

BEST MANAGEMENT PRACTICES



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VEHICLE TRACKING AND DUST CONTROL

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3.1 STABILIZED CONSTRUCTION ACCESS

DESCRIPTION

Stabilized construction access is required to minimize the tracking of soils and sediment from vehicles leaving the construction site. Installation of a rock pad or a construction mud mat at the site's exit/entrance should be used to protect streets and public rights-of-ways. Construction mud mats are comparatively easier to install and remove, and may best fit smaller more urban sites, due to space constraints.

GUIDELINES

- Install the construction entrance after fencing off "no disturbance" areas and establishing perimeter controls.
- Design mats and rock pads to support the heaviest and widest equipment entering the project site.
- Anchor construction mud mats to the adjacent surface to ensure stable placement.
- Grade the construction exit/entrance to prevent runoff from leaving the site.
- Direct all runoff from the access through a sediment-trapping device prior to discharge.

MAINTENANCE

Inspect the construction access points daily. If clogged with sediment and debris, clean or replace the rock or mats. Maintenance also includes the cleaning and repair of any structures used to trap sediment.

All materials spilled, dropped, washed or tracked from vehicles onto roadways or into the stormwater collection system shall be removed or cleaned up immediately, and no later than the end of the work day. Applying water to the roadway before sweeping or vacuuming may help loosen sediment, provided that discharge to the stormwater collection system does not occur.



The entrance to this construction site is unstabilized, and will promote dirt tracking.



A gravel construction access is properly installed at the site entrance.

3.2 STABILIZED CONSTRUCTION ROADWAY

DESCRIPTION

Efficient construction road stabilization not only reduces onsite erosion, but can help to avoid instances of immobilized machinery and delivery vehicles, and generally improve site efficiency and working conditions during adverse weather.

APPLICABILITY

Stabilization of construction roads should occur under the following conditions:

- During wet weather
- During activities that create dust
- When adjacent to water bodies
- When soils are easily erodible
- Where phased construction will cause roads to be placed in and out of service

GUIDELINES

- Access roads, driveways, subdivision roads, parking areas and other on-site vehicle transportation routes should be stabilized immediately after grading.
- A temporary gravel roadway should be considered during the rainy season and on slopes greater than five percent.
- Roadway slope should not exceed fifteen percent without an alternate surface material. Design stabilized access to support heavy vehicle and equipment use.
- The temporary roadway must be removed, restored and permanently stabilized when construction is complete.

MAINTENANCE AND INSPECTION

Periodically apply additional aggregate or base material on gravel roads. If using a soil based construction road, apply water at a minimum of three times per day during the dry season for dust control, or as indicated from site traffic. Increase water application according to site traffic.



The contractors properly installed a stabilized construction roadway.



The entrance to this site requires a stabilized roadway.

3.3 TIRE WASH

DESCRIPTION

Tire wash facilities should be located at construction access points to remove sediment from tires and undercarriages, and prevent sediment from being transported onto roadways. The wash water should be discharged to a settling basin or dewatering device prior to leaving the site.

GUIDELINES

- Incorporate tire wash facilities with a stabilized construction access. There should be separate drive-out space for the tire wash.
- Construct tire wash facilities on level ground when possible, or on a pad of coarse aggregate. A geotextile fabric should be placed below the aggregate.
- Wash racks should be designed and constructed to support anticipated traffic loads.
- Use a drainage ditch to convey the runoff from the wash area to a sediment trapping device. The drainage ditch should be of sufficient grade, width and depth to carry the runoff.
- Direct all traffic leaving the site with mud-caked tires and/or undercarriages use the wash facility.
- Barricades may be installed to collect, control, and hold wash water, especially over asphalt and concrete surfaces.

MAINTENANCE AND INSPECTION

Inspect the tire wash area daily. Remove trapped sediment on vehicles to ensure it does not travel offsite, and enter the storm drain system.

SIGNS OF FAILURE:

SYMPTOMS	CAUSES	SOLUTIONS
<ul style="list-style-type: none"> • Mud stays on tires 	<ul style="list-style-type: none"> • Sediment exceeds 1/3 of wash facility capacity • Reused turbid water • Insufficient water spray intensity and/or volume available • Insufficient water contact time 	<ul style="list-style-type: none"> • Remove buildup in wash area • Replace water used in facility. Appropriately dispose of removed materials • Increase water pressure • Clean water feed lines/spray heads • Adjust site exit procedures to allow for soak time in wash area. • Add a second tire wash • Add a grate to vibrate sediment off of tires



Construction area without a tire wash.



Effects of tire wash removal.

3.4 STREET CLEANING

DESCRIPTION

Street sweeping and vacuuming may be used to remove tracked soils, sand and other debris from public streets and paved areas.

GUIDELINES

- Streets should be cleaned with a broom.
- The site manager is responsible for cleaning construction vehicles leaving the site on a daily basis.
- Adjacent street frontages should be swept at least once a day to remove silt and other construction related debris.
- Dispose of sweeper wastes at an approved dump-site.



Site violations: unprotected inlet, tracking mud and concrete waste.



Proper street cleaning.



The polluted waste within street needs to be vacuumed and removed.



A street cleaning truck headed to a construction site.

3.5 DUST CONTROL

DESCRIPTION

Dust control reduces surface activities and air movement that cause dust to be generated from disturbed soil areas. These practices consist of applying water or commercial stabilizers to prevent or minimize generation of dust.

GUIDELINES

Structural Controls

The following examples are methods of dust control to be used during work site operations:

- Stabilize storage, vehicle movement, and parking areas by installing gravel over geotextile fabric.
- Install or maintain vegetative or structural barriers.
- Sweep or vacuum paved surfaces to remove tracked soil.
- Apply mulch to exposed soil.
- Use tarps to cover stockpiles.
- Load trucks carrying excavated material so that the material does not extend above the walls or back of the truck bed. Wet the surface of each load and tightly cover before the haul truck leaves the loading area.



Water is applied to exposed soil and stockpiles to prevent dust generation.



Water is applied to exposed soil and stockpiles to prevent dust generation.

3.5 DUST CONTROL

WATER SPRAYING

Mist the immediate excavation area with a water spray to prevent airborne dust particles. During dust generation activities, perform continuous water spraying. While spraying, be sure to prevent ponding and/or generation of runoff that could potentially reach storm drains inlets.

COMMERCIAL STABILIZERS

Chemical based stabilizers may be used on site as an alternative to water. Stabilizers include tackifier mixtures and other binding agents. Stabilizers typically come in a concentrated form and are applied through a surface spray either by a water truck or a handheld sprayer.



In order to reduce the dust generated by delivery trucks, water should be applied to all disturbed areas.