CHAPTER 15

EROSION & SEDIMENT CONTROL STANDARDS

FOR CONSTRUCTION ACTIVITIES

15.01 GENERAL

The City of Modesto is required by State and Federal regulations to develop programs to control the discharge of pollutants to the municipal storm drain system, including the discharge of pollutants from construction sites. As a result, all construction projects are subject to requirements designed to improve stormwater quality such as, expanded plan check and review, implementation of Best Management Practices, stormwater treatment and source control measures, Low Impact Development (LID) measures and increased construction site inspection.

To obtain stormwater design information or determine whether a construction project will be subject to stormwater treatment, source control or LID requirements, refer to the current edition of the City of Modesto Guidance Manual for Development Stormwater Quality Control Measures.

These Standards consist of regulations contained in State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System (NPDES) Construction General Permit No.CAS000002, and the Central Valley Regional Water Quality Control Board Order No. R5-2008-0092 City of Modesto NPDES Stormwater Permit No.CAS083526, the City of Modesto Guidance Manual for Development Stormwater Quality Control Measures (current edition) and Modesto City Ordinance Chapter 10, Title 5: Stormwater Management and Discharge Controls.

15.02 WATER POLLUTION CONTROL PLANS

All construction projects occurring in the City of Modesto (City), regardless of size, require the submittal of a Water Pollution Control Plan (WPCP) or Local SWPPP to the City for review. The submittal shall include a description of the stormwater erosion, sediment, and pollution control Best Management Practices (BMPs) to be used to prevent sediment and other sources of pollution from entering the City storm drain system as well as a site plan showing their placement.

For privately owned construction projects, a WPCP shall be submitted to the City's Land Development Engineering Division with an application for a Grading, Demolition or Building Permit. The City's review comments will be provided to the Applicant within 15 working days. The Applicant shall revise the WPCP to address the City's review comments and re-submit to the City. The WPCP shall be completed to the satisfaction of the City prior to the issuance of a Grading, Demolition or Building Permit for the construction project.
For City owned construction projects, a WPCP shall be submitted to the City's Construction Administration Office a minimum of 21 working days prior to the start of any field work. The City's review comments will be provided to the Contractor within 10 working days. Contractor shall revise the WPCP to address the City's review comments and re-submit to the City. The WPCP shall be completed to the satisfaction of the City prior to the start of any field work.

All construction projects occurring within the City must implement the following BMPs, where and when applicable, regardless of project size. Additional BMPs may be required to ensure that sediment, construction waste and other pollutants from construction sites and parking areas, including runoff from equipment at construction sites, shall be retained on the site to the maximum extent practicable.


1. Dust Control:

The Contractor shall comply with all City of Modesto and San Joaquin Valley Air Pollution Control District rules, regulations, ordinances, and statutes which apply to any work performed, including any air pollution control rules, regulations, ordinances, and statutes, specified in the Government Code. The Contractor shall be responsible for the control of dust within the limits of the project at all times including weekends and holidays in addition to normal working days. The Contractor shall take whatever steps are necessary or required by the City to eliminate the nuisance of blowing dust without causing sediment, debris or litter to enter the City storm drain system.

2. Erosion, Sediment, and Pollution Control:

The Contractor shall be responsible for controlling erosion and sedimentation within the limits of the project at all times during the course of construction including evenings, weekends, and holidays in addition to normal working days. The Contractor shall prevent any sediment and construction debris from entering the City storm drain system by implementing the following BMPs:

- Erosion control measures. Refer to CASQA Factsheets EC-1 to EC-16 and choose appropriate measures for project site.

- Sediment control measures. Refer to CASQA Factsheets SE-1 to SE-14 and choose appropriate measures for project site.

- Drain inlet protection. Refer to CASQA Factsheet SE-10. Mandatory for all projects.

- Stabilized entrance and egress from construction site. Refer to CASQA Factsheets TC-1, TC-2, & TC-3 and choose appropriate measures for project site.

- Stockpile management. Refer to CASQA Factsheet WM-3.
- Keep gutter flow line unimpeded and free of soil, debris and construction materials at all times.

- Use drainage controls as needed to protect site from run-on and prevent contaminated run-off. Refer to CASQA Factsheets EC-9 and EC-11.

- Use any other BMP's necessary to control the discharge of pollutants from the construction site.

Wash water, slurry and sediment from concrete or asphalt saw cutting operations shall not be allowed to enter the City storm drain system.

- When making saw cuts in pavement, use as little water as possible.

- Cover and place barricades around each catch basin during the sawing operation to contain the slurry. Shovel or vacuum the slurry residue from the pavement or gutter and remove from site. Refer to CASQA Factsheet NS-3

The Contractor is required to implement, at a minimum, the following housekeeping practices: site cleanup, solid waste management, material storage and delivery area, concrete waste management, and spill prevention and control.

- Site Cleanup: The Contractor shall keep the project site clean and free of dust, mud and debris resulting from the Contractor's operations. Daily clean up throughout the duration of the project shall be required as the Contractor progresses with the work. Extra precautions and clean-up efforts shall be made prior to weekends, holidays and predicted storm events.

- Street Sweeping: Refer to CASQA Factsheet SE-7.

- Spillage of earth, gravel, concrete, asphalt, or other materials resulting from hauling operations along or across any public traveled way shall be removed immediately by the Contractor at Contractor's expense.

- Solid Waste Management: Refer to CASQA Factsheet WM-5 and WM-6.

- Material Storage and Delivery Area: Refer to CASQA Factsheet WM-1.

- Concrete Waste Management: Refer to CASQA Factsheet WM-8.

- Spill Prevention and Control: Refer to CASQA Factsheet WM-3.

- Temporary Sanitary Waste Facilities: Refer to CASQA WM-10

3. Non-Stormwater Discharges:

- The contractor shall prohibit non-stormwater discharges listed in Modesto City Ordinance Title 5, Chapter 10, Section 202.
• No washing of construction or other industrial vehicles shall be allowed on a construction site or property adjacent to a construction site. Refer to CASQA Factsheet NS-8.

4. Inspection

Throughout the duration of the project the Contractor will be required to inspect and maintain, in effective condition, all erosion, sediment, and pollution control BMPs. Inspections are required at minimum weekly, and before and after each storm event, and as needed. The contractor shall immediately correct or replace any ineffective or damaged BMPs

15.03 REQUIREMENTS FOR CONSTRUCTION PROJECTS EQUAL TO OR GREATER THAN 1 ACRE

If the construction project will disturb one acre or more of land, coverage must be obtained under the Construction General Permit issued by the SWRCB for stormwater discharges associated with construction activity. To obtain coverage under the Construction General Permit, Permit Registration Documents (PRDs) including a Notice of Intent (NOI) must be electronically filed by the project Owner on the SWRCB Storm Water Multi-Application and Reports Tracking System (SMARTS) database. The SWRCB will subsequently issue the project a Waste Discharge Identification (WDID) Number. The Contractor will not be allowed to begin work until the PRDs have been submitted to the SWRCB and the WDID number has been received.

The Construction General Permit also requires the preparation of a “Stormwater Pollution Prevention Plan” or SWPPP. The SWPPP must identify appropriate stormwater pollution prevention measures or BMPs that will be used at the site to eliminate or reduce pollutants in stormwater discharges during construction. The SWPPP must be kept readily available on the construction site at all times. For more information on the Construction General Permit, call the SWRCB’s Stormwater Information Line at: (916) 341-5537 or visit the SWRCB’s website at http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

PRDS AND SWPPP

For City-owned construction projects, Contractor shall follow the Stormwater Quality Control Requirements found in the project specific Special Provisions or Project Specifications.

For privately owned construction projects, the Applicant shall submit one copy of the construction project PRDs and SWPPP to the City of Modesto Land Development Engineering Division and follow all requirements listed below.

1. The submittal shall consist of all required PRDs, including but not limited to a Notice of Intent (NOI), a Site Map and the project SWPPP. All PRDs shall be certified by the property Owner.

2. The Applicant shall submit construction project PRDs with an application for a Grading, Demolition or Building Permit. The City’s review comments will be provided within 15 working days (10 working days for a second submittal) and the Applicant shall revise the PRDs and re-submit to the City. The PRDs shall be completed to the satisfaction of the City prior to the issuance of a Grading, Demolition or Building permit.
3. The SWPPP shall be developed by a Qualified SWPPP Developer (QSD) as defined by the Construction General Permit.

   a. The SWPPP shall be developed to implement the minimum required BMPs and any additional BMPs necessary to meet the Construction General Permit objectives.

   b. The SWPPP shall include a construction stormwater monitoring program to implement water quality monitoring and data reporting.

   c. The SWPPP shall include a detailed inspection, monitoring, and maintenance program that meets the requirements specified in the Construction General Permit and the manufacturers’ recommendations for BMP inspection and maintenance.

   d. The SWPPP shall briefly describe the general SWPPP training program for all subcontract personnel performing tasks that may result in pollution of storm water.

   e. The SWPPP shall contain documentation of the training and qualifications for QSD, QSP, Contractor and any other personnel that implement BMPs and perform inspections.

   f. All subsequent amendments to the SWPPP shall be made and certified by a QSD, and submitted to the City’s Stormwater Inspector for review and acceptance.

4. The City’s acceptance of the SWPPP does not relieve the property Owner of responsibility for the quality and adequacy of the SWPPP. Such acceptance does not warrant, acknowledge, or admit the quality and adequacy of the SWPPP.

ANNUAL REPORTS AND OTHER REPORTING

1. The property Owner shall submit annual reports to the SWRCB meeting the requirements of the Construction General Permit by September 1st of each year when field work has been underway during the preceding 12 months.

2. In the event of an exceedence of an applicable NAL, the property Owner shall submit an NAL Exceedence Report to the SWRCB within four Calendar Days of the end of the storm event in which the exceedence occurred. Exceedence and violation reports must contain proposed corrective actions and a time schedule to complete the actions. The property Owner shall provide the City a copy of any NAL Exceedence Reports when they are submitted to the SWRCB.

3. The property Owner shall provide the City a copy of any SWPPP amendments, sample results, Notices of Termination (NOT) or other documents or reports when they are submitted to the SWRCB.
BEST MANAGEMENT PRACTICES AND IMPLEMENTATION

1. The QSD, QSP and Contractor shall use the “California Stormwater Quality Association Stormwater Eest Management Practice Handbook for Construction” 2009 edition, as guidance in developing and implementing a SWPPP for this project. To use the electronic version, go to the following internet website: www.casqa.org.

2. The property Owner shall provide a Qualified SWPPP Practitioner (QSP) as defined by the Construction General Permit who shall assume sole, complete, and continuous responsibility for storm water pollution prevention, runoff management and erosion and sediment control at the work site during construction.

3. The QSP shall implement all measures necessary to comply with the Construction General Permit; prepare all reports, plans, and documents as required by the Construction General Permit; perform all sampling and inspections as required by the Construction General Permit; furnish, install, and maintain all pollution prevention, erosion and sediment control measures required by the Construction General Permit or described in the SWPPP or REAPs; and implement monitoring programs, record keeping, maintenance, inspection, repair, training, and sampling as required in the Construction General Permit.

4. Prior to commencement of any field work, the QSP shall meet with the City Stormwater Inspector to review the implementation of the SWPPP. The purpose of the meeting will be to review the Contractor’s procedures and to develop mutual understandings relative to compliance with the Construction General Permit, SWPPP and administration of the Contractor’s erosion control and pollution prevention program.

5. The QSP shall immediately notify the City of any sample results that exceed a NAL and provide copies of the field logs by the end of the day the samples were collected. Deficiencies noted during the monitoring and inspections shall be corrected within 72 hours of identification, or sooner if a rain event is predicted.

ENFORCEMENT

Per Modesto Municipal Code, Section 5-10.501(e) and 5-10.702, the construction project shall be subject to Notices of Violation (NOVs) resulting in possible Administrative Compliance Orders, Stop Work Orders and Civil Penalties of up to $25,000 per violation per day for failure to implement appropriate best management practices at the construction site.

Per the State’s Porter Cologne Water Quality Act, the construction project shall also be subject to inspection by Staff from the Central Valley Regional Water Quality Control Board who have the authority to issue Notices of Violation (NOVs) and Penalties of up to $10,000 per day and $10,000 per gallon for non-compliance.
15.04 PERMITTING

The submittal process required to obtain a grading permit from the City of Modesto is detailed in Standard Specifications, Chapter 2, Section 2.02.

15.05 INSPECTION

Contractors (or other responsible party) shall conduct regular inspections and maintenance of stormwater BMPs on the construction site. Active construction sites may be visited at any time by City or State Water Board inspection staff. Violations will be enforced per the Modesto Municipal Code Title 5, Chapter 10, Article 5.