

SEDIMENT IN STORMWATER

Sediment from construction sites can contain pollutants that will enter waterbodies unless the sediment is retained on site.

In addition to the toxic effects of the pollutants, sediment can also impact water quality by adding suspended solids/turbidity.

Turbid water contains small particles that can clog fish gills and limit light penetration into the water. It can also negatively impact the temperature and oxygen levels of the water.

The harmful effects of turbidity can be avoided by containing sediment on the construction site and out of nearby watercourses.



CONTACT US

Connecticut Department of Transportation

Office of Environmental Planning

www.ct.gov/dot/CTDOT-MS4



CONNECTICUT DEPARTMENT
OF TRANSPORTATION

Construction Stormwater Best Management Practices (BMP'S)



Source: US EPA

STORMWATER POLLUTION

If not properly managed, stormwater runoff can pick up many pollutants from construction sites.

EROSION AND SEDIMENTATION (E&S) CONTROLS SHOULD BE IN PLACE TO STABILIZE SOIL ON THE SITE

Types of E&S controls include:

- Erosion Control Matting
- Riprap Slope Protection
- Silt Fence
- Seeding/Vegetation
- Stone Check Dam
- Anti-tracking Pad
- Dust Control

According to DOT Form 817, all E&S Controls should be checked at least weekly, immediately after a rainfall event, and daily during periods of prolonged rainfall



ILLICIT DISCHARGE ON CONSTRUCTION SITES

Any discharge into the storm sewer system other than stormwater runoff is considered an illicit discharge. Construction projects should be carefully monitored for illicit discharges. If odor or discoloration is noticed in the water, it should be reported immediately to DOT.MS4@ct.gov.



LOW IMPACT DEVELOPMENT (LID)

Low Impact Development (LID) techniques can retain stormwater on site and minimize the volume of stormwater runoff collected by the storm sewer system.

Some examples of LID include:

- Rain Gardens/Bioretention
- Infiltration Trenches/Dry Wells
- Vegetated Swales, Buffers, and Filter Strips
- Permeable Pavement

By implementing LID on construction projects, stormwater can be kept on site, which reduces the likelihood that polluted stormwater or eroded sediment will reach the storm sewer system.

See Section 4.4 of the 2004 DEEP Stormwater Quality Manual for more information on LID.



Source: US EPA

BMP'S TO MINIMIZE STORMWATER POLLUTION

- Maintain proper E&S Controls
- Monitor for illicit discharges
- Implement LID techniques
- Keep spill kit on site
- Protect nearby catch basins and watercourses

Reference the 2002 Connecticut Erosion and Sedimentation Control Guidelines for more BMP's

