

Stormwater: Construction Site Requirements

Department: Environmental Protection

Program: Stormwater

Owner: Program Manager, Darrin Gambelin

Authority: ES&H Manual, Chapter 26, Stormwater

This list will help SLAC employees and subcontractors working on construction, soil excavation, and grading projects inspect their job sites for compliance with stormwater management requirements. Included are inspection items that apply to all phases of the construction project, from planning to re-vegetation. For additional information, contact the Safety Service Desk at Ext. 4554 or the stormwater program manager.

Before Construction

All sites

- The project manager or university technical representatives (UTR) must collaborate with SLAC employees and subcontractors to plan the project.
- The project plan must include the time and materials required to meet environmental protection requirements.
- The UTR must review with employees and subcontractors specific required stormwater protection actions that are to be performed before, during, and after the project.

Construction Sites Larger than One Acre

- Notice of intent (NOI) must be submitted at least 10 days before work begins. The project manager will collaborate with the stormwater program manager to secure an NOI from the regional water quality control board.
- Determine if additional requirements apply, such as a joint aquatic resources permit Application (JARPA) permit, or a waste discharge requirement (WDR). See Stormwater: Permit Requirement Determination Flowchart.¹
- After the project manager obtains the required permit(s), a project-specific stormwater pollution prevention plan (SWPPP) must be formulated that is based on both the permit and the requirements of this chapter.

Note SWPPP preparation should be included in the construction subcontractor's scope of work. The SWPPP is the plan for mitigating environmental pollution before, during, and after the project.

During Construction

The UTR will regularly review the construction, soil excavating, and grading activities at the construction site to ensure that the following are performed or implemented properly:

1 Stormwater: Permit Requirement Determination Flow Chart (SLAC-I-750-0A16S-010), <http://www-group.slac.stanford.edu/esh/eshmanual/references/stormFlowPermit.pdf>

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- Project-specific SWPPP, if applicable
- Storm drain protection and material handling
- Spill prevention
- Spill cleanup

Storm Drain Protection and Material Handling

Constructing Protective Measures

Construction personnel will

- Construct diversion dikes to channel runoff around the construction site, as appropriate
- Remove existing vegetation only when absolutely necessary
- Protect sloped areas by installing silt fencing, erosion control matting, wattles, or other protective measures
- Place straw bales, wattles, berms, inserts, or other inlet protection measures to protect storm drain inlets from runoff
- Maintain a stabilized entrance/exit for all construction sites. Properly grade the entrance/exit and then cover with aggregate. Use gravel approaches to reduce soil compaction and limit the tracking of sediments into streets.
- Maintain good housekeeping. Keep the site free of debris and sweep paved and concrete surfaces regularly.

Ongoing Maintenance

Construction personnel will

- On no less than a daily basis, cover all stockpiled soil and excavated materials with secured plastic sheeting, or place the soil and excavated materials in covered bins
- Dry sweep the entry roadways whenever construction traffic has deposited soil from the construction site
- Clean the worksite by the end of each day by dry sweeping paved areas. Only use water to wash fine soil onto dirt areas, not down the street. (Never wash soil down storm drains.)
- Inspect each construction site before, during, and after a storm. Remove any buildup of sediment. Ensure that all storm drain protection measures are working properly
- During the rainy season (October 1 through May 31), cover freshly graded surfaces with temporary vegetation, gravel, mulch, or erosion control blankets

Spill Prevention

Personnel will

- Maintain all vehicles and heavy equipment
- Inspect frequently for leaks
- Conduct all vehicle/equipment maintenance and refueling at one location away from storm drains
- Use secondary containment, as feasible

Spill Cleanup

Personnel will

- Clean up leaks, drips, and other spills immediately. To obtain services or supplies, call the Waste Management (WM) Group at Ext. 2399
- Sweep up dry spilled materials immediately
- If a spill is on pavement, absorb the spill with absorbent material, then put it in a container issued by WM
- If the spill is on soil, scoop up the affected dirt and put in a container issued by WM
- Use dry cleanup methods (saw dust, cat litter, or rags). Do not use water to hose down pavement or impermeable surfaces where fluids have spilled.

After Construction

Construction Debris Cleanup

- Inspect all catch basins in the area of the site.
- Clean the site and remove all construction debris.

Re-vegetation

- Prevent erosion by covering bare soil with erosion control matting and planting/hydroseeding fast-growing annual and perennial grasses. Such vegetation shields and binds the soil.
- Plant permanent vegetation as soon as possible after excavating and grading activities are complete.