1/17
- Stabilization 5/1/17 8/1/17

2.6 Potential Construction Activity and Material Pollutant Sources

Complete Construction Activities and Pollutant Table in Appendix G of the SWPPP and include in this section.

2.7 Identification of Non-Storm Water Discharges

Include narrative from CASQA Template and identify/describe known or potential non-stormwater discharges, as appropriate.

2.8 Required Site Map Information

Include narrative from CASQA Template. Populate CASQA Table 2.6, accounting for each required Site Map element. The Site Map(s) shall also reflect each applicable phase of development including:

- Grading and Land Development Phase
- Streets and Utilities Phase
- Vertical Construction Phase
- Final Landscaping and Site Stabilization Phase



Section 3 Best Management Practices

All Best Management Practices (BMPs) described in this section must be shown in Table 3.1- BMP Implementation Schedule, have the associated Fact Sheets included in Appendix H – BMP Fact Sheets, and be properly identified on the drawings included in Appendix B – Site Maps.

3.1 Schedule for BMP Implementation

Populate Table 3.1 from CASQA Template. Types of BMPs to provide implementation schedules for include:

- Temporary soil stabilization BMPs
- Temporary sediment control BMPs
- Wind erosion control BMPs
- Tracking control BMPs
- Non-Storm Water BMPs
- Waste management and material pollution control BMPs

The BMP Implementation Schedule shall also reflect each applicable phase of development including:

- Grading and Land Development Phase
- Streets and Utilities Phase
- Vertical Construction Phase
- Final Landscaping and Site Stabilization Phase

3.2 Erosion and Sediment Control

Use erosion and sediment control worksheets from CASQA Template to determine applicable BMPs based on project materials and activities. The contractor shall post a publically visible sign with the telephone number and contact person regarding dust complaints. Conflict resolution (i.e., resolving which section has priority in instances where there is conflicting BMP implementation guidance) shall be such that the priority is, in order:

- 1. Section 3 descriptions, over
- 2. Text description in the plans, over
- 3. CASQA BMP Factsheets.

3.2.1 Erosion Controls

- Populate Table 3.2 Temporary Erosion Control BMPs from CASQA Template.
- Use CASQA language (from BMP Factsheets) to provide description of site-specific implementation for each BMP being used.
- Wind Erosion (WE-1) Per LAWA, the Contractor shall use reclaimed water for dust control purposes.



• The following BMPs shall not be utilized on a project adjacent to or on the airfield: Straw Mulch (EC-6) and Wood Mulching (EC-8).

3.2.2 Sediment Controls

- Populate Table 3.3 Temporary Sediment Control BMPs from CASQA Template.
- Use CASQA language to provide description of site-specific implementation for each BMP being used.
- For Risk Levels 2 and 3, projects shall provide linear sediment control along toe of slope, face of slope, and at the grade breaks of exposed slopes.

If chosen as a BMP, the following language shall be included:

- Street Sweeping (SE-7) the Contractor shall keep available on-site enough selfloading operational vacuum motor sweepers with spray nozzles to maintain dust control (use reclaimed water) and cleaning of pavements affected by Contractor operations.
- Straw Bale Barrier (SE-9) this BMP shall not be utilized on a project within or adjacent to the airfield.

For LAWA Project SWPPPs, the preferred selection order of BMPs (most preferred to least preferred) for linear barrier sediment control is shown below:

Linear Barrier/Sediment Control BMPs

If chosen as a BMP, the following language shall be included:

- Fiber Rolls (SE-5) Only natural wrapped fiber rolls (e.g., burlap, cotton, etc.) shall be installed on all LAWA property projects. Plastic monofilament wrapped rolls shall not be used.
- 2. Gravel Bags (SE-6) Use Caltrans specifications for geosynthetic (nonwoven) gravel-filled bags; gravel must be from 3/8 to 3/4 inch in diameter and must be clean and free of clay balls, organic matter, and other deleterious materials.
- 3. Silt Fence (SE-1) Shall not be installed anywhere on a project without specific approval from LAWA and shall not be used within the Air Operations Area (AOA).

3.3 Non-Storm Water Controls and Waste and Materials Management

Use Non-Storm Water, Construction Materials, & Waste Management worksheet to determine applicable BMPs based on Project materials and activities.

3.3.1 Non-Storm Water Controls

- Populate Table 3.4 Temporary Non-Storm Water BMPs from CASQA Template.
- Use CASQA language to provide description of site-specific implementation for each BMP being used.

Handling of Contained Storm Water. If non-contaminated storm water has accumulated on-site and needs to be removed for construction to continue, the Contractor should consider:

 Dust Control – use the accumulated storm water for dust control within the construction site. The Contractor shall follow the procedures identified in the CASQA BMP WE-1 –



Wind Erosion Control.

 Discharge – in cases where the accumulated storm water cannot be used for dust control, the stored water will need to be treated prior to discharge to the MS4. The Contractor must comply with all the CGP requirements, provisions, limitations, and prohibitions as described in the SWPPP. There may be additional requirements and/or permits from the Regional Water Quality Control Board (RWQCB) and/or the owner of the MS4. There are a variety of methods that the Contractor can use to treat the water prior to discharge; see the guidance in CASQA BMP NS-2 – Dewatering Operations.

Paving and Grinding. In order to prevent the discharge of materials into the stormwater prior to a forecasted precipitation event:

- Paving follow manufacturer's recommendations to allow for sufficient curing of the material, prior to the onset of precipitation.
- Grinding allow sufficient time for clean-up prior to the onset of precipitation.

3.3.2 Materials and Waste Management

- Populate Table 3.5 Temporary Materials Management BMPs from CASQA Template.
- Stockpiles (WM-5) Stockpile locations require pre-approval by LAWA. They shall be located such that access by construction vehicles minimizes disruption to adjacent public streets consistent with all impact mitigations outlined in the FAA Haul Route Plan in the Construction Safety and Phasing Plan.
- Concrete Waste Management (WM-8)
- Protect stockpiles of rock and earth materials that are not actively being used with a dust control product such as: water spray (reclaimed water shall be used for dust control), proprietary non-toxic crusting agents, anchored geotextile fabric or tarps, erosion control fabric, seeding, or other methods approved by LAWA. Note: bituminous prime coat products for dust control are not acceptable.
- Provide description of site-specific implementation and locations for each BMP being used.
- Provide a Spill Prevention and Emergency Response Plan in accordance with Permit requirements (see Attachment 2 SWPPP Spill Response Plan).

3.4 Post Construction Storm Water Management Measures

Include narrative from CASQA Template. Detail the components used to satisfy agency SUSMP and/or LID requirements. Final design of the post-construction measures must be described including stabilization, MS4 compliance (e.g., infiltration/treatment BMPs), and the relevant MS4 agency acceptance must be included for the NOT.



Section 4 BMP Inspection, Maintenance, and Rain Event Action Plans

4.1 BMP Inspection and Maintenance

Include statement from CASQA Template. Provide blank inspection forms in Appendix I.

4.2 Rain Event Action Plans (REAP) [RL 2 and 3 ONLY]

If the project is a Risk Lever 1 (RL1) Project then include the following statement: "Rain Event Action Plans are not applicable to a Risk Level 1 Project." Otherwise, include the narrative from CASQA Template with respect to RL2 and RL3 Projects. At a minimum, the REAP must include the following site and phase-specific information:

- Site Address
- Calculated Risk Level
- Site Storm Water Manager info (Name, Title, Company, 24-hr Phone Number) [QSP/Superintendent]
- Erosion and Sediment control provider info (i.e. Name, Title, Company, 24-hr Phone Number)
- Storm water sampling agent info (typically the QSP/Superintendent)

As the QSD, this is where the identification of each construction phase is important. A REAP template will need to be provided with the SWPPP and will need to be able to address each phase of construction of the Project. Information such as the following must be provided:

- Activities associated with each construction phase
- Trades active on the construction site during each phase
- Trade contractor info
- Recommended actions for each project phase



Section 5 Training

Include narrative from CASQA Template. Also, provide training logs and certifications in Appendix K.



Section 6 Responsible Parties and Operators

6.1 Responsible Parties

Populate list of Approved Signatories and include encompassing narrative from CASQA Template. The Approved Signatory information is available from the LAWA Project Manager or designee.

The bullet under QSP responsibilities that addresses authority to mobilize crews and resources shall change the wording from "authority by the LRP to mobilize crews" to "authority by the Contractor to mobilize crews".

Change the wording of the notification requirements bullet to include the LAWA Project Manager or designee and Contractor Project Manager (in addition to the LRP or Authorized Signatory).

6.2 Contractor List

Include fields from CASQA Template and populate accordingly. The supplied text can be copied to create additional entries as appropriate. This should be the Prime Contractor in charge of the execution of the Project. Include a reference to Appendix M for the subcontractor contact information.



Section 7 Construction Site Monitoring Program (CSMP)

The CSMP includes monitoring procedures and instructions, location maps, forms, checklists, and descriptions of the Project site's drainage patterns and discharge locations. The CSMP should be developed to meet the requirements of all Projects under the Construction General Permit while also addressing elements specific to the Project's risk level.

Table 1 below aids in the development of the CSMP by presenting each of Sections 7's subsections' applicability to each individual risk level (Note: Table 1 is a reference table and is not to be included into the SWPPP). While most subsections apply to all Los Angeles World Airports Projects, several require additional content specific to Risk Level 2 and Risk Level 3 Projects. Utilize Table 1 as well as recommended language from the CASQA Template in order to develop the CSMP. The CSMP shall include the name of the designated laboratory used for sample collection and analyses (see CSMP Section 7.7.2.3).

Within five (5) days of the inspection, the QSP shall submit copies of the inspection report to the LAWA Project Manager (who should be named) or designee and initiate corrective actions within 72 hours of identification per permit requirements.

			Additional	
Section # CASQA Template Section		All Projects	Risk Level 2 (RL 2)	Risk Level 3 (RL 3)
7.1	Purpose	Х		
7.2	Applicability of Permit Requirements	X		
7.3	Weather and Rain Event Tracking	Х	Х	Х
7.3.1	Weather Tracking	Х		
7.3.2	Rain Gauge	Х		
7.4	Monitoring Locations	Х		
7.5	Safety and Monitoring Exemptions	Х		
7.6	6 Visual Monitoring			
7.6.1	Routine Observations and Inspections	Х		
7.6.2	7.6.2 Rain-Event Triggered Observations and Inspections			
7.6.2.1	2.1 Visual Observations Prior to a Forecasted X Qualifying Rain Event			
7.6.2.2	7.6.2.2 BMP Inspections During an Extended Storm X			
7.6.2.3	2.3 Visual Observation Following a Qualifying X			
7.6.3	Visual Monitoring Procedures X			
7.6.4	Visual Monitoring Follow-up and Reporting	Х		

Table 1: Section 7 Applicability to Project Risk Level



			Additional	
Section #	CASQA Template Section	All Projects	Risk Level 2 (RL 2)	Risk Level 3 (RL 3)
7.6.5	Visual Monitoring Locations	Х		
7.7	Water Quality Sampling and Analysis	Х		
7.7.1	Sampling and Analysis Plan for Non-Visible Pollutants in Storm Water Runoff Discharges ¹⁰	Х	X	Х
7.7.1.1	Sampling Schedule	Х		
7.7.1.2	Sampling Locations	Х	X	Х
7.7.1.3	Monitoring Preparation	X ²		
7.7.1.4	Analytical Constituents	Х		
7.7.1.5	Sample Collection	Х		
7.7.1.6	Sample Analysis	Х		
7.7.1.7	Data Evaluation and Reporting	Х		
7.7.2	Sampling and Analysis Plan for pH and Turbidity in Storm Water Runoff Discharges		RL 2 an	d 3 ONLY ³
7.7.2.1	Sampling Schedule		RL 2 and 3 ONLY	
7.7.2.2	Sampling Locations	RL 2 and 3 ONLY		
7.7.2.3	Monitoring Preparation		RL 2 and 3 ONLY ²	
7.7.2.4	Field Parameters		RL 2 and 3 ONLY	
7.7.2.5	Sample Collection		RL 2 and 3 ONLY	
7.7.2.6	Field Measurements		RL 2 ar	nd 3 ONLY
7.7.2.7	Data Evaluation and Reporting		RL 2 ar	nd 3 ONLY
7.7.3	Additional Monitoring Following a			RL 3 ONLY ⁴
7.7.3.1	Sampling and Analysis Plan for Suspended Sediment Concentration in Storm Water Runoff			RL 3 ONLY
7.7.3.1.1	Sample Schedule and Locations			RL 3 ONLY
7.7.3.1.2	Monitoring Preparation			RL 3 ONLY ²
7.7.3.1.3	Sample Collection and Analysis			RL 3 ONLY
7.7.3.1.4	Data Evaluation			RL 3 ONLY
7.7.3.2	7.3.2 Sampling and Analysis for pH, Turbidity, and SSC in Receiving Water			RL 3 ONLY ⁵
7.7.3.2.1	Sample Schedule and Locations RL		RL 3 ONLY ⁶	
7.7.3.2.2			RL 3 ONLY ²	
7.7.3.2.3	Sample Collection and Analysis			RL 3 ONLY
7.7.3.2.4				RL 3 ONLY

Table 1: Section 7 Applicability to Project Risk Level



			Additional		
Section #	CASQA Template Section	All Projects	Risk Level 2 (RL 2)	Risk Level 3 (RL 3)	
7.7.4	Sampling and Analysis Plan for Non-Storm Water		RL 2 an	d 3 ONLY ³	
7.7.4.1	Sampling Schedule		RL 2 ar	d 3 ONLY	
7.7.4.2	Sampling Locations		RL 2 ar	d 3 ONLY	
7.7.4.3	Monitoring Preparation		RL 2 and	d 3 ONLY ^{2,7}	
7.7.4.4	Analytical Constituents		RL 2 ar	d 3 ONLY	
7.7.4.5	Sample Collection		RL 2 ar	d 3 ONLY	
7.7.4.6	Sample Analysis		RL 2 ar	d 3 ONLY	
7.7.4.7	Data Evaluation and Reporting		RL 2 ar	d 3 ONLY	
7.7.5	Sampling and Analysis Plan for Other Pollutants Required by the Regional Water Board		RL 2 an	d 3 ONLY ⁸	
7.7.5.1	Sampling Schedule		RL 2 ar	nd 3 ONLY	
7.7.5.2	Sampling Locations		RL 2 ar	d 3 ONLY	
7.7.5.3	Monitoring Preparation		RL 2 and 3 ONLY ^{2,7}		
7.7.5.4	Sample Collection		RL 2 and 3 ONLY		
7.7.5.5	Sample Analysis		RL 2 and 3 ONLY		
7.7.5.6	Data Evaluation and Reporting		RL 2 and 3 ONLY		
7.7.6	Training of Sampling Personnel	Х			
7.7.7	Sample Collection and Handling	Х			
7.7.7.1	Sample Collection	Х		Х	
7.7.7.2	Sample Handling	Х			
7.7.7.3	Sample Documentation Procedures	Х			
7.8	Active Treatment System Monitoring	X ⁹			
7.9	Bioassessment Monitoring			RL 3 ONLY ⁴	
7.10	Watershed Monitoring Option	NA			
7.11	Quality Assurance and Quality Control	Х			
7.11.1	Field Logs	Х			
7.11.2	Clean Sampling Techniques X				
7.11.3	Chain of Custody	Х			
7.11.4	QA/QC Samples	Х			
7.11.4.1	Field Duplicates	Х			
7.11.4.2	2 Equipment Blanks X				
7.11.4.3	Field Blanks	Х			

Table 1: Section 7 Applicability to Project Risk Level



			Additional	
Section # CASQA Template Section		All Projects	Risk Level 2 (RL 2)	Risk Level 3 (RL 3)
7.11.4.4 Travel Blanks		Х		
7.11.5 Data Verification		Х		
7.12	Records Retention	Х		

Table 1: Section 7 Applicability to Project Risk Level

Risk Level 1 Projects delete text related to NALs, NELs, and REAPs. Risk Level 2 Projects delete text related to NELs.

² CSMP Attachment 3 should include the Chain-of-Custody from the laboratory identified in CSMP Section 7.7.2.3.
 ³ Dictate and delate used of participation.

³ Risk Level 1 Projects include statement from CASQA Template and delete rest of section.

⁴ Risk Level 1 and 2 Projects include statement from CASQA Template and delete rest of section.

⁵ Additional requirements, depending on whether Project has or does not have a direct discharge to a receiving water.

⁶ Additional requirements, depending on whether the receiving water is or is not located on the Project site.

⁷ Additional requirements if Contracted Personnel will collect field measurements.

⁸ Risk Level 1 Projects and Risk Level 2 and 3 Projects not requiring additional monitoring by the Regional Water Board include statement from CASQA Template and delete rest of section.

⁹ Additional requirements, depending on whether an Active Treatment System (ATS) will or will not be deployed.

¹⁰ In the event of a spill, see the Los Angeles World Airports SWPPP Spill Response Plan in Attachment 2 of this document.



CSMP Attachments 1 – 5

Include the required documents listed in the CASQA Template in this Section.



Section 8 References

Include statement from CASQA Template and add additional references accordingly.



Appendix A – Calculations

Include calculations used to develop the SWPPP.

Appendix B – Site Maps

Include Site Maps per CASQA Template. Include all phases of the construction project (at a minimum there will be an initial phase and a final phase showing stabilization). Refer to Section 3 - Best Management Practices and the corresponding Fact Sheets included in Appendix H - Construction Fact Sheets; the Site Maps must show the layout of all identified BMPs including:

- Haul roads use the FAA Construction Safety and Phasing Plan (CSPP), and
- Laydown yards.

Appendix C – Permit Registration Documents (PRDs)

Include copies of PRDs listed in CASQA Template as available for SWPPP submitted to LAWA (i.e., Risk Assessment, Post Construction Water Balance, Site Map), and subsequently completed once the WDID is issued (i.e., NOI, Certification, Annual Fee Receipt, etc.). Include and complete PRD checklist from the Template.

- Risk Assessment calculations for LS; include a map illustrating your calculations (show transects for each calculated area).
 - **NOTE**: Calculations for LS factor must be site-specific (do not rely on the geographical topography maps provided by SWRCB as they are too general in coverage). If the project has multiple locations use area weighted calculations.
 - EXAMPLE: Weighted Calculations for determining LS Factor:

Area 1 is a 3 acre site with LS factor of 0.13; Area 2 is a 2 acre site with LS factor of 0.25; and Area 3 is a 5 acre site with LS factor of 0.06; then LS _{total} = [(3ac*0.13) + (2ac*0.25) + (5ac*0.06)] / [3ac+2ac+5ac] = 0.119

Weighted LS Factor = 0.119

- MS4 Permit
- Post-compliance documentation and approvals
 - SUSMP
 - WQMP
 - o LID

Appendix D – SWPPP Amendment Certifications

Include certification statement included in CASQA Template. The required standards for amending the SWPPP include:



- Redline/strikeout format for changing or updating the text. A note in the SWPPP for revised sections referencing the amendment is required.
- When a Change-of-Information (COI) is required (i.e., adding or removing acreage, revising the dates, new ownership, etc.), the information needs to be entered into the SMARTS database (COI tab), the amendment uploaded to SMARTS, and the LRP notified to certify the submission prior to Board approval.
 - Place the appropriate notice of approval(s) here, along with the amendment.
- Update the amendment log.

Appendix E – Submitted Changes to PRDs

Include log of updated PRDs included in CASQA Template.

Appendix F – Construction Schedule

Include a copy of Project construction schedule as it relates to the Storm Water Pollution Prevention Plan (SWPPP). The schedule should indicate the date and phase of BMP implementation so that it is clear that this schedule is relevant to the SWPPP and not the construction contract milestones.

Phase	Description	Start	End	BMP's Utilized
1	Mobilization	8/1/2015	10/2/2015	
2	Grading	10/2/2015	11/4/2015	BMP's listed here shall:
3	Utilities	11/5/2015	8/1/2016	 Match Section 3 description; Be identified on the Site Maps in
4	Vertical	10/3/2015	8/1/2016	Appendix B; and
5	Paving	6/1/2016	8/1/2016	Include Fact Sheets in Appendix H.
6	Stabilization	8/2/2016	10/2/2016	

EXAMPLE: Construction Schedule

Appendix G – Construction Activities, Materials Used, and Associated Pollutants

Using CASQA Handbook Table G.a (Pollutants Associated with Construction Activity), populate CASQA Table G.1. Add (Remove) additional (inapplicable) construction phases as appropriate.

Appendix H – CASQA Storm Water BMP Handbook Portal: Construction Fact Sheets

All Best Management Practices (BMPs) described in Section 3, listed in Table 3-1 BMP Implementation Schedule, must have the associated Fact Sheets included in Appendix H and properly identified in Appendix B – Site Maps.

Appendix I – BMP Inspection Form

Identify Risk Level and include BMP Inspection Report from CASQA Template. For Risk Level


2 or 3 only include highlighted text. An alternative form may be utilized, as long as Permit Reporting requirements are met in the form.

Appendix J – Project Specific Rain Event Action Plan Template

Include REAP Template from CASQA Template and modify for use by the QSP accordingly. If this is a Risk Level 1 project, state that "*REAPs are not applicable for Risk Level 1 projects*" and remove the form from this appendix.

Appendix K – Training Reporting Form

Include Trained Contractor Personnel Log from CASQA Template.

Appendix L – Responsible Parties

Include Authorization of Approved Signatories, Identification of QSP, and Authorization of Data Submitters (optional) forms from CASQA Template. LAWA retains Data Submitter responsibilities.

Appendix M – Contractors and Subcontractors

List Contractors and Subcontractors and their respective contact information in this Appendix (see Attachment 3 for an example).

Appendix N – Construction General Permit

Provide only a copy of the CGP Permit Order and the applicable Risk Level (CGP Appendix C, D, or E). Also include the following language:

"A copy of the complete Construction General Permit (Order No. 2009-0009-DWQ, amended by Order Nos. 2010-0014-DWQ & 2012-0006-DWQ) can be found at the following location:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_20 09_0009_complete.pdf "

Appendix O – Annual Report and Notice of Termination

Provide a copy of the Annual Report (once it's filed). When the project has been successfully closed, include a copy of the Notice of Termination approval notice. Submit to the LAWA Project Manager or designee upon completion of the Project.



Attachment 1

SWPPP Preparation Checklist

This checklist must be completed by the preparer and submitted with the SWPPP. If for any reason Project-specific conditions necessitate deviation from advised CASQA Template language or the guidance in this manual, each change and reason for the change should be documented in the 'Comments' column of the checklist.

In order to be marked as satisfied, each of the items in the Checklist shall meet all additional requirements described in Section 1 of this manual.

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CASQA SWPPP Requirement	Requireme	nt Satisfied?	Comments
Title Page & Project General Information			
• Name of Project [Title Page]	Yes 🗌	No	
○ Risk Level	Yes 🗌	No	
• Project Location (e.g. address) [Title Page]	Yes 🗌	No	
• City & State of Project [Title Page]	Yes 🗌	No	
• LRP Name [Title Page]	Yes 🗌	No	
• Address			
○ City, State, Zip			
\circ Telephone and Fax			
• Title			
• QSD Name [Title Page]	Yes 🗌	No	
• Address			
○ City, State, Zip			
\circ Telephone and Fax			
○ Title/ Certification #			
• QSP Name [Title Page]	Yes 🗌	No	
○ Address			
◦ City, State, Zip			
\circ Telephone and Fax			
○ Title/ Certification #			
• SWPPP Preparation Date [Title Page]	Yes 🗌	No	
• Project Construction Dates [Title Page]	Yes 🗌	No	
• Table of Contents [General]	Yes 🗌	No	
• QSD Certification Page [General]	Yes 🗌	No	
• LRP Certification Page [General]	Yes 🗌	No	
• Amendment Log [General]	Yes 🗌	No	

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CASQA SWPPP Requirement	Requirem	ent Satisfied?	Comments
Section 1 SWPPP Requirements			
1.1 Introduction • Include suggested narrative from CASQA Template	Yes 🗌	No	
1.2 Permit Registration Documents (PRDs) • Identify the PRDs which shall be submitted	Yes 🗌	No	
1.3 SWPPP Availability and Implementation • Include suggested narrative from CASQA Template	Yes 🗌	No	
 1.4 SWPPP Amendments Provide direction regarding circumstances under which SWPPP amendments are required 	Yes 🗌	No	
 1.5 Retention of Records Include suggested narrative from CASQA Template 	Yes 🗌	No	
• Include suggested narrative from CASQA	Yes 🗌	No	
Template 1.7 Annual Report • Include suggested narrative from CASQA Template	Yes		
Template • Instructions for reporting info to LAWA included	Yes 🗌	No	
1.8 Changes to Permit Coverage			
 Include suggested narrative from CASQA Template 	Yes 🗌	No	
 1.9 Notice of Termination ○ Include suggested narrative from CASQA Template 	Yes 🗌	No	

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CASQA SWPPP Requirement	Requir	ement Sati	sfied?	Comments
Section 2 Project Information				
2.1 Project and Site Description				
2.1.1 Site Description				
○ Name of Project	Yes 🗌	No		
 Size of Project Address and description of location with nearby 				
major roads	Yes 🗌	No		
• Describe nearby water bodies	Yes 🗌	No		
• Project's Lat/Long	Yes 🗌	No		
2.1.2 Existing Conditions				
\circ Describe site previous land use	Yes 🗌	No		
• Describe site proposed land use	Yes 🗌	No		
 Describe potential or known contamination sources 	Yes 🗌	No		"No known contaminants exist" is a response
2.1.3 Existing DrainageO Describe site topography	Yes	No		
 Describe site topography Describe site elevation range 	Yes			
• Describe surface drainage courses, conveyance	Yes 🗌	No		
systems				
• Describe and list receiving water bodies	Yes 🗌	No		Project to ocean
2.1.4 Geology and Groundwater				
• Describe underlying soil, type, thicknesses and	Yes	No		
geologic conditions • Describe ground water depth	Yes	No		
2.1.5 Project Description	_	_		
• Describe construction activities	Yes 🗌	No		
\circ Describe limits of grading and show on site map	Yes 🗌	No		
• Describe stockpiling locations and show on site map	Yes 🗌	No	N/A	
• Describe construction phasing	Yes	No		
• Impervious % (after project?)	Yes 🗌	No		
2.1.6 Developed Condition				
• Describe post-construction surface drainage	Yes 🗌	No		
• Describe post-construction conveyance systems	Yes 🗌	No		
• Describe post-construction discharge locations	Yes 🗌	No		
\circ Owner of MS4 discharged to (if applicable)	Yes 🗌	No	N/A	

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CASQA SWPPP Requirement	Require	ement Satis	sfied?	Comments
 2.2 Permits and Governing Documents List permits and other governing documents relevant to the Project and key requirements associated with Water Quality 	Yes 🗌	No	N/A	
 2.3 Storm Water Run-on From Offsite Areas Describe if Project anticipates to receive offsite run-on 	Yes 🗌	No		
• If so, describe sources, drainage area contributing	Yes 🗌	No	N/A	
• Describe proposed BMPs for run-on	Yes 🗌	No	N/A	
 2.4 Findings of Risk Determination Risk Level Methods and Assumptions used RUSLE Factors/Sediment Risk Summary Receiving Water Risk Summary NAL Table [Risk Level 2 Only] NAL and NEL Table [Risk Level 3 Only] 2.5 Construction Schedule Grading and Land Development Phase Streets and Utilities Phase Vertical Construction Phase Final Landscaping and Site Stabilization Phase Completion date (NOT) 	Yes Yes Yes Yes Yes Yes Yes Yes	No No No No No No No No No	N/A N/A N/A N/A N/A	
2.6 Potential Construction Activity and Material				
 Pollutant Sources List Construction Activities List Construction Materials 2.7 Identification of Non-Storm Water Discharges 	Yes 🗌 Yes 🗌	No 🗌 No 🗌		
 List authorized non-storm water discharges List activities for potential unauthorized non- storm water discharges 	Yes 🗌 Yes 🗌	No 🗌 No 🗌		
2.8 Required Site Map InformationSee Appendix B	Yes 🗌	No		

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CASQA SWPPP Requirement	Requir	ement Sati	Comments	
Section 3 Schedule For BMP Implementation	-			
 3.1 Schedule for BMP Implementation Temporary soil stabilization BMPs Temporary sediment control BMPs Wind erosion control BMPs Tracking control BMPs Non-storm water BMPs Waste management and material pollution control 	Yes Yes Yes Yes Yes Yes Yes Yes	No No No No No		
BMPsBMP Implementation Schedule (CASQA Table 3.1)	Yes 🗌 Yes 🗌	No 🗌		
 3.2 Erosion and Sediment Control Use erosion and sediment control worksheets to determine applicable BMPs based on Project materials and activities 	Yes 🗌	No		
 3.2.1 Erosion Controls Temporary Erosion Control and Wind Control BMPs (CASQA Table 3.2) Provide description of site-specific implementation for each BMP being used Included BMPs are in Appendix B, H 	Yes Yes Yes Yes	No 🗌 No 🗌 No 🗌		
 3.2.2 Sediment Controls Temporary Sediment Control and TrackingControl BMPs (CASQA Table 3.3) Provide description of site-specific implementation for each BMP being used Projects shall provide linear sediment control along toe of slope, face of slope, and at the grade breaks of exposed slopes. [RL 2 and 3] Included BMPs are in Appendix B, H 	Yes 🗌 Yes 🗍 Yes 🗍 Yes 🗍	No 🗌 No 🗌 No 🗌	N/A 🗌	
 3.3 Non-Storm Water Controls and Waste and Materials Management Use non-storm water, construction materials, and waste management worksheet to determine applicable BMPs based on Project materials and activities Included BMPs are in Appendix B, H Dewatering of excavations accounted for 	Yes 🗌 Yes 🛄 Yes 🗍	No 🗌 No 🗍 No 🗌	N/A 🗌	
 3.3.1 Non-Storm Water Controls Temporary Non-Storm water BMPs (CASQA Table 3.4) Provide description of site-specific implementation for each BMP being used 	Yes 🗌 Yes 🗌	No 🗌		

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CASQA SWPPP Requirement	Require	ment Satis	fied?	Comments
 Included BMPs are in Appendix B, H Dewatering of excavations accounted for 	Yes 🗌 Yes 🗌	No 🗌 No 🗌	N/A	
 3.3.2 Materials and Waste Management Temporary Materials Management BMPs(CASQA Table 3.5) Provide description of site-specific implementation for each BMP being used. Waste management conducted in accordance with 	Yes 🗌 Yes 🗌	No 🗌		
 waste management conducted in accordance with Projects Construction Waste Management Plan Included BMPs are in Appedix B, H 	Yes 🗌 Yes 🗌	No 🗌	N/A	
3.4 Post Construction Storm Water Management				
 Measures Include a written narrative to describe Post Construction BMPs and show locations on Site Maps Is Project in an area subject to Phase I or Phase II MS4 permit approved Storm Water Management Plan 	Yes 🗌 Yes 🗌	No 🗌	N/A	
• If yes, is post construction runoff reduction requirement satisfied (Municipal Permit provided)	Yes 🗌	No		
• List all applicable site design, source control, and treatment control BMPs	Yes 🗌	No	N/A	

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CASQA SWPPP Requirement	Require	ment Satis	Comments	
Section 4 BMP Inspection, Maintenance, and Rai				
 4.1 BMP Inspection and Maintenance Statement about BMP inspection and maintenance 				
requirements	r es	No		
• Provide blank inspection forms in Appendix I	Yes 🗌	No		
4.2 Rain Event Action Plans (REAP) [RL 2 and 3]				
• Include requirement and procedure for preparing and implementing a REAP	Yes 🗌	No	N/A	
• REAP info:	Yes 🗌	No	N/A	
• Site Address	Yes 🗌	No	N/A	
 Calculated Risk Level 	Yes 🗌	No	N/A	
 Site Storm Water Manager info (Name, Title, Company, 24-hr Phone Number) Erosion and Sediment control provider info 	Yes 🗌	No	N/A	
(i.e. Name, Title, Company, 24-hr Phone Number)	Yes 🗌	No	N/A	
 Storm water sampling agent info (Name, Title, Company, 24-hr Phone Number) 	Yes 🗌	No	N/A	
• Activities associated with each construction phase	Yes 🗌	No	N/A	
• Trades active on the construction site during each phase	Yes 🗌	No	N/A	
• Trade contractor info	Yes 🗌	No	N/A	
• Recommended actions for each project phase	Yes 🗌	No	N/A	

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CASQA SWPPP Requirement	Requirement Satisfied?	Comments
Section 5 Training		
 5.1 Training Statement about training requirements and documentation Provide training logs in Appendix K 	Yes No Yes No	
Section 6 Responsible Parties and Operators		
 6.1 Responsible Parties o List Approved Signatories o Include LRP written authorization in Appendix L 	Yes No Yes No	
 6.2 Contractor List List all Prime Contractors for Project (Name, Title, Company, Address, 24-hr Phone Number) List of all intended subcontractors in Appendix M 	Yes No Yes No	

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CASQA SWPPP Requirement	Require	ement Sati	sfied?	Comments
Section 7 Construction Site Monitoring Program	(CSMP)			
 7.1 Purpose Statement about objectives that the CSMP was developed to address the Risk Level 	Yes 🗌	No		
 7.2 Applicability of Permit Requirements Include Project Risk Level and bullet the types of monitoring activities required and applicable to that particular Risk Level 	Yes 🗌	No		
 7.3 Weather and Rain Event Tracking Statement about the weather and rain event tracking required based on Risk Level 	Yes 🗌	No		
 7.3.1 Weather Tracking Identify tools QSP will use to track weather and precipitation. 	Yes 🗌	No		
 7.3.2 Rain Gauge Identify number of rain gauges on site and locations. 	Yes 🗌	No		
 7.4 Monitoring Locations Identify all upstream and downstream monitoring/sampling locations 	Yes 🗌	No		
 7.5 Safety and Monitoring Exemptions Identify governing safety documents (e.g. Health and Safety Plan) A description of site safety hazards, particularly during visual monitoring and sample collection Identify scheduled business hours Identify permit-specified sampling/observation exemptions 	Yes Yes Yes Yes	No 🗌 No 🗌 No 🗌	N/A 🗌	
 7.6 Visual Monitoring Include narrative describing visual monitoring requirements Summary of Visual Monitoring and Inspections (CASQA Table 7.1) 	Yes 🗌 Yes 🗌	No 🗌		
 7.6.1 Routine Observations and Inspections Provide narrative for 7.6.1.1 Routine BMP Inspections and 7.6.1.2 Non-Storm Water Discharge Observations 	Yes 🗌	No		

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CASQA SWPPP Requirement	Require	ment Satis	fied?	Comments	
 7.6.2 Rain-Event Triggered Observations and Inspections Include suggested narrative for when rain event observations and inspections are conducted (see CASQA template) 	Yes 🗌	No			
 7.6.2.1 Visual Observations Prior to a Forecasted Qualifying Rain Event Include suggested narrative for how pre-storm observations will be made (see CASQA template) 	Yes 🗌	No			
 7.6.2.2 BMP Inspections During an Extended Storm Event Include suggested narrative for inspections during an extended storm event (see CASQA template) 	Yes 🗌	No			
 7.6.2.3 Visual Observation Following a Qualifying Rain Event Include suggested narrative from CASQA template 	Yes	No			
 7.6.3 Visual Monitoring Procedures Include suggested narrative from CASQA template List assigned and alternate inspectors and provide names, contact numbers and training qualifications in Appendix K 	Yes 🗌 Yes 🗌	No 🗌			
 7.6.4 Visual Monitoring Follow-up and Reporting Include suggested narrative from CASQA template 	Yes	No			
 7.6.5 Visual Monitoring Locations Include suggested narrative from CASQA template Locations shown on Site Maps Sampling locations at Site Drainage Areas (CASQA template Table 7.2) Sampling locations at Storm Water Storage and 	Yes Yes Yes Yes	No 🗌 No 🗌 No 🗌			
Containment Areas (CASQA template Table 7.3) • Sampling locations at Site Storm Water Discharge Locations (CASQA template Table 7.4)	Yes 🗌 Yes 🗌	No 🗌	N/A		

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CASQA SWPPP Requirement	Requi	rement Sati	Comments	
7.7 Water Quality Sampling and Analysis				
7.7.1 Sampling and Analysis Plan for Non-Visible Pollutants in Storm Water Runoff Discharges				
• Include narrative to list or describe all potential sources of non-visible pollutants for all construction materials, wastes or activities; existing site features; soil amendments; and off-site storm water run-on	Yes 🗌	No		
 7.7.1.1 Sampling Schedule Include suggested narrative from CASQA template 	Yes 🗌	No		
 7.7.1.2 Sampling Locations Include suggested narrative from CASQA template Data is the Data template 	Yes 🗌	No		
 Non-visible Pollutant Sampling Locations – Contractor's Yard (CASQA template Table 7.6) 	Yes 🗌	No		
 Non-visible Pollutant Sampling Locations – Soil Amendment Areas (CASQA template Table 7.7) 	Yes 🗌	No	N/A	
 Non-visible Pollutant Sampling Locations – Areas of Historical Contamination (CASQA template Table 7.8) 	Yes 🗌	No	N/A	
 Non-visible Pollutant Sampling Locations – Site Run-on (CASQA template Table 7.9) 	Yes 🗌	No	N/A	
7.7.1.3 Monitoring Preparation				
 Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
• Contractor sampling personnel name and telephone number	Yes 🗌	No	N/A	
 Effluent Sampling Field Logs and Chain of Custody forms 	Yes 🗌	No	N/A	
• Laboratory or environmental consultant company name, address, telephone number, point of contact, name of samplers, name of alternates	Yes 🗌	No	N/A	
7.7.1.4 Analytical Constituents				
 Include suggested narrative from CASQA template Potential Non visible Pollutants and Water 	Yes 🗌	No	N/A	
 Potential Non-visible Pollutants and Water Quality Indicator Constituents (CASQA template Table 7.11) 	Yes 🗌	No	N/A	

CASQA SWPPP Requirement	Requi	irement Sati	sfied?	Comments
 7.7.1.5 Sample Collection Onclude suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	
 7.7.1.6 Sample Analysis Include suggested narrative from CASQA template Laboratory Name, address, telephone number, point of contact, ELAP certification 	Yes 🗌 Yes 🗌	No 🗌	N/A 🗌 N/A 🗍	
 Sample Collection, Preservation and Analysis for Monitoring Non-visible Pollutants (CASQA template Table 7.12) 	Yes 🗌	No	N/A	
 7.7.1.7 Data Evaluation and Reporting Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.2 Sampling and Analysis Plan for pH and Turbidity in Storm Water Runoff Discharges [RL 2 and 3] Include suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	
 7.7.2.1 Sampling Schedule Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.2.2 Sampling Locations Include suggested narrative from CASQA template Turbidity and pH Runoff Sample Locations (CASQA template Table 7.13) Turbidity and pH Run-on Sample Locations (CASQA template Table 7.14) 	Yes 🗌 Yes 🗌 Yes 🗌	No 🗌 No 🗌 No 🗌	N/A 🗌 N/A 🗌 N/A 🗌	
 7.7.2.4 Field Parameters Include suggested narrative from CASQA template Sample Collection and Analysis for Monitoring Turbidity and pH (CASQA template Table 7.15) 	Yes 🗌 Yes 🗌	No 🗌	N/A 🗌 N/A 🗌	
 7.7.2.5 Sample Collection Include suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	
 7.7.2.6 Field Measurements Onclude suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	
• Field Instruments and include manufacturer's instructions (CASQA template Table 7.16)	Yes 🗌	No	N/A	

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CASQA SWPPP Requirement	Requi	rement Sati	sfied?	Comments
 7.7.2.7 Data Evaluation and Reporting Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.3 Additional Monitoring Following an NEL Exceedance [RL 3] Statement of non-applicability (i.e. RLI) 	Yes 🗌	No	N/A 🗌	
7.7.3.1 Sampling and Analysis Plan for Suspended Sediment Concentration in Storm Water Runoff Discharges				
 7.7.3.1.1 Sample Schedule and Locations Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.3.1.2 Monitoring Preparation Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.3.1.3 Sample Collection and Analysis Include suggested narrative from CASQA template Sample Collection and Analysis for Monitoring Suspended Sediment Concentration (CASQA 	Yes 🗌 Yes 🗌	No 🗌	N/A 🗌	
 template Table 7.19) 7.7.3.1.4 Data Evaluation Include suggested narrative from CASQA 	Yes	No	N/A	
template 7.7.3.2 Sampling and Analysis for pH, Turbidity, and SSC in Receiving Water				
 7.7.3.2.1 Sample Schedule and Locations Include suggested narrative from CASQA template Receiving Water Sample Locations (CASQA template Table 7.20) 	Yes 🗌 Yes 🗌	No 🗌	N/A 🗌 N/A 🗌	
 7.7.3.2.2 Monitoring Preparation Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.3.2.3 Sample Collection and Analysis Onclude suggested narrative from CASQA template 	Yes 🗌	No	N/A	

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CASQA SWPPP Requirement	Requir	ement Sati	sfied?	Comments
 7.7.3.2.4 Data Evaluation Include suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	
 7.7.4 Sampling and Analysis Plan for Non- Storm Water Discharges Include suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	
 7.7.4.1 Sampling Schedule Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.4.2 Sampling Locations Include suggested narrative from CASQA template Fill in sampling locations for Project runoff and run-on 	Yes 🗌 Yes 🗌	No 🗌	N/A 🗌 N/A 🗌	
 7.7.4.3 Monitoring Preparation Include suggested narrative from CASQA template Contractor sampling personnel name and telephone number Effluent Sampling Filed Logs and Chain of Custody forms Laboratory or environmental consultant company name, address, telephone number, point of contact, name of samplers, name of alternates 	Yes Yes Yes Yes	No 🗌 No 🗌 No 🗌	N/A N/A N/A N/A	
 7.7.4.4 Analytical Constituents Include suggested narrative from CASQA template Potential Non-Storm Water Discharge Pollutants and Water Quality Indicator Constituents (CASQA template Table 7.21) 	Yes 🗌 Yes 🗌	No 🗌	N/A 🗌 N/A 🗌	
 7.7.4.5 Sample Collection Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.4.6 Sample Analysis Include suggested narrative from CASQA template Sample Collection, Preservation and Analysis for Monitoring Non-Storm Water Discharge Pollutants (CASQA template Table 7.22) 	Yes 🗌 Yes 🗌	No 🗌	N/A 🗌 N/A 🗌	

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CASQA SWPPP Requirement	Requi	rement Sati	sfied?	Comments
 7.7.4.7 Data Evaluation and Reporting Include suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	
7.7.5 Sampling and Analysis Plan for Other Pollutants Required by the Regional Water Board				
[RL 2 and 3] Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
7.7.5.1 Sampling Schedule				
 Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
7.7.5.2 Sampling Locations				
 Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
• Fill in sampling locations for Project runoff and run-on (CASQA Table 7.23)	Yes 🗌	No	N/A	
7.7.5.3 Monitoring Preparation				
 Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 Contractor sampling personnel name and telephone number 	Yes	No	N/A	
 Effluent Sampling Field Logs and Chain of Custody forms 	Yes 🗌	No	N/A	
• Laboratory or environmental consultant company name, address, telephone number, point of contact, name of samplers, name of alternates	Yes 🗌	No	N/A	
 7.7.5.4 Sample Collection Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.5.5 Sample Analysis o Include suggested narrative from CASQA 				
template • Sample Collection, Preservation and Analysis for	Yes 🗌	No	N/A	
Monitoring Regional Board Required Pollutants (CASQA Table 7.24)	Yes 🗌	No	N/A	
 7.7.5.6 Data Evaluation and Reporting Include suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	
 7.7.6 Training of Sampling Personnel Include suggested narrative from CASQA template 	Yes 🗌	No	N/A 🗌	

CASQA SWPPP Requirement	Requ	irement Sati	isfied?	Comments
• List all sampling personnel, training courses taken, and storm water sampling experience for each	Yes 🗌	No	N/A	
• Include training records of all designated sampling personnel in Appendix K	Yes 🗌	No		
 7.7.7 Sample Collection and Handling Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.7.1 Sample Collection Include suggested narrative from CASQA template 	Yes 🗌	No	N/A	
 7.7.7.2 Sample Handling Include suggested narrative from CASQA template 	Yes 🗌	No		
• List laboratory company name, address, telephone number, point of contact	Yes 🗌	No		
 7.7.7.3 Sample Documentation Procedures Include suggested narrative from CASQA template 	Yes 🗌	No		
7.8 Active Treatment System Monitoring [RL 2 and 3]				
 Include suggested narrative from CASQA template 	Yes 🗌	No		
• Will an Active Treatment System (ATS) be deployed on site?	Yes 🗌	No		
• If yes, provide location for ATS Monitoring and Sampling Plan location	Yes 🗌	No	N/A	
 7.9 Bioassessment Monitoring [RL 3] O Include suggested narrative from CASQA template 	Yes 🗌	No		
 7.10 Watershed Monitoring Option [RL 3] O Include suggested narrative from CASQA template if Project is participating in a watershed monitoring option 	Yes 🗌	No		
• If yes, include a summary of the watershed monitoring and Regional Board approval of the program	Yes 🗌	No		
 7.11 Quality Assurance and Quality Control O Include suggested narrative from CASQA template 	Yes 🗌	No		

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CASQA SWPPP Requirement	Requirement Satisfied?	Comments
 7.11.1 Field Logs Include suggested narrative from CASQA template Include Visual Inspection Log, Effluent Sampling Field Log Sheet 	Yes No Yes No No	
 7.11.2 Clean Sampling Techniques Include suggested narrative from CASQA template 	Yes No	
 7.11.3 Chain of Custody Include suggested narrative from CASQA template Include Chain of Custody (CoC) Forms 	Yes No Yes No No	
 7.11.4 QA/QC Samples Include suggested narrative from CASQA template Include frequency required by each QA/QC method 	Yes No No Yes No No	
 7.11.4.1 Field Duplicates Include suggested narrative from CASQA template 	Yes No	
 7.11.4.2 Equipment Blanks Onclude suggested narrative from CASQA template 	Yes No	
 7.11.4.3 Field Blanks Onclude suggested narrative from CASQA template 	Yes No	
 7.11.4.4 Travel Blanks Onclude suggested narrative from CASQA template 	Yes No	
 7.11.5 Data Verification Include suggested narrative from CASQA template 	Yes No	
 7.12 Records Retention Include suggested narrative from CASQA template 	Yes No	
CSMP Attachments		
Attachment 1 Weather Reports Printed NOAA or other source weather 	Yes No	

CASQA SWPPP Requirement	Requir	ement Sati	sfied?	Comments
forecasts to be stored in this attachment				
Attachment 2 Monitoring Records • Completed BMP Inspection Forms, Visual Monitoring, Effluent Sampling Logs, Monitoring Exceptions, and NAL Exceedance Reports to be stored in this attachment	Yes 🗌	No		
Attachment 3 Example Forms • Example Rain Gauge Logs, Field Logs, Visual Monitoring, Effluent Sampling Logs, NAL Exceedance Reports and CoCs of lab named in Section 7 to be stored in this attachment	Yes 🗌	No		
Attachment 4 Field Meter Instructions • Field Meter Instructions to be stored in this attachment	Yes 🗌	No	N/A	
Attachment 5 Supplemental Information • Documents related to Regional Board required monitoring (if applicable), watershed monitoring option approval (if applicable) to be stored in this attachment	Yes 🗌	No	N/A 🗌	
Section 8 References				·
8.1 References				
• Include CASQA template suggested narrative for any pertinent references for this Project's SWPPP document (i.e. General Construction Permit)	Yes 🗌	No		
 Project Spill Response Plan 	Yes 🗌	No		
Appendix A Calculations				
A. Calculations	1			
• Calculations	Yes 🗌	No		Are there minimum required calculations? List.
Appendix B Site Maps				
B. Site Maps				
• Site Map (Multiple maps if necessary)	Yes	No		
• Vicinity Map	Yes	No		
• Site layout	Yes	No		
• Construction site boundaries	Yes 🗌	No		
• Drainage areas	Yes	No 🗌		
• Discharge locations	Yes			
 Sampling locations 	Yes 🗌	No		

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CASQA SWPPP Requirement	Requirement Satisfied?	Comments
 Areas of soil disturbance (temporary or permanent) Active areas of soil disturbance (cut or fill) Locations of runoff BMPs Locations of erosion control BMPs Locations of sediment control BMPs ATS location (if applicable) Locations of sensitive habitats, watercourses, or other features which are not to be disturbed 	Yes No Yes No Yes No Yes No Yes No Yes No	
 Locations of all post-construction BMPs Waste storage areas Vehicle storage areas Material storage areas o Entrances and Exits Fueling locations Haul Routes Contained Storm Water Infiltration Areas Water Pollution Control Drawings show phased implementation 	Yes No	
Appendix C Permit Registration Documents (PR	Ds)	
 C. PRDs Notice of Intent (NOI) Risk Assessment LS Calculation R-value LEW print out Signed Certification Statement Post Construction Water Balance MS4 Compliance Document Copy of Annual Fee Receipt ATS Design Documents (if applicable) Site Map, see Appendix B Waste Discharge Identification (WDID) confirmation 	Yes No Yes No	

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CASQA SWPPP Requirement	Requiren	nent Satisf	fied?	Comments		
Appendix D SWPPP Amendment Certifications						
D. SWPPP Amendment Certifications SWPPP Amendment Certification Statement 	Yes	No	N/A			
Appendix E Submitted Changes to PRDs						
E. Submitted Changes to PRDs						
• Log of Updated PRDs	Yes 🗌	No				
Appendix F Construction Schedule						
F. Construction Schedule						
• Construction Schedule	Yes 🗌	No				
Appendix G Construction Activities, Materials U	sed, and Asso	ociated Pol	llutants			
G. Construction Activities, Materials, Pollutants						
 Include Construction Activities and Associated Pollutants from CASQA Template 	Yes	No				
Appendix H CASQA Storm Water BMP Handbo	ook Portal: Co	onstructio	n Fact S	heets		
H. CASQA BMP Fact Sheets						
 BMP Factsheets for all identified BMPs in Section 3 	Yes	No				
 BMPs shown on the Site Maps in Appendix B (as 	Yes 🗌	No				
appropriate)						
Appendix I BMP Inspection Report						
I. BMP Inspection Report						
• BMP Inspection Report Form appropriate to RL	Yes 🗌	No				

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CASQA SWPPP Requirement	Requi	rement Sati	isfied?	Comments
Appendix J Project Specific REAP				
J. REAP [RL 2 and 3] • REAP	Yes 🗌	No	N/A	
Appendix K Training Reporting Form				
 K. Training Reporting Form Trained Contractor Personnel Log 	Yes 🗌	No		
Appendix L Responsible Parties				
 L. Responsible Parties Authorization of Approved Signatories Identification of QSP & Certifications Authorization of Data Submitters (optional) QSD Certification 	Yes Yes Yes Yes Yes	No No No	N/A 🗌	
Appendix M Contractors and Subcontractors				
 M. Contractors and Subcontractors Contractors and Subcontractors 	Yes 🗌	No		
Appendix N Construction General Permit				
 N. Construction General Permit Copy of Construction General Permit Order and RL Attachment (C, D, or E) 	Yes 🗌	No		
Appendix O Annual Report and Notice of Termination				
 O. Annual Report and Notice of Termination Copy of Annual Report (once filed) Copy of Notice of Termination (approval notice from RWQCB) 	Yes 🗌 Yes 🗌	No 🗌 No 🗌		



Attachment 2

Los Angeles World Airports SWPPP Spill Response Plan

SWPPP Spill Response Plan

[Insert Date]

Los Angeles World Airports

Prepared For:

[Insert Project Name] [Insert Project Address] [Insert Project Contact Person] [Insert Project Contact Number]

Spill Response Personnel

Spill Response Coordinator

		is hereby designated as the Spill
Full Name	Position	
Response Coordinator for the		located at
	[Insert Project Name]	[Insert Project Address]

I acknowledge my responsibility as Spill Response Coordinator for the Project. I have reviewed the SWPPP and the Spill Response Plan, and I have sufficient knowledge and training to effectively implement the Spill Response Plan. The individuals named below, if any, will assist me in implementing the Spill Response Plan, and I have reviewed this responsibility with each named individual.

Signature

()	Office
-----	--------

() Mobile

Contact Telephone Number

Additional Spill Response Personnel

Name	Role	Phone Number
		Office: ()
		Mobile: ()
		Office: ()
		Mobile: ()
		Office: ()
		Mobile: ()

Date

SECTION 1 Spill Risk Assessment

1.1 Introduction

This Spill Response Plan has been prepared at the request and direction of Los Angeles World Airports with the objective of meeting the standards and requirements of the 2009 Construction General Permit (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ) for the Project located at [Insert Project Address]. Construction BMPs will be implemented in accordance with the Project SWPPP to prevent spills on-site. This plan identifies current construction activities and materials at the site that have the potential for a pollutant spill. This plan identifies equipment and materials that will be kept on-site to contain and clean up any spills associated with these activities and materials. This plan also includes a list of emergency spill response services in the event that a spill goes beyond that which can be effectively managed with the prevention, containment, and cleanup provisions of this plan.

1.2 Spill Response Checklist

Г

Construction Phase	Construction Activity/Material	Will Activity/ Material be Used?	Pollutant	Spill Response	Equipment To Be Located on-site
Land Development/ Grading	Grading Equipment Fueling	Yes/No	Vehicle Fuel	Use dry cleaning methods. Use Absorbent on spill, remove and store in waste container.	Rags, Pads, Absorbent, Shovel, Containment Drum
	Grading Equipment Leak	Yes/No	Vehicle Fuel	Use dry cleaning methods. Use Absorbent on spill, remove and store in waste container.	Rags, Pads, Absorbent, Shovel, Containment Drum
	Grading Equipment Leak	Yes/No	Vehicle Oil	Use dry cleaning methods. Use Absorbent on spill, remove and store in waste container.	Rags, Pads, Oil Absorbent, Shovel, Containment Drum
	Grading Equipment Leak	Yes/No	Vehicle Fluids	Use dry cleaning methods. Use Absorbent on spill, remove and store in waste container.	Rags, Pads, Absorbent, Shovel, Containment Drum
	Grading Equipment	Yes/No	Greases	Use dry cleaning methods. Use Absorbent on spill, remove and store in waste container.	Rags, Pads, Absorbent, Shovel, Containment Drum
	Concrete Pouring of Footings and Pads.	Yes/No	Form Release Agent	Use dry cleaning methods. Let form agent dry and store in containment drum.	Rags, Pads, Shovel Broom, Containmen Drum
	Concrete Pouring of Footings and Pads.	Yes/No	Concrete curing compounds	Use dry cleaning methods. Let curing compounds dry and store in containment drum.	Rags, Pads, Shovel, Broom, Containmen Drum
Utilities/ Roads	Rupture, Leakage, Valve failure	Yes/No	Super Chlorinated water	Contain and Vacuum.	
	Water Line Discharge	Yes/No	Super Chlorinated water	Contain and Vacuum.	
	Asphalt Paving	Yes/No	Asphaltic Emulsions	Use dry cleaning methods. Let asphalt dry and store in containment drum.	Rags, Pads, Absorbent, Shovel, Containment Drum
	Adhesives/ Epoxy Operations	Yes/No	Adhesives/ Epoxies	Contain, allow spill to dry. Remove and store in containment drum.	Rags, Pads, Shovel, Containment Drum
Vertical Structures	Painting Operations	Yes/No	Paints/ Solvents	Use absorbent and allow spill to dry. Remove and store in containment drum.	Absorbent, Containment Drum
	Mortar Mix	Yes/No	Mortar	Use dry cleaning methods. Let Mortar mix dry and store in containment drum.	Broom, Shovel, Containment Drum
	Stucco Operations	Yes/No	Stucco Plaster	Use dry cleaning methods. Let Mortar mix dry and store in containment drum.	Broom, Shovel, Containment Drum
	Drywall Operations	Yes/No	Drywall Plaster	Use dry cleaning methods. Let spill dry and store in containment drum.	Broom, Containmen Drum
	Sealers	Yes/No	Sealers	Use dry cleaning methods. Let sealer dry and store in containment drum.	Rags, Pads, Absorbent, Shovel, Containment Drum

Construction Phase	Construction Activity/Material	Will Activity/ Material be Used?	Pollutant	Spill Response	Equipment To Be Located on-site
	Grout	Yes/No	Grout	Use dry cleaning methods. Let Grout dry and store in containment drum.	Rags, Pads, Absorbent, Shovel, Containment Drum
Landscaping and Final Stabilization	Landscaping Operations	Yes/No	Hydroseed/ Soil-Binders	Use dry cleaning methods. Stop leak/spill, contain spill, and clean up spill.	Shovel
	Landscaping Operations	<mark>Yes/No</mark>	Mulches	Use dry cleaning methods. Stop leak/spill, contain spill, and clean up spill.	Shovel
	Landscaping Operations	Yes/No	Fertilizers	Use dry cleaning methods. Stop leak/spill, contain spill, and clean up spill.	Shovel
	Landscaping Operations	Yes/No	Herbicide	Use rags or pads to remove and store contaminated materials in containment drums.	Rags, Pads, Absorbent, Shovel Containment Drum

Additional items can be added as necessary.

1.3 Spill Cleanup

Clean up leaks and spills immediately. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent materials for larger spills. If the spill is hazardous, then the used cleanup materials are also hazardous and must be sent to either a certified laundry facility (i.e. rags) or disposed of as hazardous waste. Use dry cleanup methods ONLY. Never hose down or bury spills. For liquid spills, contain the spill and then utilize absorbent material. Clean up as much of the spill as possible (using dry cleanup methods) and dispose of the spent absorbent and spill material properly. If necessary, store spill and spent absorbent materials in a containment drum until they can be properly disposed of by a hazardous waste removal service.

Containment drums will be used for the storage of cleaned up spill and spent absorbent. These drums are only for temporary storage and will contain the spilled pollutant, any contaminated materials the spill came in contact with (i.e. soil) and any materials that were used to clean up the spill (i.e. rags, pads, and absorbent compound).

If a spill occurs on the soil, first contain the spill, then apply absorbent compound, and then shovel the contaminated soil and spent absorbent into a containment drum.

In the event a spill occurs and cannot be cleaned up and disposed of prior to a forecasted rain event, contain the spill and use tarps to cover the spill until it can be removed properly.

1.4 Spill Response Materials

Table 1.2- Spill Response Mater	ials Required On-Site.	
Materials	On-Site	Where Located
Shovels	Yes/No	
Brooms	Yes/No	
Dust Pan	Yes/No	
Rags	Yes/No	
Pads	Yes/No	
Absorbent	Yes/No	
Containment Drums	Yes/No	
Tarps	Yes/No	

SECTION 2 Spill Response Agencies

2.1 Spill Response Agencies

Table 2.1 is a list of local agencies that provide emergency response and/or cleanup of spills on the Project site that are too large for the materials on-site to handle.

Table 2.1- Spill Resp	oonse Agencies	
Agency/Contact	Telephone Number	Address
[Insert Local] Fire Department	911; [Insert Phone Number]	[Insert Address]
[Insert Local] California Environmental Protection Agency	[Insert Phone Number]	[Insert Address]
[Insert County] Sanitation District	[Insert Phone Number]	[Insert Address]
State Office of Emergency Services	800-852-7550	3650 Schriever Ave Mather, CA 95655
The County of [Insert County Name] Hazardous Materials Management Division	[Insert Phone Number]	[Insert Address]
California Environmental Protection Agency, Santa Ana Regional Water Quality Control Board	909-782-4130	3737 Main Street, Suite 500 Riverside, CA 92501 [Remove if Project is not in this region]
California Environmental Protection Agency, Los Angeles Regional Water Quality Control Board	213-576-6600	320 West Fourth Street, Suite 200 Los Angeles, CA 90013 [Remove if Project is not in this region]
National Response Center Environmental Response Team	513-569-7537	26 W. Martin Luther King Drive Cincinnati, OH 45268
United States Coast Guard, Los Angeles/Long Beach	310-732-2043	Coast Guard District Eleven Coast Guard Island Alameda, CA 94501

Attachment 3

Contractor and Subcontractor Form (EXAMPLE)

Contractor/Subcontractor	Contact Person/		Start	End
Name and Address	Phone Number	Activity	Date	Date
Bullwhip Excavation and Grading	Ron Guereca ###-###-####	Grading	6-15-15	8-31-15
Ballast Construction	Dave Lloyd ###-###-####	Water truck; Trenching; Paving	6-15-15	
TECS Electrical Construction	Jose Munoz ###-###-####	Civil; Electrical	7-20-15	
Sandstone Landscaping	Scott Keno ###-###-####	Landscaping	8-01-15	



Guidance Manual for Construction Storm Water Pollution Prevention Part 2: Water Pollution Control for Projects that Disturb Less than One Acre

PART 2:

Water Pollution Control For Projects that Disturb Less than One Acre



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List of Acronyms

BMP	Best Management Practice
EPA	Environmental Protection Agency (United States)
ELUP	Environmental and Land Use Planning
ERC	Environmental Regulatory Compliance Group
IA	Independent Assurance
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
QA	Quality Assurance (ERC Consultant Staff)
QC	Quality Control
QSP	Qualified SWPPP Practitioner (SWRCB Certified)
QSD	Qualified SWPPP Developer (SWRCB Certified)
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
WWECP	Wet Weather Erosion Control Plan



1. Introduction

Construction projects with a disturbed area of less than one acre are not covered under the Construction General Permit and therefore are not required by the SWRCB to develop a State SWPPP.

However, LAWA requires the implementation of the minimum construction BMPs necessary to control runoff and prevent storm water pollutants emanating from construction sites to the maximum extent practicable.

The minimum storm water BMP requirements are, for the most part, good housekeeping practices. These requirements may include, but are not limited to: covering stockpiles; retaining eroded sediments and pollutants on site; proper storage for fuels, oils, solvents and other toxic materials; containing non-storm water runoff at the project site; and proper concrete washout facilities. All BMPs will be consistent with the California Stormwater Quality Association (CASQA) Construction Best Management Handbook. A copy of the handbook is available online at: <u>https://www.casqa.org/resources/bmp-handbooks/construction</u>

In addition to the minimum BMP requirements specified, construction projects in the City of Los Angeles (LAX and VNY airports) with grading activities during the rainy season (October 1st to April 14th) must also develop and implement a Wet Weather Erosion Control Plan (WWECP). The requirements of the WWECP are outlined in the City of Los Angeles Department of Public Works "Development Best Management Practices Handbook – Part A Construction Activities, Third Edition" which was adopted by the Board of Public Works on September 29, 2004 as authorized by Section 64.72 of the Los Angeles Municipal Code approved by ordinances No. 173494 and 172673.

2. Minimum BMP Requirements

Projects that create less than one acre of disturbed soil area do not require coverage under the CGP; however, they are required by the NPDES MS4 Permit for Los Angeles County and the MS4 Permit for San Bernardino County to implement certain minimum Best Management Practices (BMPs) to prevent pollutants from being carried off of the site or into the storm drain system by storm water or non-storm water.

2.1 Objectives

Water pollution control BMPs must be implemented to prevent pollution of storm water and nonstorm water as follows:


Guidance Manual for Construction Storm Water Pollution Prevention Part 2: Water Pollution Control for Projects that Disturb Less than One Acre

- 1. Sediments shall not be discharged to a storm drain system or receiving waters.
- 2. Sediments generated on the Work site shall be contained on the Work site using appropriate Best Management Practices (BMPs).
- 3. No construction-related materials, waste, spill, or residue shall be discharged from the Work site to streets, drainage facilities, receiving waters, or adjacent property by wind or runoff unless such discharge is in compliance with regulatory agencies requirements.
- 4. Non-storm water runoff from equipment, vehicle washing, or any other activity shall be contained within the Work site using appropriate Best Management Practices.
- 5. Soil erosion shall be prevented. Slopes susceptible to erosion shall be covered, planted, or otherwise protected in a way that prevents discharge from the Work site.

2.2 Minimum BMP Requirements

The minimum BMP requirements listed below will apply to all LAWA project sites regardless of size or location of the project.

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence (see conditions below), and/or
	Gravel Bag Barrier, and/or
	Sand Bag Barrier, and/or
	Fiber Rolls
	Stabilized Construction Site Entrance/Exit
Non-Storm Water Management	Water Conservation Practices
	Dewatering Operations
	Vehicle Fueling
	Equipment and Maintenance
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

Minimum BMPs for All Construction Projects:



Guidance Manual for Construction Storm Water Pollution Prevention Part 2: Water Pollution Control for Projects that Disturb Less than One Acre

Minimum Required BMPs for Roadway Paving or Repair Operation

1.	Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless
	required by emergency conditions.
2.	Install gravel bags and filter fabric or other equivalent inlet protection at all susceptible storm
	drain inlets and at manholes to prevent spills of paving products and tack coat.
3.	Prevent the discharge of release agents including soybean oil, other oils, or diesel to the
	storm water drainage system or receiving waters.
4.	Minimize non-storm water runoff from water use for the roller and for evaporative cooling of
	the asphalt.
5.	Clean equipment over absorbent pads, drip pans, plastic sheeting, or other material to
	capture all spillage and dispose of properly.
6.	Collect liquid waste in a container with a secure lid for transport to a maintenance facility to
	be reused, recycled, or disposed of properly.
7.	Collect solid waste by vacuuming or sweeping and securing in an appropriate container for
	transport to a maintenance facility to be reused, recycled, or disposed of properly.
8.	Cover the "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective
	sheeting during a rainstorm.
9.	Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
10.	Minimize airborne dust by using water spray or other approved dust suppressant during
	grinding.
11.	Avoid stockpiling soil, sand, sediment, asphalt material, or rubble in or near storm water
	drainage system or receiving waters.
12.	Protect stockpiles with a cover or sediment barriers during a rain and when not actively
	being used.
13.	Park paving equipment on impervious surfaces only (never on bare soil).

2.3 BMP Conditions

The following conditions and restrictions apply to BMPs on LAWA projects:

Dust Control

- Contractor shall use reclaimed water for dust control purposes when it is available.
- Contractor shall keep available on-site enough self-loading operational vacuum motor sweepers with spray nozzles to maintain dust control (use reclaimed water) and cleaning of pavements affected by Contractor operations.



Linear Barrier/Sediment Control BMPs

- Fiber Rolls (SE-5) Only natural wrapped fiber rolls shall be installed on all LAWA property projects. Plastic monofilament wrapped rolls shall not be used.
- Gravel Bags (SE-6) Use Caltrans specifications for geosynthetic (nonwoven) gravel-filled bags; gravel must be from 3/8 to 3/4 inch in diameter and must be clean and free of clay balls, organic matter, and other deleterious materials.
- Silt Fence (SE-1) Shall not be installed anywhere on a project without specific approval from LAWA and shall not be used within the Air Operations Area (AOA).

Materials and Waste Management

- Stockpile locations require pre-approval by LAWA. They shall be located such that access by construction vehicles minimizes disruption to adjacent public streets.
- Protect stockpiles of rock and earth materials that are not actively being used with a dust control product such as: water spray (reclaimed water shall be used for dust control), proprietary non-toxic crusting agents, anchored geotextile fabric or tarps, erosion control fabric, seeding, or other methods approved by LAWA. Note: bituminous prime coat products for dust control are *not acceptable*.

3. Wet Weather Erosion Control Plan

In addition to the minimum BMP requirements specified in the previous section, construction projects with grading activities during the rainy season must also develop and implement a Wet Weather Erosion Control Plan (WWECP). Whenever it appears that the construction Site will have grading during the rainy season (from October 1 to April 14), the Contractor shall submit a WWECP to LAWA for a thirty-day review period. Grading within the rainy season shall *not* be allowed without prior approval of a WWECP by LAWA. Guidance on WWECP requirements can be found on the City of Los Angeles Stormwater website at

http://www.lastormwater.org/wp-content/files_mf/parta.pdf

(Development Best Management Practices Handbook - Part A Construction Activities).



Guidance Manual for Construction Storm Water Pollution Prevention Part 3: Construction Storm Water Compliance Review Program (CSWCRP)

PART 3:

Construction Storm Water Compliance Review Program (CSWCRP)



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Attachments

Attachment 1 - LAWA Construction Project Storm Water Assessment Checklist Attachment 2 - LAWA Construction Project Storm Water Action Plan



List of Acronyms

BMP	Best Management Practice
CSWCRP	Construction Storm Water Compliance Review Program
CPSWAC	Construction Project Storm Water Assessment Checklist
CPSWAP	Construction Project Storm Water Action Plan
CGP	Construction General Stormwater Permit
EPA	Environmental Protection Agency (United States)
ELUP	Environmental and Land Use Planning
ERC	Environmental Regulatory Compliance Group
IQA	Independent Quality Assurance Assessor (ERC Consultant Staff)
LAWA	Los Angeles World Airports
NPDES	National Pollutant Discharge Elimination System
QC	Quality Control
QSP	Qualified SWPPP Practitioner (SWRCB Certified)
QSD	Qualified SWPPP Developer (SWRCB Certified)
RWQCB	Regional Water Quality Control Board
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
WWECP	Wet Weather Erosion Control Plan



1. Introduction

The Construction Storm Water Review Program (CSWCRP) describes the activities implemented by LAWA to evaluate construction project storm water compliance with the National Pollutant Discharge Elimination System (NPDES) Permits. This includes the Construction General Permit (CGP) and the NPDES Municipal Permits for Los Angeles County and San Bernardino County. Evaluations of ongoing construction projects are performed by independent third party assessors contracted by Los Angeles World Airports (LAWA). The CSWCRP provides a method for those assessors to determine the level of storm water compliance of individual projects.

The CSWCRP will measure compliance with permit administrative requirements as well as the implementation of Best Management Practices (BMPs). It will also identify projects with the potential for discharge of pollutants that pose an imminent threat to water quality. By identifying those threats, discharges of pollutants from LAWA facilities can be minimized.

2. Construction Storm Water Compliance Review Program

2.1 Construction Storm Water Review Plan Organization

The CSWCRP consists of the following sections:

- Purpose
- Goals
- Scope
- Project Assessment Procedure
- Feedback and Program Improvement

2.2 Purpose

The purpose of the CSWCRP is to have a standardized procedure for the third party reviews of storm water compliance on construction projects at LAWA facilities to ensure that the interests of LAWA as the property owner are protected.

2.3 Goals

The goals of the CSWCRP are to document a project's compliance with the Construction General Permit (CGP), the LAWA Industrial Permit, the City Municipal Storm Water codes, and the project's administration of construction contract provisions related to storm water runoff management. These include:

- Proper selection of BMPs
- Proper placement of BMPs in accordance with Wet Weather Erosion Control Plan (WWECP) or Storm Water Pollution Prevention Plan (SWPPP)
- Proper installation of BMPs
- Proper maintenance of BMPs



- Approval of WWECP or SWPPP
- Amendment of WWECP or SWPPP as required
- Project inspection at expected frequencies
- Required storm water monitoring
- Corrective actions taken to remedy observed deficiencies

2.4 Scope

The CSWCRP provides the following:

- Specific procedures for third party Quality Assurance (IQA) assessors to follow when conducting construction project reviews
- Consistency in data collection and reporting
- Description of the method in which the assessor documents the findings of a construction site assessment
- Description of the method for presenting the findings from construction site assessments to LAWA management

2.5 Independent Assurance Project Review Procedure

The third party Independent Quality Assurance (IQA) assessor will be responsible for arranging and conducting project compliance reviews. The project compliance review process involves the following main steps:

- Arrange project review with the LAWA Project Manager
- Conduct project review
 - a) Project documentation assessment (SMARTS files and field forms)
 - b) Project field assessment (implementation of BMPs in the field)
- Complete Construction Project Storm Water Assessment Checklist (Checklist)
- Debrief LAWA Project manager of any project corrective actions required
- Submit copy of Checklist to the LAWA PM and to stormwater@lawa.org
- Schedule follow up inspection if corrective actions are identified
- Complete Construction Project Storm Water Action Plan (Action Plan) if Major or Critical deficiencies are identified
- Follow up on implementation of Action Plan
- Recommend enforcement action to the LAWA PM if corrective actions are not implemented

2.5.1 Arrange Project Assessment

Contact the Project Manager and Contractor's representative to schedule a project assessment. It is acceptable to leave a message, but the IQA should continue to call until contact is established. Confirm the project assessment date and time with the Project Manager by phone or by electronic mail. Remind the Project Manager to provide a courtesy invitation to the contractor's QSP or water pollution control manager.



2.5.2 Conduct Project Documentation Assessment

Use the attached LAWA Construction Project Stormwater Assessment Checklist (Checklist) to assess the adequacy of the following documentation (when applicable) for existence, completeness, and currency:

- WWECP or SWPPP and other pertinent project file documents or correspondence
- Approved amendments
- Up-to-date contractor inspection reports and REAPs
- Construction Site Monitoring Program (CSMP) including monitoring results for visible and non-visible pollutants (if any)
- Dewatering Provisions
- Other permits for the job and their expiration dates
- Contractor water pollution control manager's current certification and training record and whether they meet quarterly update requirements
- SMARTS forms including copies of the NOI, any COIs, and Annual Reports

Before the project field assessment (Section 8.5.3) the following information needs to be gathered:

- Weather forecast for percentage chance of rain
- Number and type of each BMP deployed as indicated in the WWECP or SWPPP for the current stage of construction

2.5.3 Conduct Project Field Assessment

The field assessment will focus on the proper implementation and maintenance of BMPs and the potential impact on receiving water quality from construction activities. The participants must include a Project Manager or a designee, and may include the contractor's QSP or designee. Safety procedures must be followed as outlined in the Code of Safe Practices for the project.

Project field assessments should include the following:

- Assessment of the project and any contractor storage yards, on- or off-site, for proper implementation and maintenance of BMPs from the approved WWECP or SWPPP and amendments. Off-site contractor storage yards, or other facilities including borrow pits, disposal sites, batch plants, and aggregate and recycling operations are to be assessed only if they are being used exclusively for a LAWA construction project. LAWA has the legal authority to enter and assess these sites.
- Explanation of any inadequacies of the BMPs observed (such as improper location, incorrect installation, or inadequate maintenance).
- Documentation of any deviations in BMP implementation, including if the BMP is not listed in the WWECP or SWPPP.
- Discussion with field assessment participants regarding potential problems and potential inadequacies observed during the assessment, so that there are no surprises on the final Checklist. This gives the assessor the opportunity to collect information from the participants for a complete and accurate report.

- The IQA should take enough photos of both good and bad observations to accurately
 identify conditions. Always take more than one photo of an inadequacy as supporting
 documentation. Start with a close up shot of the deficiency and then show a more general
 picture of the surrounding area. Take enough photos to show the entire area; look for
 slopes, drainage areas or inlets, BMPs installed or missing, redundancy of BMPs, and
 anything else that could provide information for the report or the report reviewers. Photos
 need to show not only the observed inadequacies, but also how that observed inadequacy
 potentially affects water quality. Provide a photo essay to document the potential threat to
 water quality assessment including shots of the source, the path, and the receiving water.
- Return to the office and review again the approved WWECP or SWPPP and compare the field observations to the documents. If amendments to WWECP or SWPPP are necessary, then document the recommendations.

Use the Checklist from Attachment 1 for each project assessment.

2.5.4 Construction Project Storm Water Review Checklist Preparation and Completion

- The IQA should take ample time to complete the Checklist. A caption should be provided for each photo included in the report.
- The Checklist should be filled out completely, with no boxes left blank.
- If there are problems or deficiencies observed, the IQA shall provide a written description and explanation (that is, describing the location, type of problem, how it may affect water quality, why it is a problem, whether the BMP is installed correctly or missing, and so on).
- If BMPs are inadequate due to lack of maintenance, the IQA shall describe and identify the
 observed maintenance deficiency (including broken bags, torn silt fence, over-capacity
 washout pits, spills with no BMPs installed in immediate or surrounding area, and so on).
 Observed BMP inadequacies must be documented with factual information. Personal
 opinions should be avoided.
- Within 48 hours of the project assessment a completed Checklist shall be submitted to the LAWA PM or designee.

2.5.5 Debrief the LAWA Project Manager

It is important for the IQA to debrief the Project Manager or designee in person after the site inspection to help ensure issues are clear and that they can be addressed promptly.

- Provide an electronic copy of the completed Checklist and all digital photos to the Project Manager or designee.
- Send an electronic copy of the completed Checklist and all digital photos to: stormwater@lawa.org
- Debrief the Project Manager or designee about what was observed in the field. Discuss the problems or deficiencies, and make recommendations for any needed amendments to the SWPPP or Erosion Control Plans. Also discuss what was good about the SWPPP implementation at the project.



- Review the completed Checklist with the Project Manager or designee and explain the project conditions that determined the evaluation level. Answer any questions or concerns the construction staff may have.
- If the project compliance Assessment is deemed to have Major, or Critical deficiencies the IQA (with concurrence of the LAWA PM) shall develop a Construction Project Storm Water Action Plan (Action Plan) for the project. A copy of the Action Plan is provided in Attachment 2.

3. Feedback and Program Improvement

The IQA will debrief the Project Manager or their designee after completion of each assessment and will work directly with them to come up with a plan to resolve or correct the deficiencies and to ensure an effective storm water program is in place at the project. The IQA assists the Project Manager in identifying immediate corrective action(s) to be taken for projects where minor corrective actions have been advised. Those actions should be initiated within one business day after receipt of the project assessment report. When a project has Major or Critical deficiencies and an Action Plan has been developed and presented to the Contractor with an implementation schedule, the LAWA PM will monitor the completion of the corrective actions. Upon the contractor's completion of all corrective actions, the PM will submit a copy of the Action Plan to the IQA.

The IQA will document that the Action Plan has been implemented, per the agreed schedule identified, by signing the form where specified. If appropriate action has not been taken, the IQA will notify the ERC contact person.

In addition to immediate corrective action, the IQA and the Project Manager will identify whether there is a need for construction storm water training or the need for project construction storm water assistance such as bringing in another contractor or LAWA maintenance forces to complete the corrective action.

For deficiencies trending toward increasing frequency, the IQA may be instructed to perform an evaluation of project-level noncompliance information to determine whether responsibilities are attributable to project management, construction contractors, LAWA storm water program support and training efforts, or availability of appropriate BMPs. Program improvements will be proposed for any program-wide deficiencies that are identified.



Attachment 1

LAWA Construction Project Storm Water Assessment Checklist

LAWA Construction Project Storm Water Assessment Checklist

Project Information

Project Name:	Date:
Contractor/Contact Name:	Contractor Phone:
Contractor's Qualified SWPPP Developer (QSD):	QSD Phone:
Contractor's Qualified SWPPP Practitioner (QSP):	QSP Phone:
LAWA Project Manager:	LAWA PM Phone:
IQA Compliance Assessor(s):	Assessor Phone:

Document Review

SWPPP/WWECP and other pertinent project file documents complete and up-to-date	Yes No N/A
Amendments	Yes No N/A
Contractor certifications and training records (satisfy requirements and up-to-date)	Yes No N/A
Dewatering Provisions	Yes No N/A
Other required Permits and valid dates	Yes No N/A
Contractor storage/laydown yard(s) onsite/offsite exclusive to LAWA project	Yes No N/A
Inspections/Monitoring	
Weekly inspection reports	☐Yes ☐No ☐N/A
Quarterly inspection reports	Yes No N/A
Pre-storm inspection reports	Yes No N/A
During-storm inspection reports	Yes No N/A
Post-storm inspection reports	Yes No N/A
Current weather forecasts with percentage chance of rain	Yes No N/A
REAP prepared 48 Hours prior to storm event	Yes No N/A
REAP onsite 24 Hours prior to storm event	Yes No N/A
BMPs installed for the current construction phase per the SWPPP/WWECP	Yes No N/A
Construction Site Monitoring Program (CSMP)	Yes No N/A
Sampling results (pH/turbidity and/or non-visible/visible pollutants)	Yes No N/A
Other:	Yes No N/A
Comments:	



Best Management Practices Review

1 EROSION CONTROLS

BMPs implemented on inactive disturbed soil areas	Yes No N/A
BMPs effective in controlling erosion	Yes No N/A
Comments:	

2 SEDIMENT CONTROLS

Sediment controls implemented	Yes No N/A
BMPs effective in controlling sediment discharge	Yes No N/A
Comments:	

3 WIND EROSION CONTROLS

Wind erosion controls properly implemented	Yes No N/A
BMPs effective in controlling wind erosion	Yes No N/A
Comments:	

4 TRACKING CONTROLS

Public roads, adjacent to site ingress & egress points, reasonably free of sediment	Yes No N/A
BMPs effective in controlling sediment tracking	Yes No N/A
Comments:	



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NON-STORM WATER MANAGEMENT 5

Non-storm water controls properly implemented	Yes No N/A
BMPs effective for managing non-storm water discharges	Yes No N/A
Comments:	

Waste Management and Materials Pollution Control 6

Waste management and material control BMPs properly implemented	Yes	□No □N/A
BMPs effective in controlling waste and material pollutants	Yes	□No □N/A
Comments:		



Assessor's General Summary

<u>Activity Le</u>	evel:
	Low Activity. Project is complete or is near completion.
	Moderate Activity
	Heavy Activity
Program (Compliance Assessment:
	Substantial Compliance.
	Minor deficiencies noted.
	Major deficiencies or discharge(s) noted. Prompt correction advised.
	Critical deficiencies or discharge(s) noted. Immediate correction advised.
Effectiven	less of BMPs:
	Project's overall observed water pollution prevention efforts appear highly effective.
	Project's overall observed water pollution prevention efforts appear moderately effective.
	Project's overall observed water pollution prevention efforts appear ineffective.
Comments	:

The purpose of this inspection is to assist LAWA in ascertaining the contractor's compliance with the NPDES Construction General Permit.



Attachment 2

LAWA Construction Project Storm Water Action Plan



LAWA Construction Project Storm Water Action Plan

Project Information

Project Name:	Original Assessment Date:
Contractor/Contact Name:	Contractor Phone:
Contractor's Qualified SWPPP Developer (QSD):	QSD Phone:
Contractor's Qualified SWPPP Practitioner (QSP):	QSP Phone:
LAWA Project Manager:	LAWA PM Phone:
IQA Compliance Assessor(s):	Assessor Phone:

Document Review

Corrective Action Required:	
Required Completion Date:	
Date Completed:	By:
Comments:	

Best Management Practices Review

1 EROSION CONTROLS

Corrective Actions Required:		
Required Completion Date:		
Date Completed:	By:	
Comments:		

2 SEDIMENT CONTROLS

Corrective Action Required:		
Required Completion Date:		
Date Completed:	By:	
Comments:		



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3 WIND EROSION CONTROLS

Corrective Action Required:		
Required Completion Date:		
Date Completed:	By:	
Comments:		

4 TRACKING CONTROLS

Corrective Action Required:		
Required Completion Date:		
Date Completed:	By:	
Comments:		

5 NON-STORM WATER MANAGEMENT

Corrective Action Required:	
Required Completion Date:	
Date Completed:	By:
Comments:	

6 Waste Management and Materials Pollution Control

Corrective Action Required:	
Required Completion Date:	
Date Completed:	By:
Comments:	



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Certification of Completion of Corrective Actions

I Certify that all required Corrective actions required from the referenced Storm Water IQA inspection report have been completed.

IQA Inspector Signature/ Date

Comments: