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**Activity:** Sediment and Erosion Control

**Description:**
To prevent or reduce impacts during construction activities

**Targeted Activities:**
- Building construction
- Utility construction
- Pavement removal and installation
- Bulkhead renovations and installation

**Development EMPs:**
- Minimize the amount of time an area is without cover.
- Minimize the quantity of soil exposed at one time.
- Prevent runoff from off-site areas from flowing across disturbed areas.
  - Install berms or dikes
  - Maintain original vegetation as much as possible. Mark, flag, or fence areas where vegetation should be preserved
  - Do not locate construction routes, stockpiles, etc, where significant adverse impact on existing vegetation may occur
  - Plant grasses, shrubs, or ground cover plants in drainage pathways to slow erosion
  - Use mulching after disturbing soil.
    - Addition of a cover of gravel, wood chips, or straw will help to minimize erosion processes.
    - Consider use of netting or mats as a supplement to mulching.
  - Create buffer zones between construction area and storm drain/receiving water. Buffer zones should have established natural vegetation to remove sediments.
  - Use water (as appropriate) to control dust in dirt and debris pile areas.
  - Minimize use of high pressure/low volume water sprays
  - Store dry materials under cover, away from drainage areas
  - Do not wash sweepings into the street or storm drain
  - Consider the use of structural sediment and erosion control devices including:
    - Earth dikes
    - Drainage swales

**Potential Pollutants:**
- Sediments
- Dust

**Target Environmental Media:**
- Surface water
- Air

**US Regulatory Requirements & Guidance:**
- 40 CFR 122 NPDES Regulations for Stormwater Discharges
- 49 CFR 171-173, 175, and 177 Department of Transportation (DOT) Regulations
- EPA Guidance - Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices
- California Storm Water BMP (Construction Activity BMP) Handbook, March, 1993
Development EMPs continued:

- Interceptor dikes and swales
- Temporary storm drain diversion
- Subsurface drains
- Silt fences
- Straw bale barriers
- Brush barriers
- Gravel or stone filter berms
- Storm drain inlet protection

Minimize off-site vehicle tracking of sediments

- Stabilize construction entrances, construction roads, parking areas, and other on-site vehicle transportation routes to ensure reduction of off-site tracking of mud, dirt, and rocks, and maintain these areas throughout the project
- Designate wash-out areas for trucks where washwater can be contained and isolated from stormwater run-on. The hardened residue can be disposed of as construction debris or fill. Several designated wash-out sites located at strategic areas may be needed to serve large construction sites.
- Train truck drivers to clean and maintain their equipment in a responsible manner both before coming onto port grounds and at the site where the materials are used. Drivers should use only the designated wash sites to clean out their trucks
- Paved roadways used for access to the construction site should be swept regularly to remove any excess mud, dirt, or rocks tracked from the site.

Considerations:

- Train workers to minimize water use and clean equipment in a manner that minimizes discharges to receiving waters
- All disturbed areas of the construction site and all material storage areas should be inspected and maintained.
- All erosion and sediment controls implemented at the construction site should be inspected regularly to ensure effectiveness
- Watering to control dust may require frequent, often daily, attention.
- Maintaining original vegetation requires planning and may not be possible based on the required uses of the site
- Shrubs, grass, and trees planted to control erosion must be watered and cared for
- Stabilized roads and entranceways must be maintained on a regular basis to control their erosion, and must be inspected weekly and after each rain.