

Stormwater Control: Implementing Construction Site Best Management Practices (BMPs)

What is the Problem?

- The leading cause of soil erosion and sediment runoff is from residential and commercial construction sites.

Why is Soil Erosion and Sediment Runoff a Problem from Construction Sites?

- Runoff from construction sites contains pollutants such as: sediment, pesticides, fertilizers, petroleum products, construction chemicals, contaminated soils, paints, debris, and sanitary waste.
- It's required that contractors use specific erosion and sediment control measures during construction (for sites 1 acre or greater in size) to minimize the amount of pollutants entering our waterways.

What is Mandated for Construction Sites 1 Acre or Greater in Size?

- Implement a Stormwater Pollution Prevention Plan (SWPPP) or Erosion and Sediment Control Plan before construction starts.
 - The plan should include soil stabilization measures, perimeter controls, onsite and offsite material storage areas, appropriate housekeeping practices, and runoff treatment practices that must be implemented and maintained before and during construction activities.
- Implement a Post-Construction Plan – Runoff from areas of new development or redevelopment significantly affects receiving waterways.
 - Post-construction measures should comply with engineering plans, implement management practices to prevent, reduce or treat stormwater runoff, establish areas to collect and treat stormwater, and incorporate vegetation methods.

Erosion and Pollution Controls



Perimeter Protection

Silt fence should be used to filter sediment and should be located downslope of disturbed areas. It must be properly installed prior to grading.

Silt fence that has fallen or is damaged in any way must be replaced immediately.

Consider using qualified personnel to install your control measures.

Stabilized Construction Site Entrances

Minimize off site vehicle/equipment tracking of sediments onto publicly or privately owned paved surfaces by installing a temporary stabilized construction site entrance.

Stabilized construction site entrances shall be constructed before clearing and grading begins.

Construction entrance(s) shall be inspected daily for evidence of off-site vehicle tracking of mud and dirt.

Any sediment that is tracked onto roads must be swept up immediately. Sediment shall **not** be removed by washing/flushing with water.





Sediment Basins

Sediment basins shall be installed prior to clearing or grading.

If sediment basins need to be removed for clearing or grading, additional traps/ponds/systems should be installed on site to accommodate storage capacity.

Catch Basin Inserts and Inlet Protection

Catch basin inserts and/or inlet protection should be used to prevent sediments from entering the storm water system.

Catch basin inserts and/or inlet protection must be inspected regularly and cleaned when sediment has covered the fabric or insert is full of sediment.



Temporary Stabilize Disturbed Areas

Preserve existing vegetation when possible and stabilize any disturbed areas where construction activity has temporary or permanently ceased.

There are several options to accomplish temporary stabilization including revegetation, sod stabilization, mulching, geotextile fabric, and others.

Ensure that the method used is effective. Stabilization is not the mere application of grass seed. Bare areas must be maintained until vegetation has been established at 70% density.

Dust Control

Dust must be controlled on your construction site.

A water truck should only spray enough water to control the dust or reach the optimum moisture content for soil compaction.

Water should **never** be applied in a manner that would cause runoff from the site that may pollute waterways.



Disposing Waste Properly

You are responsible for all waste generated at your construction site. All waste must be placed in a trash container at all times and kept covered to prevent stormwater exposure.

If waste is deposited or blown into a creek/river/stream or any other area outside the site, it must be picked up immediately and disposed of properly.



Conducting Inspections

- A qualified person is required to inspect the site for all erosion and sediment control measures at least once a week and after each 0.5 inch of rainfall. Inspections must be documented.
- Not all erosion and control measures will work everywhere. You are responsible for cleaning and replacing any measure as necessary.
- The SWPPP must be modified based on the results of the inspections.

For more information on stormwater, please contact the Storm Water Hotline monitored by the Public Works Department at 317-894-6210.