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EPA EXPECTS MUNICIPALITIES TO ENFORCE NPDES STORMWATER

Stormwater News

The U.S. Environmental Protection Agency has scheduled the Water Quality and Green Infrastructure Conference on May 13-14, 2010 in Dallas, Texas, at the Dallas Convention Center. Registration is \$35.00 for both days. To get additional information or register go to http://www.epa.gov/npdes/greeninfrastructure/dallas/flier .pdf

EPA will soon issue a proposed NPDES permit for pesticide applications. The final permit is expected by December. EPA and states with NPDES permitting authority will then have three months to issue NPDES permits to cover over 5 million pesticide annual applications. This activity was previously exempted from NPDES permit requirements. However, on January 7, 2009, the U.S. Sixth Circuit Court of Appeals vacated the exemption. The Sixth Circuit held that NPDES permits are required for all biological pesticide applications and chemical pesticide applications that leave a residue in water when such applications are made.

Hovnanian Enterprises, a national home builder, will pay a \$1 million civil penalty to resolve stormwater permit violations. The compliance order applies to 591 construction sites in 18 states. The company will implement a program designed to improve compliance with stormwater run-off requirements. The violations include failure to obtain permits until after construction had begun, or failing to obtain them at all. At sites with permits, violations included failure to prevent or minimize the discharge of pollutants such as silt and debris in stormwater runoff. (Continued on Page 3)

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Green Development Expected to Be the EPA National Standard

In a Federal Register Notice on December 28, EPA startled the construction industry by announcing the Agency's intent to promulgate an Effluent Guideline for post-construction runoff.

Surveys will be made, options proposed and by November 2012 the National Standard for Post-Construction Runoff is expected to limit the discharge to pre-construction hydrology.

The indicators are: (1) It is a recommendation in the 1999 Phase II municipal (MS4) permit rule, (2) Several states are doing it now, (3) A Presidential Executive Order requires all federal agencies to do it or demonstrate why it is technically infeasible.

EPA has announced their intent to redefine Municipal Separate Storm Sewer System (MS4) requirements by establishing more stringent stormwater retention requirements for newly developed and redeveloped sites and applying these requirements to smaller sites.

EPA intends to survey the construction industry and municipal governments this summer, propose the post-construction rule in 2011 and then take final action by November 2012. See issue 8 in the article on Future MS4 Permits and the Draft MS4 permit for Washington D. C. on page 3. *

<u>Future MS4 Permits Expected to Manage Entire EPA Stormwater Program</u> **EPA Plan: Next Round of Municipal Permits**

Municipal managers who complain about unfunded mandates will be shocked at EPA's plan for future MS4 stormwater permits. How to finance the permit requirements will be a major problem.

The EPA plan for future municipal permit requirements is found in a recently distributed document sent to state permit writers. The title is: *Municipal Separate Storm Sewer System Permit Improvement Guide*. The Guide can be downloaded at http://www.epa.gov/npdes/pubs/ms4permit i mprovement guide.pdf

The 119 page Guide is not a directive. The Guide includes example MS4 permit language, but is not intended to be either definitive or comprehensive for all MS4 Permit Requirements.

EPA wants permits with (1) specific deadlines for compliance, that (2) incorporate clear performance standards, and (3) include measurable goals or quantifiable targets for implementation.

Expect EPA to update the Guide (after receiving comments) and use it to develop new regulations. Therefore, it is important to understand that the EPA intent is to transfer all stormwater inspections and compliance to the local level of government.

The Guide has extensive recommendations, ten are selected here for consideration. They are enforcement escalation, form a citizen advisory group, sample for illicit discharges, enforce National Effluent Guidelines for construction, frequent inspections, employee and construction industry training, require post-construction to equal pre-construction, manage municipal high value facilities, and regulate industrial stormwater compliance.

Ten Significant Recommendations

1. EPA recommends that the MS4 permittee be required to develop and implement an enforcement response plan (ERP), which clearly describes the action to be taken for common violations such as:

- a. Verbal Warnings,
- b. Written Notices,
- c. Escalated Enforcement Measures
 - i. Citations (with fines)
 - ii. Stop Work Orders
 - iii. Withholding Plan Approvals
 - iv. Bond Collection
 - v. Direct Billing to Make Corrections

In addition to an ERP, municipalities should be required to develop programs for enforcement tracking, recidivism reduction, and referral to NPDES authorities for permit non-filers and significant violators.

2. Establish a citizen advisory group. The group must consist of a balanced representation of all affected parties, including residents, business owners, and environmental organizations. The MS4 must invite the citizen advisory group to participate in the development and implementation of all parts of the community's SWMP.

The citizen advisory group should meet with the local land use planners and provide input on land use code or ordinance updates so that land use requirements incorporate provisions for better management of stormwater runoff and watershed protection.

3. Expand the illicit discharge program to include dry weather field screening and analytical monitoring at selected stations. An exceedance of benchmark concentration levels would indicate the need to conduct a follow-up investigation.

(Continued on pages 4 and 5)

EPA Targets Parking Lots

The new England EPA Office (Region 1) is planning to require new measures to control stormwater pollution in the Charles River watershed near Boston.

Under a pilot program, large industrial, commercial and multi-family residential facilities in three communities in the Upper Charles River Watershed will be required to reduce polluted runoff from their properties. This initiative is part of a continuing, multifaceted effort to restore the Charles to environmental health.

The EPA action will apply to properties with two or more acres of impervious area (parking lots, roofs, roadways, etc.) in the Towns of Milford, Franklin, and Bellingham. These large property owners with two or more acres of impervious surfaces will now be required to obtain an EPA permit and to take steps to reduce pollutants in stormwater.

Large impervious areas are one of the last major unregulated sources of water pollution, and a chief culprit in dramatic algae blooms – including toxic cyanobacteria – that have plagued the Charles in recent years. Extensive impervious cover also aggravates the severity of flooding because those areas diminish the amount of land that can naturally soak in and filter rainwater.

The federal Clean Water Act mandates that storm water sources that degrade water quality below minimum standards be managed to reduce the harm they cause.

Numerous studies have demonstrated a direct link between pollution (including temperature) in stormwater and large impervious surfaces. *

A federal grand jury in Greensboro, NC charged a poultry processor and a plant manager with multiple violations of the Clean Water Act for illegally discharging wastewater from its turkey processing facility in Raeford.

The indictment alleges that on 14 occasions plant employees bypassed the facility's pretreatment system and sent its untreated wastewater directly to Publicly Owned Treatment Works (POTW).

If convicted, the company faces a maximum fine of \$500,000. The Plant Manager faces a maximum penalty of five years in prison and a \$250,000 fine, per count.

A Texas-based pipeline company has agreed to pay a \$450,000 civil penalty. They failed to prepare and maintain facility response plans to deal with spills and environmental accidents at eight of its oil storage terminal facilities in Iowa, Kansas and Nebraska.

NuStar Pipeline Operating Partnership, LP of San Antonio, Texas, has also agreed to spend an additional \$768,000 on a supplemental environmental project to install and operate tank volume monitoring and alarm systems at several of its facilities.

U.S. Environmental Protection Agency Region 5 issued a complaint and final order against the Illinois Department of Transportation for failure to comply with stormwater rules for the Route 22/12 project in Lake Zurich. The complaint cited IDOT for violating water quality standards, failing to maintain proper erosion controls at the site, conduct inspections and maintain proper records. IDOT has corrected the problems at the site and recently paid a penalty of \$100,000.

EPA has released a draft stormwater permit for the Government of the District of Columbia. The draft Permit would impose measurable requirements for green technology practices. These requirements, which include green roofs, enhanced tree plantings, and bioretention and water reuse onsite to slow the rate of runoff of stormwater. Visit http://www.epa.gov/reg3wapd/npdes/pdf/DCMS4/D Cpermit4-19-10.pdf *

Future MS4 Permits

4. Require MS4 permittees to list and enforce EPA's Construction and Development Effluent Guidelines (published December 1, 2009) which will be required in all NPDES stormwater permits issued to construction site operators. At a minimum, the permit should reference the applicable state standards and any local standards. The Guide does not address turbidity sampling. It is not included in the recommendations other than a reference to the state issued permit.

5. MS4 permittees will inspect public and private construction projects in accordance with the following frequency:

Biweekly (every 2 weeks) and after a 0.5 inch storm event for sites of five acres or more, or sites greater than one acre that could be a significant threat to water quality. For sites between 1 and 5 acres the inspection should be monthly.

The permittee must track the number of inspections for the inventoried construction sites to verify that the sites are inspected at the minimum frequencies required. Inspection findings must be documented and maintained for review by the permitting authority.

The MS4 permittee must adequately inspect all three phases of construction.

a. Prior to Land Disturbance: Prior to allowing an operator to commence land disturbance, the permittee must perform an inspection to ensure all necessary erosion and sediment controls are in place.

b. During Active Construction: During active construction, the permittee is required to conduct inspections in accordance with the frequencies specified in permit

c. Following Active Construction: At the conclusion of the project, the permittee must inspect all projects to ensure that all graded areas have reached final stabilization and that all temporary control measures are removed.

6. The MS4 must provide training for all staff whose primary job duties are related to implementing the construction stormwater program, including permitting, plan review, construction site inspections, and enforcement. This training must include, at a minimum.

a. Erosion and Sediment Control/Stormwater Inspectors:

1. Initial training, within the first permit year, regarding proper control measure selection, installation, implementation, and maintenance, as well as administrative requirements such as inspection reporting/tracking and use of the permittees enforcement responses; and

2. Annual refresher training for existing inspection staff to update them on preferred controls, regulation changes, permit updates, and policy or standards updates.

b. Other Construction Inspectors: Initial training must be held within the first permit year, on general stormwater issues, basic control measure implementation information, and procedures for notifying the appropriate personnel of noncompliance. Refresher training held at least once every two years.

c. Plan Reviewers:

1. Initial training, regarding control measure selection, design standards, and review procedures: and

2. Annual training regarding new control measures, innovative approaches, permit updates, regulation changes, and policy or standard updates.

7. The permittee must develop and distribute educational materials to construction site operators as follows:

a. Each year, the permittee must either provide information on existing training opportunities or develop new training for construction operators on control measure selection, installation, implementation, and maintenance as well as overall program compliance.

b. The permittee must develop or utilize existing outreach tools (i.e. brochures, posters, website, plan notes, manuals, etc.) aimed at educating construction operators on appropriate selection, installation, implementation, and maintenance of stormwater controls, as well as overall program compliance.

c. The permittee must make available appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. The permittee's contact information and website must be included in these materials.

d. The permittee must include information on appropriate selection, installation, implementation, and maintenance of controls, as well as overall program compliance, on the permittee's existing website.

8. The MS4 must select and enforce performance standards for new development and redeveloped sites discharging to the MS4, which disturb greater than or equal to one acre. Typical options include to maintain the pre-development hydrograph for rate, volume, duration and temperature of discharges or contain the first one inch of rainfall from a 24-hour storm.

9. The municipality must select "high priority" facilities or operation and develop site-specific plans to identify stormwater

controls to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater. At a minimum, the facility-specific SOP must include the stormwater control measures. Each high priority facility will be visually inspected weekly and a comprehensive inspection performed each quarter.

10. A list of both will be maintained.

Industry discharging to the MS4 would be required to minimize exposure of industrial activities to stormwater. Other controls include good housekeeping, maintenance, spill controls, erosion, stormwater management and employee training.

The next round of MS4 permits will require a tracking system to monitor implementation of its various programs in order to document the MS4 compliance.

The database will include the number of construction sites and industrial facilities inspected. The tracking system will allow the permittee to monitor the compliance status of those entities within its jurisdiction

Without adequate tracking of data the permittees will not be able to submit annual reports to the permitting authority that provides the necessary information to determine permit compliance. *

Editors note:

The EPA guidance document is targeted at state permit writers. Municipal governments need to recognize that the cost of permit compliance will increase. It may very well be an unfunded mandate, but a mandate it is. Failure to comply will have penalties. Therefore, municipalities must plan funding in advance of receiving their permit. *

Summary: Nation-Wide Stormwater Construction Standards

Any construction point source must achieve the following effluent limitations:

<u>Sampling</u>: The average turbidity of any discharge for any day must not exceed 280 nephelometric turbidity units (NTU) beginning no later than August 2, 2010 during construction activity that disturbs 20 or more acres of land at one time and no later than February 2, 2014 during construction activity that disturbs ten or more acres of land area at one time, including non-contiguous land disturbances that take place at the same time and are part of a larger common plan of development or sale.

Other Controls:

<u>a. Erosion and Sediment Controls</u>. Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to: (1) Control stormwater volume and velocity within the site to minimize soil erosion;

(2) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;

(3) Minimize the amount of soil exposed during construction activity;

(4) Minimize the disturbance of steep slopes;

(5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;

(6) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible; and

(7) Minimize soil compaction and, unless infeasible, preserve topsoil.

<u>b. Soil Stabilization.</u> Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permittee. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee.

c. Dewatering. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls.

<u>d. Pollution Prevention Measures.</u> Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

(1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

(2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and

(3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. Prohibited Discharges. The following discharges are prohibited:

(1) Wastewater from washout of concrete, unless managed by an appropriate control;

(2) Wastewater from washout and cleanout of stucco, paint, from release oils, curing compounds and other construction materials;

(3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,

(4) Soaps or solvents used in vehicle and equipment washing.

<u>f. Surface Outlets.</u> When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible. *

State Activity

California

Zero is the amount of trash allowed to be discharged into the Los Angeles River by 2016. The Los Angeles Water Quality Control Board recently modified municipal stormwater permits to make the requirement enforceable.

Los Angeles started installing screens and collection systems to keep street debris from washing into sewers. Sixteen cities in the watershed recently received \$10 million in federal stimulus money to outfit their catch basins.

Florida

EPA has proposed nutrient water quality standards for Florida waters. Final rules are expected by Oct. 1, 2010. Last August, a federal judge approved a consent degree between the EPA and environmental groups. EPA now has a template that could be tailored to other states should similar litigation be filed. Wisconsin may be next.

Pennsylvania

DEP has proposed a complete reorganization of the NPDES permits program. The proposed rules are online at http://www.pabulletin.com/secure/data/vol40 /40-7/276.html. The primary goal is to be consistent with EPA regulations.

Louisiana

EPA issued cease and desist orders to the Louisiana Land Trust and Camp Dresser McKee, Inc. for "widespread" noncompliance with stormwater provisions of the Clean Water Act. LLT and Camp Dresser have been ordered to stop all sediment discharges from construction sites in St. Bernard and Orleans parishes. They must remove discharged sediment and debris and file for stormwater permits.

Kansas

According to a consent decree filed August 18 in the U.S. District Court in Kansas City, Mo., Cooper Land Development has agreed to pay a \$513,740 civil penalty to settle the allegations that it failed to properly manage construction site stormwater runoff and implement erosion control at five of its housing developments located in Missouri, West Virginia and Arkansas.

Kentucky

Environmental organizations filed a petition asking the EPA to withdraw NPDES program delegation from the State of Kentucky. The petition alleges widespread contamination of state waters by pollution from coal mining operations.

Maryland

The State's erosion and sediment control standards have been revised and expanded. This is the result of Waterkeeper organizations represented by the University of Maryland Environmental Law Clinic.

The 343-page draft document is available at <u>http://www.mde.state.md.us/assets/document</u>/<u>sedimentstormwater/MD_ESC_Standards_1</u>0-15-09_DRAFT_III.pdf. It will replace the smaller document with a 1994 date.

The document contains standards for erosion and sediment control that will be incorporated, into NPDES construction permits. The scheduled date for incorporation into regulation is May 30, 2010. *

John Whitescarver, Executive Director National Stormwater Center



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2011 Schedule

January "Sectors L, K March ""Sectors O, P May """"Sectors T, U

"February "Sectors M, N April """"Sectors Q, R, S June """"Sectors V, W

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