

Local NPDES Activity

For the past year, Ecologists at **Planning Resources Inc (PRI)** have driven by a vacant construction site in the northwest Chicago suburbs on a weekly basis. Last fall, the site was bustling with construction equipment. Soil was being moved, utilities were being installed, and ponds were being dug. The excavators have long since moved off the site after completing mass grading. A large topsoil stockpile, a stormwater detention basin, and large expanses of exposed land provide evidence of what had occurred. A large sign along the property frontage indicating the likely future use and the land behind the sign contains no buildings. This site is similar to many sites throughout the Chicago area, prone to dumping large quantities of sediments onto our lakes, streams, and rivers.

After seeing this partially developed site, we wanted to know how the local regulatory agencies were treating similar sites relative to the U.S. Environmental Protection Agency's (EPA) National Pollution Discharge Elimination System Phase II (NPDES) program. After all, the NPDES program requires developers to stabilize soils within seven days after construction activities have temporarily or permanently ceased. Based on phone calls to the Illinois Environmental Protection Agency (IEPA) and local Soil and Water Conservation District (SWCD) offices, the agencies responsible for overseeing compliance with the NPDES program, they are experiencing a similar trend: lower permit volumes. This translates to more time available to review construction sites for compliance with the NPDES program. According to the Lake County SWCD, prior to 2009, they monitored only 20 to 30 percent of construction sites for NPDES compliance. However, the number of construction sites being reviewed has risen to 60 to 70 percent as a result of the decrease in permit volume. Violations from the IEPA have increased as a result.

Common problems encountered during the agency site inspections included broken silt fence, silt fence installed in areas of concentrated flows, the accumulation of sediments at the storm sewer inlets, and contractors waiting until construction over the entire site is complete before stabilizing the site. When asked for advice to pass along to cost-conscious developers looking to maintain compliance with NPDES, the consensus was clear. Installation of temporary or permanent vegetation is the regulator's choice. Once the site becomes 70 percent stabilized, developers are submitting a Notice of Termination to avoid the \$500 annual permit fee and discontinue the weekly site inspections, as the potential for sediments discharging from a site is minimal. When stabilizing a site using seed, timing is everything. After September 15th, seeding typically is delayed because the growing season is nearly over and the chance of frost kill-off is greater. Dormant seeding can begin after November 15th and continue until the soil becomes frozen.

One surprise was regarding the use of straw bales as sediment control devices. The straw bale, recently frowned upon by the SWCDs, is making a comeback as an acceptable measure, if used at a concrete washout. The Illinois Urban Manual will be updated to reference the concrete washout detail. In the meantime, this detail can be found on our web site at www.planres.com/news.php.

Not only is water quality an issue at the local level, communities with a Municipal Separate Storm Sewer System (MS4) permit have a responsibility to police developments within their corporate limits. McHenry County SWCD recommends municipalities become active in site erosion control from the very beginning of a project and not wait until erosion becomes a problem. Furthermore, McHenry County SWCD encourages communities to request copies of the weekly site inspection reports along with site photographs as a requirement of the NPDES permit in an effort to better monitor their local site conditions. Communities should shut down construction sites that are unstable and have no action being taken. After all, a community is in violation of its MS4 permit if an individual construction site under its jurisdiction has a discharge of sediment. So far none of the agencies interviewed had knowledge of a community being cited a violation for problems with a development in its community. That said, there are a few communities with repeated problems that are being watched closely.

The future of the NPDES program will play out over the next four years. Early speculation indicates that water quality standards will be established for construction sites. No longer will a “discharge” from a construction site be open to interpretation. Samples will be collected from the stormwater discharging from a site and these samples must be nearly as clear as drinking water to avoid a violation.