# THE STORMWATER QUARTERLY

National Stormwater Center TM

Summer 2016

Issue 146

# **Stormwater Rules Are Understood, Now! It's Permit Compliance Time**

### **Stormwater News**

Massachusetts is planning to apply to administer the National Pollutant Discharge Elimination System (NPDES) permit program like 46 other states. NPDES permitting is currently run EPA New England (Region 1). In Mass, the permits would be issued by the state's Department of Environmental Protection, called MassDEP. The Mass Legislature needs to fund the MassDEP \$4.7 million a year for extra staff, programming and up-to-date monitoring and analysis of water quality data.

On May 18, the EPA published a wide-ranging series of proposed changes to the National Pollutant Discharge Elimination System ("NPDES") regulations. The proposed changes cover 15 topics in the following major categories: NPDES permit applications; the water quality-based permitting process; NPDES permit objection, documentation and process efficiencies; the vessels exclusion; and the Clean Water Act Section 401 certification process.

Continued on Page 3

### **INSIDE THIS ISSUE**

Page 2 - EPA Proposed Construction Permit
Page 3 - Planned Compliance Activities
Page 4 - Puerto Rico Permit Does Illicit Detection
Page 6 - Enforcement Examples
Page 7 - Washington DC SWMP Rejected - NRDC

## **Use Self-Audit Checklist**

The EPA stormwater permit program is 25years old. Permits are issued to 100,000+ industries, 7,450 local governments and over a million construction sites. Before anyone considers changing permit conditions, we should pause to determine if the issued permits actually improve water quality.

Now is the time for EPA and each NPDES approved state to establish a program to measure permit compliance. States issuing permits need to contact each permittee with an administrative order to conduct a self-audit and report the result. Non responding permittees should be penalized until they report.

EPA Region 6 (Dallas) has developed and is using a self-audit checklist for municipalities. EPA Headquarters should require each NPDES approved state to do the same. Where states fail to conduct such an audit procedure, the Regional EPA office must do it. The goal for permittees should be at least 75% compliance with penalties for significant non compliance.

Self-audit checklist for municipalities, industry and construction are readily developed by extracting each permit requirement to a spread sheet to score percent compliance against a max value for 100% compliance.

The National Stormwater Center<sup>TM</sup> expects to assist permittees with a self-audit checklist with an aggressive program in 2017. See page 3.  $\infty$ 

## **EPA's Proposed 2017 Construction General Permit (CGP) CONTROL WATER VOLUME AND DRAG OUT TO STREETS**

The Environmental Protection Agency (EPA) will reissue the Construction General Permit (CGP) in early 2017. The public comment period ended in May 26, 2016.

EPA promulgated 19 technology standards. All are in the proposed permit. The more important ones include:

- 1. Control stormwater **volume and velocity** to minimize soil erosion in order to minimize pollutant discharges;
- 2. ... at a minimum, initiate soil stabilization measures **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.
- 3. 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.

4.

Some states have included these technologies by reference and several states misrepresent the technology standards as water quality standards.

Those states that hide or reduce standards to assist the regulated industry should recognize that their actions are illegal.

Other technology standards in the permit restrict truck drag out of dirt onto public streets. The proposed words read:

"Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. "Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal." "You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance, storm drain inlet, or water of the U.S.

Fine grains that remain visible (i.e., staining) on the surfaces of off-site streets, other paved areas, and sidewalks after you have implemented sediment removal practices are not a violation."

Another technology requirement proposes to keep drainage inlets clean. The proposed words are: "Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised."

"Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible."

Public notice requirements have changed to encourage citizens to report observations that indicate the discharge of pollutants to EPA. Training is required for personnel responsible for:

- 1. design, installation, maintenance, and/or repair of stormwater controls
- 2. application and storage of treatment chemicals
- 3. conducting inspections and taking corrective actions

Training must include:

- 1. Deadlines associated with installation, maintenance, and removal of stormwater controls and with stabilization
- 2. Location and maintenance of controls
- 3. Pollution prevention procedures
- 4. Inspections, findings and corrective actions.

∞

## National Stormwater Center<sup>™</sup> Compliance Assistance

National Stormwater Center has provided training thousands of inspectors in municipal, to construction, and industrial activities. This training provides inspectors with the knowledge required to meet the requirements of their permits. The Certified Stormwater Inspector (CSI)<sup>TM</sup> class has assisted hundreds of organizations in meeting and maintaining stormwater compliance through plan development, plan templates, compliance tracking, analytical sampling and reporting service, and filing reports.

Now there's a need for follow through on compliance. Even if noncompliance is reported there is not an easily manageable system in place to determine the next step. Even if someone is fined for noncompliance, that does not fix the actual issue. The National Stormwater Center<sup>™</sup> plans to promote compliance projects through a not-forprofit company listed with the Internal Revenue Service (IRS) as Conservation Preservation Environment, Inc. a 501 (c)(3) foundation. In addition to CSI training, we will be stronger advocates for permit compliance.

We will promote compliance through understanding the power of the law, by providing tools for compliance, and promoting citizen reporting of noncompliance. We will offer self audit spread sheets to allow permittees to evaluate their own compliance level. This will enable permittees to clearly see their strengths and weaknesses in each area of their permit compliance.

Upcoming editions to our compliance program will include citizen training modules and a citizen certification program, a new, more efficient way to report non compliers, a website for the compliance project, and a new Facebook page. We will also be teaming up with others to create activities that work towards making sure our waters are cleaner.

The Facebook page and compliance website will help us modernize our program and allow for more efficient and convenient citizen education. Citizen education will help us move towards our goal of helping people understand the laws, thereby making stormwater programs more effective. All of these new developments are on the horizon. We are developing tools to train citizens to spot polluters and the their ability to report non compliance.

In January, look for *www.NPDESCompliance.org*∞

# **Stormwater News** (Continued From Page 1)

The Philadelphia Water Department has created a contest in order to bring innovative new ideas to enhance their Green City, Clean Waters Program. They have teamed up with Citymart, an organization that aids cities in need of creative solutions. The agency is launching the Philadelphia Green Stormwater Infrastructure (GSI) Innovation Challenge. In an effort to comply with the Clean Water Act's mandate requiring the reduction of sewage runoff, Philadelphia was the first city to use green infrastructure in an attempt to accomplish this goal. Currently, the city is searching for a more efficient way to run the program and assess subsurface conditions at potential GSI sites prior to planning and construction.

During a press release, the City stated that the problem was not the efficacy of their current process for determining site suitability but that there is much more that could be done. Agreements with state and federal regulators require Philadelphia to nearly triple the volume of stormwater currently being managed by green infrastructure over the next five years. Therefore, the better the infrastructure works, the more likely it is that the City can meet this goal.

In the first phase of the GSI Innovation Challenge, the Philadelphia Water Department has issued a request for information. All are invited to submit information on possible solutions to determining subsurface conditions. The second phase will be a request for proposals, drawing on the ideas submitted in the first round. Interested applicants can learn more information and submit their ideas at http:// bigideasphl.com/.

The Philadelphia GSI Innovation Challenge is the latest effort by the Philadelphia Water Department to raise awareness and change behavior around stormwater management. Previously, the agency released a guide for designing more water-friendly schoolyards and created an online game to see how green infrastructure could reduce stormwater charges (Kinney 2016).

**EPA has increased civil monetary penalties to reflect inflation as required by law.** In practice, EPA has failed to do so for many years. Therefor the EPA calculated "catch-up" to increase the previous maximum \$37,500 per-day penalty for violating requirements of implementation plans or permits for affected sources, major emitting facilities, or major stationary sources under the Clean Air Act (CAA) to a maximum of \$93,750 per day per violation.  $\infty$  The municipality is required to achieve the following goals and milestones:

Complete dry weather screening and sampling of every MS4 outfall and interconnections no later than three years from the authorization of the permit.

Implement the Catchment Investigation Procedure in every catchment of the MS4, even where dry weather screening does not indicate evidence of illicit discharges.

Implementation of the Catchment Investigation Procedure will comply with the following milestones.

Complete the Catchment Investigation Procedure in a minimum of 80% of the MS4 area served by Problem Catchments within three years of the authorization under this permit and 100% of Problem Catchments within five years.

The Catchment Investigation Procedure is used in every catchment of the MS4 where information indicates sewer input including outfall/ interconnection screening that indicates sewer input based on olfactory/visual evidence or sampling results (ammonia to potassium ratio  $\geq$ 1.0, surfactants  $\geq 0.25$  mg/l, and bacteria levels greater than the water quality criteria applicable to the receiving water; or ammonia  $\geq 1.0$  mg/l, surfactants  $\geq 0.25$  mg/l or boron  $\geq 0.35$  mg/l, and detectable levels of chlorine) within five (5) years of the authorization under this permit.

The permittee will describe indicators for tracking program success. Indicators include measures that demonstrate efforts to locate illicit discharges, the number of illicit discharges identified and removed, the percentage and area in acres of the catchment area served by the MS4 evaluated using the catchment investigation procedure, and volume of sewage removed. The permittee shall evaluate and report the overall effectiveness of the program based on the tracking indicators in the annual report.

MS4s will provide annual training to employees involved in IDDE program. The training will include how to recognize illicit discharges. ∞

### **Editors Comment:**

Puerto Rico has only a few municipalities with the financial capability to comply with the stormwater permit. Most of the 74 municipalities must seek grants or find unique solutions or simply accept non compliance and the associated penalties.

The National Stormwater Center<sup>TM</sup> has for several years encouraged Puerto Rico's local governments to partner with their waste manage company to assist with permit compliance.

Waste management companies have the expertise and personnel necessary prevent waste from entering drainage systems. While they don't work for free, they are efficient, have the necessary equipment and are highly motived to keep streets clean.

We encourage communities to implement monthly clean-up projects in blighted areas that are dirty as a result of cigarette waste, overloaded dumpsters and trash. Civic groups should sponsor the cleanup activities with the intent of changing the behavior of people who create waste in drainage systems.

Civic groups are in a unique position to sponsor cleanup Saturdays and just as important to conduct fund raising events to pay waste management companies for the cost of community clean-up activities.

The result is a win for the municipal permittee, the waste management company, the civic group and the community.

This is not a plan only for Puerto Rico, it's a plan for all communities in the United States of America and it's territories. Public Work Directors across the US will welcome civic groups like Kiwanis, Lyons, and Rotary to sponsor community street and sidewalk sweeping projects.

Contact the National Stormwater Center<sup>TM</sup> at info@NPDES.com for guidance and support.  $\infty$ 

# <u>EPA Issues Puerto Rico Municipal Permit</u> ILLICIT DISCHARGE – WILL THIS BE THE FUTURE?

The municipal general permit (120 pages) was issued to the territory of Puerto Rico by the EPA with an effective date of July 1, 2016. The 74 municipalities have until October 1 (90 days) to file their Notice of intent (NOI) to accept the conditions of the general permit. EPA will make the NOI publically available for at least 30 days. EPA will then issue the permit.

The written SWMP shall be developed and submitted within one hundred eighty (180) days from the date of authorization of coverage under the permit. The implementation of the SWMP shall commence immediately after submission to EPA.

The illicit discharge requirements are extensive, 10 pages, almost 10% of the entire permit. So here is a summary of the illicit discharge requirements.

The written IDDE program shall be completed within one (1) year of the authorization under this permit for existing permittees and three (3) years for new permittees.

The permittee must have adequate legal authority to accomplish the following tasks: prohibit illicit discharges; investigate suspected illicit discharges; eliminate illicit discharges, including discharges from properties not owned by or controlled by the MS4 that discharge into the MS4 system; and implement appropriate enforcement procedures and actions.

The permittee shall assess and priority rank the catchments in terms of their potential to have illicit discharges. This ranking will determine the priority order for screening of outfalls and interconnections. The permittee must classify each catchment into one of the following categories: *Excluded catchments, Problem Catchments, High Priority Catchments, Low Priority Catchments.* 

Dry weather screening and sampling when no more than 0.1 inches of rainfall has occurred in the previous 24-hour period. When a flow is observed, a sample of the flow shall be collected and analyzed. Wet weather screening and sampling takes place when there is a discharge. The manhole inspection of each key junction manhole within the MS4, even where no evidence of an illicit discharge is observed at the outfall. Key junction manholes shall be opened and inspected for visual and evidence of illicit connections (e.g., excrement, toilet paper, gray filamentous bacterial growth, or sanitary products present).

If flow is observed, the permittee samples the flow for ammonia, potassium, chlorine and surfactants. Additional indicator sampling may assist in determining potential sources (e.g. bacteria for sanitary flows, conductivity to detect tidal backwater, etc.). Where sampling results shows evidence indicating potential illicit discharges, the area draining to the junction manhole must be flagged for further investigation.

Permittees will also inspect and sample under wet weather conditions to the extent necessary to determine whether wet weather-induced high flows in sanitary sewers or high groundwater in areas served by septic systems result in discharges of sanitary flow to the MS4. This sampling can be done upon completion of any dry weather investigation but must be completed before catchment investigation is marked as complete.

Upon completion of catchment investigation and illicit discharge removal, the catchment outfall or interconnection shall be scheduled for follow-up screening within five years. Follow-up screening shall consist of dry weather screening and sampling except that wet weather screening and sampling shall also be required in catchments where wet weather screening was required.

Illicit Discharge Prevention Procedures - The permittee must implement procedures designed to prevent illicit discharges such as: identification of spills; reporting procedures; containment procedures; documentation; and public awareness; reporting (hotlines); and training of public employees involved in the IDDE program on ways to identify potential illicit discharges.

Continued on the next page

# **Recent Stormwater Permit Enforcement**

## New Castle, Delaware

Real estate developer Joseph L. Capano recently pleaded guilty to charges that he and his company illegally built an entry road to a New Castle housing development through protected wetlands.

Capano, 73, pleaded guilty to one count of bank fraud and one count of knowingly violating the Clean Water Act. He faces prison and significant fines.

A federal grand jury indicted Capano after he was accused of telling workers to expand an entranceway and place utilities through marsh land during construction. He was also accused of lying to environmental regulators about the site.

The Riverbend Development was funded in part by a \$1.5 million commercial line of credit from a bank. After signing an agreement for a line of credit, prosecutors said Capano submitted funding requests, referred to as draw requests, to the bank that contained false representations and statements concerning the reasons for the requests.

"Instead of using those funds for Riverbend Development expenses, Capano used some of the funds for personal expenses, including approximately \$63,000 to pay for a jewelry purchase. As part of his guilty plea, Capano has admitted that he converted at least \$146,909.96 in loan proceeds to his personal use."

In addition, prosecutors said Capano knowingly discharged pollutants into wetlands without a permit . Capano directed employees and contractors of his company to perform earth-moving, construction and excavation activities in wetlands areas.

"Specifically, Capano directed contractors and employees to expand the entrance road to the development, referred to as the causeway, into wetlands subject to federal jurisdiction,"

Prosecutors said. "Capano also directed contractors and employees to place a water main pipe through the causeway wetlands area, even after the Army Corps of Engineers instructed Capano to stop performing construction in wetland areas and issued Capano a Cease and Desist letter to that effect."  $\infty$ 

## Oakland, Maine

The U.S. EPA has filed a civil suit against a scrap metal company, Kennebec Scrap Iron, charging that the company violated sections of the federal Clean Water Act by improperly monitoring waste disposal and allowing pollutants to enter nearby streams through stormwater discharge. Pollutants can include motor oil, gasoline, anti-freeze and hydraulic fluids. The company also removes batteries and electrical switches that can contain mercury. The claim alleges that:

• The company had a deficient site map for locating scrap storage and structural or engineered control devices and systems to treat polluted stormwater.

• The stormwater pollution protection plan does not fully list all pollution sources, such as material stockpiling, wet vehicle storage and vehicle crushing.

• The company failed to clearly identify areas where potential spills and leaks might occur with accompanying drainage points.

• It failed to describe and maintain a preventive maintenance program for inspection and stormwater management devices, such as cleaning of oil/water separators and catch basins and "good housekeeping best management practices" for material containment.

The government alleges Kennebec Scrap Iron did not keep to its permitted management plan by allowing such things as rotting, unsecured hay bales; an improperly placed catch basin; a saturated oil boom disintegrating in a spill pond; and uncovered trailers, according to the court document. In addition, the government claims the company did not conduct benchmark monitoring, visual monitoring, quarterly site evaluations and adequate employee training. The company employed as many as five people who worked in areas where industrial material or activities were exposed to stormwater or who were responsible for implementing activities under the pollution prevention plan.  $\infty$ 

# EPA Stands Up for Clean Water in D.C., Rejects 140-Year-Long Clean Up Plan

REPRINT April 19, 2016 by Becky Hammer (NRDC)

The rivers and streams of our nation's capital scored a big win recently when the U.S. Environmental Protection Agency (EPA) rejected the District of Columbia's proposed plan to clean up polluted runoff, which would have taken more than a century to meet clean water standards.

The District Department of Energy & Environment (DOEE) has been tasked with developing a longterm plan to reduce its discharges of polluted storm water runoff sufficiently to achieve clean water in the Potomac River, Anacostia River, and Rock Creek. The problem is that DOEE's proposed plan was a little *too* long-term. It failed to include any new actions that could reduce polluted runoff quickly, and instead proposed an extremely long schedule that wouldn't have achieved pollution reduction targets until the year 2154.

NRDC believes a schedule that long is just unacceptable. We submitted detailed comments on the proposal, and in those comments we suggested several actions that the District could incorporate into the plan to speed 1 hings up so that Washingtonians can enjoy safe, clean water within our lifetimes. We also sent our comments to EPA, he agency in charge of reviewing and approving the District's proposed plan.

Earlier this month we were happy to learn that EPA agreed with us and found the plan inadequate. In its comments on the plan, the agency determined that the proposed plan is not approvable as written because "actual management activities and implementation are lacking" ---in other words, the District had failed to include additional strategies that could accelerate the clean-up efforts, as we had suggested. EPA said: "At the current rate of implementation, DOEE projects that all stormwater pollution reduction targets will be attained by 2154. EPA finds this end-date to be potentially artificially long."

The agency echoed our concerns that the proposed plan failed to identify any new stormwater control measures and that it didn't provide enough clarity for citizens who have a right to know how 1he District intends to achieve clean water goals. As a result, EPA directed DOEE to strengthen the plan by exploring supplemental opportunities such as: Requiring transportation projects in the right-of-way to capture more stormwater runoff.

Investing more of the Districts resources in mufti-beneficial green infrastructure practices that capture rain where it falls (like rain gardens, green roofs, and permeable pavement), focusing those practices on the areas with the greatest pollution problems; and creating incentives for private property owners to retrofit their properties with green infrastructure and other stormwater controls.

NRDC appreciates EPA's willingness to stand up for clean water and not give the District of Columbia a free pass on this critically important effort. We hope that DOEE will take this feedback to heart and significantly strengthen the plan. In fact, we stand ready to assist the District in exploring new opportunities for reducing runoff pollution, and we hope that DOEE will work together with us on revisions to the plan over the coming weeks.

Visit the Natural Resources Defense Council (NRDC) at <u>www.NRDC.org</u>  $\infty$ 

#### Dan Ahern Instructor for the National Stormwater Center



- ⇒ Retired SW Utility Manager for Beaufort County SC
- $\Rightarrow$  Retired from US EPA with 35 years in Water Programs
- ⇒ Retired from US Army as an Environmental Engineer (3 years Active and 27 years reserve)
- $\Rightarrow$  Registered Engineer in GA and SC
- ⇒ Flight Instructor in Airplanes and Gliders
- $\Rightarrow$  Life member of ASCE and AAEE
- ⇒ Member of WEF Stormwater Committee

#### 2015-2016 Training Schedule Certified Stormwater Inspector

	P1
Aug 8-9	Phoenix, AZ
Aug 18-19	Charlotte, NC
Aug 18-19	Anchorage, AK
Aug 23-24	St. Louis, MO
Aug 25-26	Portland, ME
Aug 30-31	Philadelphia, PA
Sep 19-20	San Jose, CA
Sep 19-20	Austin, TX
Sep 20-21	Jacksonville, FL
Sep 21-22	Oakland, CA
Sep 22-23	Dallas, TX
Sep 22-23	Daytona, FL
Sep 26-27	Pensacola, FL
Oct 3-4	Chicago, IL
Oct 3-4	Charleston, WV
Oct 4-5	Oklahoma City, OK
Oct 6-7	Indianapolis, IN
Oct 6-7	Pittsburgh, PA
Oct 12-13	Florida Erosion
Oct 17-18	Seattle, WA
Oct 20-21	Portland/Vancouver

Comments expressed *The Stormwater Quarterly* are the strictly the opinion of the editor, John Whitescarver.

Be sure to see our website for our full training and events schedule at www.NPDES.com

Email for more information: info@npdes.com

### Fair Use Notice

The Stormwater Quarterly contains copyrighted material which may not always be specifically authorized by the copyright owner. "Fair Use" of copyrighted material is provided for in Section 107 of the U.S. Copyright Law. We distribute some material, without profit, to those who express a prior interest in receiving information for research and educational purposes. The information in the publication is for informational purposes only.

### National Stormwater Center Also Offers:

- Certified Inspector Training Courses
- SWPPP Templates
- Analytical Sampling Assistance
- Compliance Tracking
- Online Training for Industry
- Online Training for MS4s

#### Call us for information at 888-397-9414



Our Nation's waters are a valuable resource that ought to be protected from illegal pollution. We support compliance with the Federal Clean Water Act by providing training and services to government and business.

> National Stormwater Center 107 F East Broadway Street Bel Air, MD 21014