The "Dirt" on the Construction Stormwater Permit

Noncompliance Penalties: An Overview

You may have heard that a site owner/operator can be fined up to $37,500 per day for failure to comply with their Stormwater Pollution Prevention Plan and the terms of the Stormwater General Construction Permit (SPDES GP-0-10-001). However, there are other penalties and actions possible that may present problems that are more immediate and perhaps less easily foreseeable. In many cases, if a site is found to be noncompliant to the extent that it presents, a potential threat to local water resources, the municipality or NYSDEC can place a stop work order on all activity other than that necessary to comply with the permit until the problem is corrected. The result is often substantial loss of time and money for everyone involved.

If a Water Quality Standards violation occurs (i.e. a visible contrast to natural conditions in the receiving water body, such as turbidity or muddy character of the water caused by introduction of sediment or other pollutants from a construction site), any or all of the above penalties may apply. A Water Quality Standards violation is a contravention of the NYS Environmental Conservation Law, and is therefore treated as a separate infraction in addition to any violation of the terms of GP-0-10-001. For Water Quality Standards violations or other significant violations, the NYSDEC may also elect to pursue a consent order **against an owner/operator and/or contractor**, requiring that certain actions be taken **at the owner or contractor's expense** to correct identified issues. Such an order may be enacted in place of, or in addition to, fines; in either case, it can rapidly become expensive and derail the progress of a project.

To avoid encountering these types of difficulties, it is always a good idea to cooperate and work with NYSDEC and/or the local municipality in an attempt to foresee potential problems at a site before they occur. This often happens most effectively through pre-construction meetings and consultations when necessary during the course of construction. Ask questions to ensure you understand the regulations, and work with the authorities to consider and discuss options and solutions when issues do arise.

Central New York Stormwater Coalition
Protecting Our Waters

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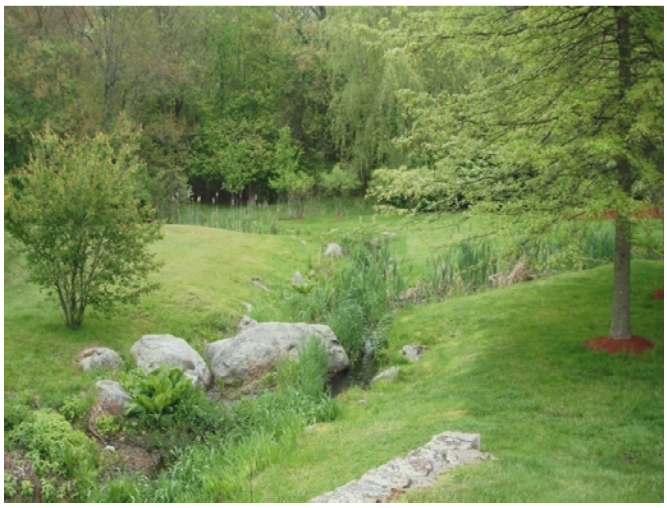
"Green" Stormwater Management: Reducing Runoff

The revised NYS Stormwater Management Design Manual (2010) presents a very different concept of stormwater management than that of the past seven years: the use of green infrastructure instead of traditional ponds and closed drainage systems. The principle behind green infrastructure is threefold:

1) **Reduce the amount of stormwater runoff generated by preserving natural features and resources**
2) **Reduce the amount of runoff generated by decreasing impervious surface**
3) **Treat runoff near its source in many small volumes, using practices designed to mimic natural features, rather than in one or a few large volumes via engineered structures.**



Grading will often allow runoff water to be dispersed to vegetated areas rather than directed to a conveyance structure or traditional stormwater management practice. Rather than cutting and filling a site to accommodate the project, it will be necessary to work with existing landscape topography and allow the natural conditions to drive the form and layout of the project.

Need more information?

Regulatory updates, training announcements, and other important notices regarding the construction stormwater permit can be found at http://www.cnyrpdb.org/stormwater/. Also check out the NYSDEC website at www.dec.ny.gov/chemical/8468.html. If you are interested in being added to our email distribution list, e-mail dkubek@cnyrpdb.org.

The margin for error in disturbing or clearing natural features such as trees, vegetation, existing drainage patterns, and resource buffer areas will be greatly reduced, because these elements are now considered functioning parts of the Stormwater Pollution Prevention Plan (SWPPP) rather than simply part of the landscape.

Some key things you should know during construction

- **Soil must be restored in order for most practices to function**
  - **Aeration, addition of organic matter, and decompaction are usually needed**
  - **Timing is critical - soil must be restored after grading is complete**
- **Vegetation selection is very important and standards must be carefully followed**
  - **Native species that are suited to conditions must be used**
  - **Maintenance and care are high priorities**
- **Wetlands, buffers, trees, and other natural landscape elements to be preserved must be conspicuously marked onsite**
- **Precise grading of fine-scale features is necessary**
- **If in doubt, check it out! The 2010 NYS Stormwater Management Design Manual is available on NYSDEC's website at:**

http://www.dec.ny.gov/chemical/29072.html

Some common types of green infrastructure you are likely to encounter in designs include:

Bioretention and rain gardens

- Manage runoff through infiltration and plant uptake of water
- Use a conditioned soil bed, sometimes containing an underdrain beneath, with vegetation in a shallow depression
- Bioretention includes a filter fabric layer, and curb cuts to connect it to adjacent pavement (or curbs may be absent)
- Rain gardens are smaller than bioretention and receive rooftop runoff

Pervious pavement

- Reduces runoff by conveying water through surface to filter into soil below
- Two general types available:
  - Paver blocks or grids
  - Porous pavement (asphalt or concrete)
- Usually includes a subsurface layer of aggregate and geotextile

Stormwater planters

- Three types: infiltration (no solid bottom), flow-through (underdrain at bottom) and contained (solid bottom)
- Runoff reduced through plant uptake and/or infiltration
- One variant is planting of trees in "boxes" set below the edge of the adjacent pavement

Vegetated swales

- Maintained, shallow turf-lined channel to convey runoff at a slow rate, allowing infiltration to occur
  - Can be used in street right-of-way and on developed sites in place of closed drainage
  - May include an underdrain and specialized soil medium

What is the 4-hour contractor certification *training* and how often must I obtain it?
The 4-hour contractor certification training is designed to ensure that contractors working on construction sites have the necessary knowledge to implement practices and techniques that prevent introduction of sediment and other pollutants to bodies of water. All contractors responsible for any installation or maintenance of erosion and sediment control practices must have received this training **within the past three years** in order to perform work on a construction site. The training can be obtained from Onondaga County Soil and Water Conservation District or from any of the sources identified on the NYSDEC website's training calendar at http://www.dec.ny.gov/chemical/8699.html. At all times, at least one contractor onsite must have in their possession a current certification card showing that they have completed the training in the last three years. A municipal inspector or state official can require an individual or firm to stop work and leave the site if they are not properly certified.

What is the "Contractor Certification *Statement*"? Who must sign it?
The SWPPP must identify the contractor or subcontractor(s) responsible for implementing each element of the erosion and sediment control and stormwater management practices on the site, including installing, repairing, inspecting and maintaining erosion and sediment control practices. Each of these contractors is required to sign a **certification statement** in the SWPPP acknowledging that they will comply with the SWPPP and the Stormwater General Construction Permit, GP-0-10-001. This includes not only the general construction site operator or land development contractor, but also subcontractors performing building, roadwork, and any activities that have the potential to result in runoff of sediment or other pollutants from the site.

Construction Site Waste Management: the "other" key SWPPP component

The requirement to manage and contain construction waste, debris, and chemicals on site often is not given the attention it merits. Failure to address this requirement can result in a citation from NYSDEC for a violation of water quality standards and the Construction Stormwater Permit. SPDES GP-0-10-001 requires that the SWPPP describe "pollution prevention measures to control litter, construction chemicals, and construction debris from becoming a pollutant source in the stormwater discharges." The construction site contractor is responsible for ensuring that these provisions are implemented. Materials and chemicals should be stored in a manner that minimizes exposure to stormwater, and located as far away as possible from bodies of water, drainageways, and wetlands. Waste must be disposed of in a timely manner and in accordance with applicable regulations; tires and other debris must not be used as fill or buried onsite.

Improper washing of concrete from trucks and equipment on the site is a permit violation. Liquid concrete should not be washed or allowed to flow into any drainage structure or body of water. A designated concrete wash station as far as possible from waterways should be equipped to collect the wastewater and dispose of it properly (i.e. have it hauled away or collect it for acceptable reuse). Alternatively, it may consist of a basin designed to allow washwater to evaporate, leaving hardened concrete that can be readily trucked away.

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