

CITY OF SAN DIEGO, CALIFORNIA Standard Operating Procedure	NUMBER SOP- 6	DEPARTMENT Public Works- Engineering & Capital Projects
SUBJECT Storm Water Compliance	PAGE 1 of 8	EFFECTIVE DATE 03/01/2011
Construction Management Field Engineering Division	SUPERCEDES SOP - PAGES DATED	

1.0 PURPOSE:

The goal of this SOP is to identify and explain the duties and responsibilities of Field Engineering staff in implementing the federal, state, and local storm water regulations; and ensuring the contractor's compliance with the subject regulations.

2.0 SCOPE:

This procedure outlines the steps to be taken by the construction management team to ensure that new projects are being constructed using Best Management Practices (BMP's) aimed at reducing or eliminating pollutants from entering into the City's storm drain conveyance system and/or receiving waters in compliance with applicable regulations. The procedure also discusses the role of the construction management staff in the inspection, coordination, documentation, and reporting of temporary and permanent storm water BMP's for private and public construction projects.

3.0 BACKGROUND:

The Federal Clean Water Act (CWA) was enacted in 1948 and expanded in 1972 to regulate water quality standards for surface waters. It is unlawful to discharge any pollutant to waters of the United States. The State of California began regulating storm water runoff under the CWA in 1990 by issuing State and Municipal Storm Water Permits. The California State Water Resources Control Board issues the State Construction Permit and the San Diego Regional Board issues the Municipal Storm Water Permit.

The construction projects within the City are required to comply with the construction requirements in the Municipal Storm Water Permit, Order No. R9-2013-0001 (Municipal Permit) and the State Construction General Permit Order No. 2009-0009-DWQ (CGP).

4.0 RESPONSIBILITY:

The Field Engineering Division is responsible for *enforcing* the storm water regulations associated with construction within the right-of-way, for private development (non-building related), grading, public improvements associated with Engineering Permits, Subdivision improvements, and CIP construction projects inspected by the division.

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The Storm Water Group for the Division shall be responsible for coordinating and documenting the necessary training and for the annual reporting for storm water compliance in the Division.

The Construction Management (CM) team is responsible for thorough inspection of construction projects to ensure proper implementation and documentation of temporary construction BMPs in accordance with the City's Storm Water Standards Manual, Chapter 5 and proper installation of permanent BMPs (storm water quality features) in accordance with the plans and specifications. Additionally, the CM team is responsible for maintaining all required Storm Water records for their projects including updating data in the Storm Water database in SD Share.

5.0 PROCEDURE:

This procedure discusses the steps to be taken by the CM team to ensure the Contractor's compliance with the Storm Water regulations as stipulated in the contract documents or the Engineering Permit and subdivision plans.

Project Identification

The RE shall review the plans and specifications before construction activities begin to determine the storm water requirements and required inspection and documentation.

Verify the Site Priority:

The RE shall verify the construction site priority (low, medium, high) as noted on the plans and included in the SWPPP or WPCP. The site priority determines the minimum inspection frequency per Attachment 8.2.

Verify the Grading Requirements:

The RE shall verify the grading requirements of the site. If the project intends to exceed the City's maximum disturbed area limit of five acres during the rainy season, a Weather Triggered Action Plan (WTAP) with a BMP Implementation Plan (BIP) is required in accordance with the City Storm Water Standards Section 5.2. prior to exceeding the maximum disturbed area limit.

Update the Storm Water Database:

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The RE shall enter the project into the SD Share SWPP database with all relevant information and add the Storm Water notices in to the data base on a regular basis.

Pre-Construction Meeting: The RE shall discuss the Storm Water Pollution Prevention requirements at the pre-construction meeting and emphasize the site priority for the project and the Risk Level. The pre-construction meeting agenda shall include a discussion with the Contractor on the proper Storm Water Pollution Prevention documentation and the contractor shall provide the required documents prior to the beginning of construction.

Storm Water Documents Submittal

All required Storm Water documents shall be submitted by the Contractor at the pre-construction meeting or prior to construction as agreed upon.

Projects subject to *only* the Municipal Permit, less than one acre: The WPCP shall be submitted to the RE, along with the name and contact information for their Qualified Contact Person (QCP).

CIP Projects subject to the CGP, equal to or greater than one acre: All Storm Water documents required by the CGP shall be submitted by the Contractor prior to the pre-con meeting, (ref: Whitebook section 6-1.8 Pre-construction Meeting) see attachment 8.6, as follows:

- Contractor shall submit the Risk Level Analysis, SWPPP and other required Project Registration Documents (PRDs).
- The Contractor shall submit the names and contact information for their Qualified SWPPP Developer (QSD), Qualified SWPPP Practitioner (QSP) and Data Submitter (DS).

The RE shall review all submitted PRD within 20 days of receipt. RE may consult with Project Implementation/Environmental Permitting Section (PI/EPS) regarding SWPPP review to ensure the SWPPP meets the project's Risk Level Requirements.

- The RE gives a recommendation of approval, rejection or revisions of submitted PRDs to the Approved Signatory (AS).
- Contractor's Data Submitter (DS) uploads the approved PRDs onto SMARTS.
- AS to verify RE's recommendation, certify and submit PRDs onto SMARTS on behalf of the Legally Responsible Person (LRP).

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- The RE shall coordinate with the contractor to provide the fee and mail the check to the State Water Resources Board no later than seven (7) days prior to the start of construction.
- When construction is complete and the site is stabilized in accordance with the CGP requirements the QSD shall file the Notice of Termination.

Private Projects Subject to the CGP: It is the responsibility of the private developer or their representative to obtain coverage under the CGP. City Staff is not the LRP and/or AS for private development projects. The City is responsible for verifying enrollment under the CGP by doing the following:

- RE shall obtain a copy of the Notice of Intent and WDID to ensure site's coverage under the CGP.
- RE shall request the names and contact information of the site's QDS and QSP, keep this information available, as the QSD and QSP are responsible for implementing the construction BMPs, and other requirements under the CGP.
- RE shall request a copy of QSD and QSP certifications to verify that they are certified as required by the CGP.

Other Submittal Requirements: When a project will be grading 5 acres or more during the rainy season, the contractor shall submit a Weather Triggered Action Plan (WTAP) along with BMP Implementation Plan (BIP) to the RE, see grading requirements above. Additionally, if a project will be utilizing Advanced Treatment System (ATS), the Contractor shall submit the ATS Plan to the RE to ensure that the ATS meets the requirements of the City Storm Water Standards, section 5.2.

Construction BMPs Inspection

The RE shall inspect the project on a regular basis to ensure compliance with the construction BMP requirements in accordance with the site's SWPPP or WPCP. The RE shall inspect the site and issue BMP Inspection Notices as needed and at a minimum the required frequency based on the project priority ranking, see attachment 8.2. BMP Inspection Notices shall be thorough and comprehensive to accurately document the inspections results and any corrective actions required. It is recommended to include photos of the site, particularly when BMP deficiencies are noted.

If inadequate or deficient BMPs are observed on the site, the RE must document deficiencies on the BMP Inspection Notice and require corrective action from the Contractor. The RE shall provide a copy of the BMP Inspection Notice to the Contractor

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and file a copy in the project file as well as in the SWPP database. When corrective actions are required, the RE shall re-inspect the site within 48 hours of the BMP Inspection Notice issuance.

If the Contractor fails to comply with the RE's request for corrective action, or if the RE observes that the Contractor's negligence threatens to cause pollutants or sediment to leave the project site, the RE shall notify the Supervising Engineer and issue another BMP Inspection Notice. In cases where a potential for significant pollution is imminent or it is likely to have a sediment discharge, the RE shall notify the Section Head and recommend the issuance of a Stop Work Order to the owner/contractor with the Deputy Director's authorization. See Attachment 8.9 Non-Compliance Escalating Enforcement Matrix

If an active pollutant discharge from a construction site is observed by an RE at any time, the RE shall immediately report it to the Storm Water Division, Enforcement Section, by calling the hotline at 619-235-1000 or report it on line at <http://www.sandiego.gov/stormwater/services/servicerequest>.

When a project will be exceeding the City's maximum disturbed area limit of five acres during the rainy season, the RE shall enforce the requirements of the site's WTAP and BIP. The WTAP and BIP shall be deployed within 24 hours of a prediction of 40% chance of rain.

When a project is equal to or greater than one (1) acre and is either a) tributary to CWA section 303(d) water body segments impaired for sediment (Los Penasquitos Watershed) or b) is within or adjacent to or discharging directly to coastal lagoons or other receiving waters within Water Quality sensitive areas, the RE shall enforce the implementation of additional controls, including but not limited to,

- Installation of high performance erosion control methods such as bonded fiber matrix or anchored erosion control blankets on all exposed slopes.
- Installation of at least two lines of defense for sediment control such as two parallel lines of silt fence along the perimeter or silt fence barriers strategically located upstream of a protected inlet.
- Stockpiles shall be fully protected and shall be located at a sufficient distance from the perimeter that is near the sensitive water body.

Permanent BMP Inspection

The RE shall review the requirements for permanent BMP's specified on the plans. The RE shall verify that the subject BMP's are being constructed in accordance with the

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approved plans and specifications. The RE and Supervising Engineer shall ensure that all design changes, or deviations from the approved plans and specifications, that impact permanent BMP features are reviewed and approved by the Project Manager for CIP projects or DSD staff for private projects, to meet the requirements established in the Water Quality Technical Report (WQTR) and that the changes are properly documented. For CIP projects, any changes to the permanent BMP's from the original project bid plan set will be documented in the daily reports, on new construction drawings when required, on the as-built plans and by the PM. For Engineering Permits/Subdivisions, any changes to the permanent BMPs shall be documented and reflected in a construction change or redlines, all shown on the as-builts and on the Maintenance Agreement exhibit.

An operational check by the asset owner will be requested and shall occur on the permanent BMP's prior to the submittal of the as-built drawings. The operational check requirements shall include the Engineer of Work (EOW) permanent BMP certification (DS- 563) form (attachment 8.5) to be completed and submitted. For CIP, the form is Permanent BMP Certification for CIP (attachment 8.6). When the operational check corrective items, if any, have been satisfied and the operation & maintenance manuals received, the permanent BMP's will be accepted at the same time the other improvements shown on the approved plans are accepted. The permanent BMP's are included in the final check list (attachment 8.7) that the RE's are to use as a guide to ensure all items required by the CIP contractor or Engineering permit/subdivision have been satisfied.

The RE shall ensure that the permanent BMPs maintenance requirements are documented in the project Operations and Maintenance (O&M) manuals. The RE shall provide a copy of the As-Built drawings incorporating the permanent BMP information and the O&M manuals to the asset owner department prior to close-out of the project.

JURMP Report

The Construction Management team shall ensure that all BMP Notices and other relevant data are entered into the SWPP database as required for all assigned projects. It is required by the Municipal Permit to report annually on all active construction projects in the Jurisdictional Urban Runoff Management Report (JURMP) that is submitted at the end of each fiscal year to the Regional Board. The Construction Management team shall compile all the information needed for this annual report on a regular basis utilizing the SWPP database. This includes periodic verification that the frequency of the Inspection Notices meets the minimum requirements.

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6.0 DEFINITIONS:

AS: Approved Signatory

BIP: BMP Implementation Plan

BMP: Best Management Practices

CIP: Capital Improvement Project

CGP: Construction General Permit

CM: Construction Manager (Supervising/District Engineer)

DS: Data Submitter

DD: Deputy Director

JURMP: Jurisdictional Urban Runoff Management Plan

LRP: Legally Responsible Person

LUP: Linear Underground/Overhead Projects

MS4: Municipal Separate Storm Sewer System

NPDES: National Pollution Discharge Elimination System

NOI: Notice of Intent

NOT: Notice of Termination

PM: Project Manager

PRD: Project Registration Documents

QSD: Qualified SWPPP Developer

QSP: Qualified SWPPP Practitioner

RE: Resident Engineer

RWQCB: Regional Water Quality Control Board

SUSMP: Standard Urban Storm Water Mitigation Plan

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SWPPP: Storm Water Pollution Prevention Plan

URMP: Urban Runoff Management Program

WDID: Water Discharge Identification Number

WPCP: Water Pollution Control Plan

WTAP: Weather Triggered Action Plan

7.0 REFERENCES AND/OR RELATED DOCUMENTS:

- 7.1 Storm Water Standards included in the Land Development Manual
(<http://www.sandiego.gov/development-services/news/pdf/stormwatermaual.pdf>)
- 7.2 State General Construction Permit
(http://www.waterboards.ca.gov/water_issues/progeams/stormwater/docs/c_onstpermits/wgo_2009_0009_complete.pdf)
- 7.3 Receiving Water Risk Analysis (http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml)
- 7.4 Electronic Filing (www.smarts.waterboards.ca.gov)
- 7.5 Weather forecast from NOAA (<http://www.srh.noaa.gov/forecast>)

8.0 ATTACHMENTS:

- 8.1 Flow Chart for SWPPP requirements
- 8.2 Minimum Inspection Frequency for Municipal Permit Projects
- 8.3 Risk Level Analysis and Inspection Requirements for CGP Projects
- 8.4 BMP Inspection Notice
- 8.5 Permanent BMP Construction self certification form (DS-563)
- 8.6 Permanent BMP Certification for CIP

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- 8.7 Final project completion checklist
- 8.8 ECP Construction Permit Process Flow Chart
- 8.9 Non-Compliance Escalating Enforcement Matrix