

PERMITS WILL ISSUE WITH EFFLUENT LIMITATIONS

Stormwater News

The Clean Water Restoration Act (CWRA) passed the Senate Environmental Committee by a vote of 12 to 7. The bill, S.787, would amend the Clean Water Act to clarify the jurisdiction of the federal government over waters of the United States, including headwater streams ditches and isolated wetlands.

The Act would bring under federal protection all waters subject to the ebb and flow of the tide, the territorial seas, and all interstate and intrastate waters and their tributaries, including lakes, rivers, streams, including intermittent streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds.

It's not clear if the Senate has sufficient votes to pass the bill, but the House does. This would return to EPA's prior interpretation of the Clean Water Act before court decisions restricted the jurisdiction of the Federal government.

EPA delayed the final rule that amends the Spill Prevention, Control, and Countermeasure (SPCC) regulations. The SPCC compliance date has been extended for all facilities until November 10, 2010. Facilities in operation before August 16, 2002 are still required to maintain their plans in accordance with the SPCC regulations in effect at that time.

The rule addresses the regulatory definition of "navigable waters" under Section 311 of the Clean Water Act, a term that is important in determining which owners or operators are required to prepare Spill Prevention, Control and Countermeasure (SPCC) Plans and Facility Response Plans (FRP) under 40 CFR part 112 for their facilities.

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Some with Numbers

Twenty-two years ago, the U.S. Congress amended the Clean Water Act to require NPDES stormwater permits. It was necessary because 40% of the Nation's waters remain impaired.

More than 100,000 dischargers have permits that are not enforceable - dischargers are allowed to pick their own best management practices (BMPs) or do practically nothing but write reports. As a result, there have been no significant water quality improvements in 22 years. That may change.

New stormwater permits are now being issued with enforceable effluent limitations, some with numbers, some without. EPA's new industrial permit has an enforceable effluent limitation to minimize exposure. By December, EPA will issue a national standard for construction activities with enforceable effluent limitations.

Permits are being issued for dischargers to impaired water bodies containing enforceable water quality-based effluent limitations (WQBEL). These are derived from EPA approved *total maximum daily load* (TMDL) studies.

Expect the Mid-Atlantic States to respond aggressively to the Chesapeake Bay initiative and the nation's airport managers to come down on tenants that pollute. *

New Conditions in Industrial Permits

EPA's industrial stormwater permit was revised and is effective in five states. The permit has new requirements and they are contagious. Several states are using EPAs MSGP as a model for their permit reissuance.

Two major changes are: 1) specific enforceable effluent limitation 2) documentation of compliance with a series of reports.

EPA explicitly established effluent limitations in the MSGP and clarified that the requirement to develop a SWPPP is as an information document rather than a compliance document.

Permittees are expected to write a SWPPP to document how control measures will be selected, designed, installed, and implemented to comply with the permit's effluent limitations.

Non-Numeric Technology-Based Effluent Limits

The major effluent limit is to “*minimize the exposure* of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings . . .”

[Note that the effluent limitation is to minimize exposure, not to minimize the discharge of pollutants.]

The term “minimize” means to reduce or eliminate, using control measures including best management practices that are technologically available and economically practicable and achievable in light of best industry practice.

TMDL to Permits

The permit contains requirements for discharges to impaired waters.

For existing discharges to impaired waters with EPA approved TMDLs, the EPA will determine if more stringent requirements are necessary to ensure that the permittee is discharging consistent with the TMDL and applicable waste load allocation (WLA).

If the water is impaired but there is no completed TMDL, the discharger is required to control its discharge as necessary to meet applicable water quality standards and to conduct routine monitoring for the pollutants for which the water body is impaired.

Reports

The new MSGP has a focus on documentation of corrective actions, and a series of required reports including: certifications of the SWPPP, non stormwater evaluation, NOI, and the annual report which must be submitted to the government. EPA views these reports as traceable historical records.

Other required reports include: training, inspections, quarterly visual assessments, sampling data, endangered species, historic places.

The permit also clarifies that failure to conduct a required corrective action is a permit violation in and of itself, in addition to any underlying violation that may have triggered the initial requirement for corrective action.

Permittees are required to submit to EPA an annual report that includes the findings from their annual comprehensive site inspection report and a report detailing any conditions triggering corrective action and the status of those actions taken in response. *

Obama Orders Bay Cleanup

In response to a suit filed by the 250,000-member Chesapeake Bay Foundation, President Obama issued an Executive Order to begin restoration immediately. The Order established a Federal Leadership Committee for the Chesapeake Bay to coordinate the restoration.

Others on the Committee are senior representatives of the Departments of Agriculture (USDA), Commerce (DOC), Defense (DOD), Homeland Security (DHS), the Interior (DOI), Transportation (DOT).

The Committee must draft recommendations for accomplishing the following steps to protect and restore the Bay:

- (1) define the necessary actions and the changes to regulations, programs, and policies to implement these actions,
- (2) target resources to better protect the Chesapeake Bay and its tributary waters,
- (3) strengthen storm water management practices on Federal lands and develop storm water best practices guidance,
- (4) develop a strategy for adapting to the impacts of a changing climate on water quality,
- (5) expand public access to waters,
- (6) strengthen scientific support for decisionmaking to restore the Bay,
- (7) develop habitat and research activities to restore living resources and water quality.

By November 12, the recommendations will be made available for public comment and the final strategy completed by May 12, 2010. The Committee must consult extensively with the States of Virginia, Maryland, Pennsylvania, West Virginia, New York, and Delaware and the District of Columbia to ensure that Federal actions are closely coordinated with actions by State and local agencies. *

Stormwater News (Continued From Page 1)

The Supreme Court confirmed that the two permitting programs created under §402 and §404 of the Clean Water Act (CWA) operate independently of each other. Therefore, an operator who has secured a dredge-and-fill §404 permit has no duty to receive a §402 NPDES permit for the same discharge.

In its June 22 decision in *Coeur Alaska, Inc. v. Southeast Alaska Conservation Council*, the Court upheld the U.S. Army Corps of Engineers in its issuance of a CWA §404 permit to a gold mining company to dispose of mill tailings into a lake in the Tongass National Forest.

EPA has permitting authority under §402 except as provided by §404. Section 402 prohibits EPA from exercising permitting authority that is provided to the Corps in §404.

The 11th U.S. Circuit Court of Appeals accepted EPA's interpretation that the Clean Water Act allows the transfer of polluted water from one navigable body to another without an NPDES Permit.

The court said the "ambiguous" language of the law allows EPA to offer the *unitary waters theory*. The theory holds that moving pollutants from one body of water to another is not an "addition . . . to navigable waters" because the law regulates pollutants only when they first enter navigable waters from a point source, not when they are moved between navigable waters.

A construction company building a 79-acre residential subdivision of townhouses in Worcester, Mass. faces up to \$157,000 in penalties. Bailin & Associates, Inc. of Worcester, MA has been constructing the subdivision without a construction stormwater permit

Though construction began in 2003, Bailin failed to apply for an NPDES permit until April of 2008. Additionally, Bailin failed to install and maintain adequate Best Management Practices (BMPs) at the site such as sedimentation control barriers, stockpile containment, and surface and slope stabilization.

Lastly, Bailin violated the Clean Water Act by allegedly discharging stormwater from the construction site without a permit. *

TMDLs to Stormwater Permits

If you think that the development of total maximum daily loads (TMDLs) for impaired waters is difficult, try using the TMDL to develop and impose waste load allocations (WLA) for stormwater permittees.

The Clean Water Act specifically requires implementation plans for TMDLs using waste load allocations through the National Pollutant Discharge Elimination System (NPDES) permit program.

After a TMDL has been developed, water quality-based discharge limits in NPDES permits must be consistent with the assumptions and requirements of the WLA.

TMDLs are not self-implementing, meaning EPA and states cannot enforce implementation of a TMDL. But permits with the WLA are enforceable. They are called WQBEL for water quality-based effluent limitations.

The TMDL determines the maximum amount of a pollutant allowed to enter a waterbody, also known as the loading capacity, so that the water body will meet and continue to meet water quality standards for that particular pollutant. The TMDL allocates that load to point sources using waste load allocation (WLA) and for nonpoint sources a Load Allocation (LA) which include pollution from both from human activities and natural background sources.

EPA has produced several documents to help regulators apply the TMDL to Stormwater permits. One is the EPA policy (<http://www.dcr.virginia.gov/documents/swmwtrepatmdl.pdf>), and the other is a 200 page guidance document (http://www.epa.gov/owow/tmdl/pdf/tmdl-sw_permits11172008.pdf).

Policy

The WLA and LA are required to be expressed in numeric form in the TMDL (40 C.F.R. § 130.2(h) & (I)). EPA expects TMDL authorities to make separate allocations to NPDES regulated stormwater discharges (in the form of WLA) and unregulated stormwater (in the form of LA).

However, WLA may be expressed in the form of best management practices (BMPs) under specified circumstances (33 U.S.C. § 1342(p)(3)(B)(iii); 40 C.F.R. § 122.44(k)(2)&(3)). When a non-numeric water quality-based effluent limit (WQBEL) is imposed, the permit's administrative record must show why the required BMPs are sufficient to implement the WLA in the TMDL.

The NPDES permit must also specify the monitoring necessary to determine compliance with effluent limitations. See 40 C.F.R. § 122.44(I). Where effluent limits are specified as BMPs, the permit should also specify the monitoring necessary to assess if the expected load reductions attributed to BMP implementation are achieved (e.g., BMP performance data).

Stormwater discharges that are not currently subject to Phase I or Phase II of the NPDES stormwater program are not required to obtain NPDES permits. 33 U.S.C. § 1342(p)(1) & (p)(6). Therefore, for regulatory purposes, they are analogous to nonpoint sources and may be included in the LA portion of a TMDL. See 40 C.F.R. § 130.2(g).

Available data and information may not be detailed enough to determine waste load allocations for stormwater discharges on an

outfall-specific basis. In this situation, EPA recommends expressing the waste load allocation in the TMDL as either a single number for all NPDES-regulated stormwater discharges, or as different WLAs for different identifiable categories, such as municipal stormwater as distinguished from stormwater discharges from construction sites.

Challenges for Regulators

The EPA guidance document identifies the following challenges:

1. Addressing Differences in Organizational Structure. TMDL and NPDES permitting staff function not only in different programs, but in different organizational groups.

2. Consistent Allocations in TMDLs. Most TMDLs fail to assign WLA to all permitted stormwater sources or to different types of permitted stormwater source.

3. Translating Numeric TMDL WLAs into Permit Requirements. This means facilitating efforts so that the WLA, the TMDL implementation plan, and the stormwater permit requirements are developed to coordinate with each other.

4: Reconciling Boundaries of TMDLs with Boundaries of NPDES Stormwater Permits. The TMDL relates to a water body; the NPDES permit relates to construction sites, industrial facilities and stormwater conveyances systems. The connection points must be defined.

5. Incorporating Monitoring, Tracking, and Management Elements into TMDL WLAs and Stormwater Permits. Most TMDLs do not address the type and frequency of monitoring necessary to demonstrate compliance. However, stormwater permittees must evaluate the effectiveness of their SWMP or SWPPP.

Case Study

In Virginia, the TMDL for the Upper Roanoke River developed the waste load allocation for all point source facilities. The pollutant of concern was sediment.

The WLA for sediment used total suspended solids (TSS) effluent limitation.

Load allocations for non-point sources and waste load allocations for the MS4s were based on an *equal percent reduction* from controllable sources. Loads from forested lands are considered to be representative of the natural condition and therefore were not subject to reductions.

By reducing sediment loads from agricultural, transitional, and developed lands and in stream erosion by 69.5%, the sediment TMDL endpoint is achieved. The sediment allocation for municipalities is listed below in tons/year:

Roanoke County	1823
City of Roanoke	1487
Town of Vinton	128
Botetourt County	327
City of Salem	589
VDOT Roanoke Urban Area	727
VA Western Community College	2
Virginia Medical Center	10
VDOT Montgomery County Urban Area	4
Town of Blacksburg	102
Town of Christianburg	75

What is the End game?

With 36,400 TMDLs developed and approved by EPA, and no tracking of permits with WLAs, one wonders where is the finish line?

The end game is not the TMDL. It is the removal of impaired water bodies from the 303(d) list. Getting there is the missing link. Getting there is placing WLA and LA into enforceable documents for all dischargers. *

Airports Required to Use MS4 Permit

Industrial stormwater permits have been issued to 5,000 public airports, appropriate at the time. However, the correct permit is the Phase Two Municipal Permit for operators of stormwater drainage systems operated by public agencies in urban areas.

As a result, airport management has liability for pollution generated by their tenants without industrial permits.

The rules are not optional

EPA's stormwater Phase Two rule on December 8, 1999 extended the NPDES stormwater program to include discharges from small municipal separate stormwater systems (MS4s) within urbanized areas.

A small MS4 means all separate storm sewers that are owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes.

EPA defines the term *Small MS4* to include systems that are similar to separate storm sewer systems in municipalities. Examples in the rule are military bases, large hospital or prison complexes, and highways. Public airports in urban areas are not specifically identified in the examples, but they clearly meet the definition of a Phase Two MS4.

Shipyards have similar organization as airports. Frequently an authority is used to manage a seaport, as are large airports. Phase Two MS4 permits have been issued to seaports in New York, Texas, California and Washington State.

Airports Will Like the MS4 Permit

The Phase Two MS4 permit is a good management tool for airport directors. Rather than accept liability for tenant's activities, the permit requires: (1) Education, (2) Inspection (3) Construction Controls and (4) Pollution Prevention.

Education of tenants and airport staff will limit airport management liability. Informing everyone of their professional and legal responsibility will limit airport liability provided the training is completely documented. Training is mandatory.

Inspection of every operation that has a potential for discharging into the drainage system is required, and documentation with pictures will assist in achieving compliance and limiting airport management liability.

Construction activity must be controlled by developing rules and enforcing the rules with penalties. The rules must include post construction which will prevent discharges that impair offsite water quality. The airport must hold a construction permit if there is either day-to-day control of construction or the ability to modify the construction plans and specifications.

Pollution prevention and good housekeeping of airport property are required. A plan must be prepared as part of the permit application process.

The application for the Phase Two MS4 permit requires a detailed stormwater management plan (SWMP) to include a schedule of measurable goals and identification of responsibility.

Industrial Permits for Airport Management

Airports must have stormwater permits for any industrial activity where they are the operator.

Airports must have industrial stormwater permits for fuel farms they operate, on-site vehicle maintenance and equipment cleaning including landscaping equipment, airplane wash stations and deicing activities.

EPA's current multi-sector permit limits the stormwater rule to vehicle maintenance, equipment cleaning and deicing.

The application of pesticides on or near waterbodies requires a separate NPDES permit, not a stormwater permit. However, pesticides are frequently stored on airports and transferred to aircraft for application. While this activity may not require an industrial stormwater permit, the potential for a release and discharge must be evaluated.

Construction Permit for Airport Projects

The airport may be considered a planned development. If so, construction activity of any size must have a permit.

Permittees must include the airport management along with the contractor if there is the ability of the airport management to modify plans and specifications of the project.

Under the MS4 permit, airport management must have rules requiring best management practices (BMPs) and an inspection program. But as a co-permittee of the project, additional permittee inspections are required.

Permittee inspections must be made at least every 14 days and after stormwater events of 0.5 inches. Many permits have the option of conducting weekly inspections.

Conducting Regulatory Inspections

Inspections by EPA, State and municipal governments are complex. First, the inspectors must determine if every activity is properly permitted. Then inspectors must determine if BMPs and controls are effective.

Meeting with the airport management, inspectors will obtain a list of every tenant and any construction activity. Not every tenant is required to have a stormwater permit, but no tenant can discharge pollutants into the airport drainage system without airport management approval.

Many airports have an industrial park with a stormwater drainage system. Many tenants conduct industrial activities and are required to have a permit or a no exposure exemption.

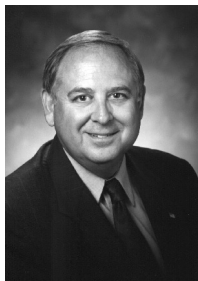
Airport managers are required to have a copy of each tenant SWPPP with the Airport SWPPP. Copies of all reports should be in the tenant's SWPPP. This includes employee training, inspections, visual examinations, sampling and annual reports.

The field inspection begins with an evaluation of each outfall from the airport. Further inspections include every fuel storage tank, vehicle maintenance including every hanger looking for inside drainage to storm sewers, vehicle washing areas (no discharge), equipment cleaning including grass cutting equipment and food related containers.

Special attention to trash containers is necessary. All trash dumpsters must be located away from storm drains, have a plugged bottom drain, and the lids closed during rain or snow events.

The time has come for Airports to follow the seaport example by contacting state permitting authorities to discuss this issue. *

**John Whitescarver,
Executive Director**
National Stormwater Center



- ▶ *Qualified Environmental Professional* by the Institute of Professional Environmental Practice
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- ▶ Appointed to EPA Advisory Committee on Compliance Assistance
- ▶ Appointed by Small Business Administration to EPA committee for streamlining Phase II stormwater rules.
- ▶ Instructor for Florida DEP Erosion & Sedimentation Control Inspector Course

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