



City of Paso Robles Community Development Department Construction Site Storm Water Quality Requirements

Overview of the City's Construction Storm Water Program

The City of Paso Robles is committed to protecting the water quality of nearby creeks and streams and to preserving the overall health of our community. One of the major contributors of pollution within our City is construction activity, especially sediment laden storm water runoff. Sediment levels in construction site runoff are typically far greater than levels from urban areas or forest lands. During a short period of time, construction activity can contribute more sediment to streams than can be deposited naturally over several decades, causing physical and biological harm to our waters. The Environmental Protection Agency estimates that 20-150 tons of soil per acre is lost every year to storm water runoff from construction sites. Many studies indicate that controlling erosion can significantly reduce polluted storm water runoff.

Below is a list of pollutants commonly associated with construction activity:

- Sediment
- Concrete liquid waste
- Paint and stucco
- Soil amendments (lime fly ash)
- Trash
- Oil and grease
- Petroleum
- Asphalt products
- Herbicides, fertilizers, and pesticides
- Joint and curing compounds

To address construction related storm water pollution, the City of Paso Robles requires all projects to implement Best Management Practices (BMPs). BMPs are a practice or combination of practices that prevent or reduce adverse affects of storm water runoff and/or associated pollutants. Following are the major categories of BMPs that are required to be considered for all construction projects:

- **Soil Stabilization-** BMPs that prevent erosion from occurring.
- **Sediment Control-** BMPs that remove sediment once it is suspended in storm water runoff.
- **Tracking Control-** BMPs that eliminate tracking of sediment off of a construction site.
- **Material and Waste Management-** BMPs that are implemented to protect storm water runoff from toxic materials or chemicals.
- **Dust Control-** BMPs which prevent wind erosion.
- **Vehicle and Equipment BMPs-** address pollutants associated with construction related equipment and vehicles.
- **Dewatering Measures-** BMPs that are implemented during dewatering activities (footing construction, culvert construction, groundwater, etc.)

The following section contains guidance that can be used by developers, contractors, commercial or small residential development to control storm water pollution during construction activities and outlines special requirements for projects that create 1 acre or more of disturbed soil areas.

SWPPP Information Requirements for Projects That Will Create 1 Acre or More of Disturbed Soil Area.

The California State Water Resources Control Board (SWRCB) requires all construction projects that will disturb 1 acre or more of soil or smaller sites that are part of a common plan of development to obtain permit coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharge Associated with Construction Activity (WQ Order No. 99-08-DWQ) (General Construction Permit). To obtain General Construction Permit Coverage, the owner or developer is required to submit a Notice of Intent (NOI) application, along with a fee, to the SWRCB. Once coverage under the General Construction Permit is obtained the owner/developer is required to

develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The City of Paso Robles will require submittal of the SWPPP and proof of permit coverage prior to the issuance of a grading permit. The SWPPP must be accepted by the City and implemented prior to the start of construction. The General Permit and NOI application can be obtained at:

<http://www.swrcb.ca.gov/stormwtr/construction.html>

The SWPPP Document must be available at the construction site at all times.

The SWPPP must include the following:

- The NOI Receipt Letter with the Water Discharge Identification Number (WDID#).
- A certification page signed by the owner of the construction site.
- Description of the nature of the construction activity.
- Identification of a person responsible for SWPPP implementation.
- Identification of potential pollutants.
- Amount of planned disturbed soil area.
- Identification of receiving water body.
- Description of soils present at site.
- Site calculations (run-off coefficient, amount of run-on coming onto the site, and pre and post construction amount of impervious surface)
- Construction activity schedule.
- Topographic map of site.
- Identification of post construction storm water controls.
- Identification of BMPs proposed.
- Identification of Sample and Analysis Plan (SAP) requirements.
- SWPPP site map, depicting locations of storm drain components, drainages, receiving waters, identification overland flow direction, site elevation, BMP implementation, material and waste storage areas, and discharge locations.
- Amendments to the SWPPP must be completed any time construction activates change, BMP implementation changes significantly, if there is a violation of the permit or at the request of the City or the Regional Water Quality Control Board (RWQCB) staff.
- Compliance with the SWPPP must be certified annually. The signed Annual Certification must be kept with the SWPPP Document on site.
- Site inspections must be completed on a bi-weekly basis during the non-rainy season (April 16th to October 14th), once per week during the rainy season (April 15th to October 15th), before and after a rain event and at 24-hour intervals during an extended event. The site inspection must include a maintenance log which identifies BMPs repaired, replaced, or new added.
- All site inspection records must be kept on site with the SWPPP Document.

This fact sheet only provides a summary of the requirements of the General Construction Permit. Please review the Permit itself for more detailed information.

Site Requirements

Site Clean Up Area

An area shall be designated for workers to clean up equipment and tools that will prevent stucco, concrete, paint or wash water from entering storm drains, lakes, streams or other watercourses. Clean up area must be a minimum of 10' back of walks, a minimum of 100' from any storm drain inlet, and large enough to accommodate disposal of concrete slurry. Stabilized access is required for any clean up area that is not accessible from a paved area. Current areas shall be identified as an amendment to the on-site SWPPP Document.

Solid Waste Management

An area shall be designated for construction workers to deposit construction waste materials in a location away from drop inlets, curbs or source of runoff. The area must be at least 50' from storm drains, road ditches, and watercourses unless protected. Provide separate containers for handling of used stucco and concrete bags, wet paint cans, oil, solvents, etc.

Drain Inlet (DI) Protection

All DIs affected by the construction activities shall be protected to keep all silt, construction materials, and any water containing construction materials from entering storm drains, lakes, streams or watercourses. DI protection is to be checked and serviced on a regular basis, with additional checks prior to and after each storm event. Cleaning of DI

protection must always be performed away from any area that might allow dirty rinse water to flow into DIs. DI protection includes storm drain inlet filter bags, fiber rolls (as per manufacturers recommended installation instructions), and rock bags to trap excess silt.

Cleaning of Streets/Sidewalks

All silt, construction materials, and water containing construction materials need to be prevented from entering storm drains, lakes, streams or other watercourses. Shoveling, scraping or dry sweeping prior to water washing of streets, curbs and gutters, and after any storm event is effective maintenance.

Sediment and Erosion Control

Keep all loose dirt and mud off sidewalks, gutters, and streets to prevent silt, construction materials, and water containing construction materials from entering storm drains, lakes, streams or other watercourses by implementing preventive measures. Undercut back of walks to create a small trench, cut lots to grade away from walks, and install fiber rolls at back of walks to prevent sediments from washing out onto the sidewalks. Keep loose materials a minimum distance of 2' to 4' back of walk. Install sediment and erosion control blankets at back of walk and on slopes to stabilize soil. Lay gravel/rock bags in the gutters every 50' to 100' to collect silt. Install straw with tackifier for erosion control.

Concrete/Stucco Equipment

Any concrete/water mixture or hazardous pollutants must not enter storm drains, lakes, streams or other watercourses. Concrete trucks and pumps must use designated area(s) for cleanup and washouts. When in use, keep pumps off sidewalks and streets. Use tarp under pumps, shovel off excess concrete mixture, and use absorbent for oil/fuel leaks. If concrete bags are used, bags must be disposed of in designated clean area(s).

Mixers are to be placed on lots. Lots are to be graded to prevent spilled concrete/stucco or water mixture from reaching the sidewalks, gutters, drop inlets or drainage ditches. Protect mixers with tarps or plastic under area and berms of sandbags or gravel bags around edges to contain spills and/or wash water. Pump contents of bermed area to a location that will prevent any contaminants from reaching storm drains. Any wash water from concrete aggregate flatwork shall be contained in a tarped and bermed area and removed in an approved manner.

Saw Cutting

Any saw cutting activities shall implement the same preventive measures included with concrete equipment. Containment of concrete/water mixture or hazardous material is required. A vacuum, dam, and pump shall be use to pump runoff from saw cutting to a truck or other approved area.

Paint Wash Area

Painting equipment and tools are to be cleaned in designated areas. If a wash area is not available, rinsing is not to be done on lot fronts where rinse water may reach the streets.

Concrete/Stucco Tools

Concrete and stucco equipment and tools should be cleaned in designated areas only. Concrete and stucco rinse water is highly alkaline and considered a pollutant to groundwater and surface water. Rinse areas should be visibly marked and self-contained. Wash-out units can be dirt berms, hay bales or metal containers, but must be water-tight and serviceable. Wash-out units should be serviced regularly and always have extra capacity for storm events.

Material/Dirt Stockpiles

All material stockpiles need to be protected from waterways, wind, and rainfall. All materials should be securely covered when not in use and kept away from gutters, creeks, ponds, and other waterways. Materials must be contained well enough to prevent runoff to adjacent lots, streets or waterways.

Tracking

Access to site should be limited to as few locations as possible. Inactive access points should be blocked to prevent unauthorized access and to direct construction traffic to active accesses. Access points should be stabilized with rock to prevent track-out. Active accesses should be swept of dirt

and debris immediately upon occurrence and at the end of each work day. Stabilized accesses should be at minimum 50 feet long and 15 feet wide.

Portable Toilets

Portable toilets should be kept off streets and behind curbs and sidewalks as much as possible and at least 50 feet from storm drain inlets. If there are no reasonable off-street locations for the placement of a portable toilet, it should be placed at least 100 feet from storm drain inlets. Portable toilets should always be secured or weighted to prevent tipping. Securing toilets with stakes or gravel bags is often effective protection against tipping.

Landscaping

Landscaping materials should always be stored away from streets and drainage ways. All active landscaping areas should be swept at the end of the day. Landscapers must be careful to keep irrigation water out of gutters that contain dirt from recent work. Be sure that all gutters are clean prior to irrigation.

Power Washing

When power washing, careful attention must be paid to resulting runoff. Power wash runoff must be reclaimed. Down gradient storm drains should be protected from rinse water. All rinse water should be pumped behind curbs to grass or other lot area where it will not enter the storm drain.

Available Resources

There are many resources available for free that can assist in the development and implementation of a SWPPP Document and to aid in BMP selection and implementation. In addition to the two sources identified below, City staff can also provide assistance.

California Stormwater Quality Association

<http://www.cabmphandbooks.com/Construction.asp>

California Department of Transportation (Caltrans) Construction Storm Water Program

<http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm>