SWEMA FACT SHEET

Construction Site BMPs

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Products for utilization on construction site before and during the construction phase of the project to control stormwater discharge or pollutants commonly found in stormwater. Product examples are silt fencing, inlet protection and dewatering bags.

Almost everyone is aware of construction site BMPs through the use of (almost ubiquitous) silt fence to control sediment. In reality, much of the silt fence employed on construction sites is poorly designed and often not maintained. Still, it is a reminder of the pervasive need to control pollution of all types during construction.

Regarding sediment controls, the first important principle to remember is that controlling erosion is the first priority on any construction site. There are many ways to accomplish erosion control, but it is much easier to prevent sediment from eroding when the ground is disturbed than it is to control sediment once it starts washing away from the construction site. Erosion control techniques include artificial and natural ground covers, careful grading methods that avoid concentrated flows, and limiting disturbed areas among others. Some erosion is unavoidable, and methods of trapping and holding sediments are then employed. Silt fence, inlet protection, check dams and settling ponds are among the methods employed to intercept and retain moving sediments.

It is critical to understand that sediments are not the only pollutants of concern during construction. There are numerous construction materials from concrete to treated lumber to roofing that can impact the water running off of a construction site. Many sealants, coatings and solvents are employed and almost all construction activities include the use of tools and heavy machinery that can have serious consequences if not used properly. Proper storage of construction materials, all types of liquids, and waste materials are part of a good plan to control pollution during construction.

The things mentioned here are not meant to be an exhaustive list, but should serve to put us on notice that construction site pollution control is much more than a silt fence placed along the property line. No matter which methods are utilized, there are three things that must be included with any BMP. The site design should utilize the proper BMPs for the job at hand, and those BMPs must be detailed so that they meet the specifications necessary to be effective. Proper design is the first critical step needed to make any BMP effective. The second step required is to be sure that the BMP is located, constructed, and implemented per the design. The third step is to maintain the BMP in working condition throughout the construction process. Sometimes this may mean removing accumulated sediment, reseeding, or touching up the grades in an area. Every BMP is different, but there is a need to review maintenance of every BMP on a regular basis. This is a critical need because a construction site changes every day, and a static drawing made at the time of permitting may no longer be valid.

In summary, construction site pollution control is more than managing sediment, and the BMPs selected for a site need to address all needs. Proper design, proper installation, and periodic inspection and maintenance are the process whereby BMPs actually do the job that they are intended to do.