



The Stormwater Quarterly

National Stormwater Center

Our 13th year

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FIX CONSTRUCTION PERMITS TRADE SWPPP FOR DISCHARGE LIMITS

Stormwater News

In Colorado, last month, the Water Quality Control Commission reaffirmed stormwater protections from oil and gas construction runoff. With the passage of the 2005 federal Energy Bill, stormwater discharges associated with oil and gas construction activities were exempted from NPDES. However, the legislation did not restrict states from continuing to regulate oil and gas construction activities.

The New Mexico State Court of Appeals confirmed that all New Mexico's waters are subject to federal water quality standards. The ruling is a victory for the New Mexico Water Quality Control Commission, which in 2005 decided all streams, rivers and lakes in the state are subject to the federal Clean Water Act, regardless of how the federal government defined those waters. "This landmark decision allows the state to define the scope of its surface water quality standards. We are no longer tied to federal rollbacks that leave our waters vulnerable," said State Environment Secretary Ron Curry.

Plan to attend EPA's MS4 Operators Conference in Rogers, Arkansas. Rogers is located in northwest Arkansas between the University of Arkansas in Fayetteville and Bentonville, the corporate home of Wal-Mart.

The program begins on Sunday, June 18, with a CPESC Exam by Shirley Morrow and ends at noon on Friday, June 22, after "*You Are the Inspector*" by the National Stormwater Center. BMP products will be reviewed and there will be concurrent training on NPDES, inspections, and water quality. The afternoon program on Thursday offers three field trips. Learn and enjoy! *(Continued on Page 3)*

INSIDE THIS ISSUE

Page 2 - Cut SWPPP - Add Discharge Limitations

Page 3 - Certified Training Can't Be Ignored

Page 4 - Polluters vs. Environmentalists

Page 6 - Post-Construction Going Low Impact

The Time Has Come to for a Major Change in Stormwater Permits

The NPDES permit program has had amazing success in cleansing the nation's waters using end-of-pipe limitations. Then, why did the EPA make a paradigm shift to BMPs (best management practices) with the stormwater permit program?

The answer is; numbers take time to develop, especially for intermittent wet weather discharges. The Clean Water Act clearly states that prior to the development of national effluent limitations, permits shall be issued to achieve the intent of the Act. So EPA used pollution prevention plans with BMPs as an interim measure.

There are two problems with the BMP permits. One is that we are using *Bad* Management Practices not *Best* Management Practices. The other problem is the high cost of compliance documentation. As a result of *Bad* Management Practices, the nation's waters have not improved and the cost is too high.

The unintended consequences of BMP permits are excessive and unnecessary government intrusion into public and private business. Why not replace fifty compliance items with only one - a discharge limitation. Then nothing else is necessary.

The time has come to follow the law and develop uniform national standards for construction and post-construction for new development and redevelopment. *

Construction Stormwater Permits Focus on Paper, Not Clean Runoff **End-of-Pipe Controls Should Replace SWPPPs**

The stormwater permit program has failed to achieve the purpose of the Clean Water Act (CWA) — to restore and maintain the integrity of the nation’s waters. In 1987, Congress amended the CWA adding Section 402(p) requiring a specific stormwater permit program. This action was the result of state reports required under CWA Section 305(b) indicating that forty percent of the nation’s waters failed to achieve the minimum water quality standards. Now, twenty years later, there is no documented improvement in the quality of the nation’s waters.

According to the U.S. Environmental Protection Agency (EPA) (see <http://www.epa.gov/owow/tmdl/overviewfs.html>) the nation’s waters remain as they were twenty years ago — forty percent impaired. Also, EPA’s 2006 National Stream Report shows that forty-two percent of the nation’s stream length is in poor biological condition.

Stormwater construction permits allow the permittee to self regulate, to write a stormwater pollution plan (SWPPP) of their choosing. First, there is uncertainty as to the “operator” responsibility for the plan. Next, an operator must document compliance with approximately fifty requirements irrespective of their applicability to the project. Finally, documented maintenance and weekly inspections are included in the plan. Often, despite following the SWPPP and permit requirements, sediment and muddy water flows into streets and off-site.

Fixing Stormwater Permits - Performance Standards

The role of government is to assure pollutants discharged from a regulated activity are acceptable. If that can be assured, government

should not interfere with the permittees’ operations. Certainly, a plan to prevent pollution is necessary, but a single permit condition would be more effective than fifty requirements.

A permittee that complies with a discharge limitation should not be subject to fifty enforceable conditions. On the other hand, a permittee who fails to comply with a discharge limitation should be subject to the SWPPP requirements until compliance is achieved.

A clear reading of CWA Section 402 requires an end-of-pipe permit program. The absence of technology-based performance standards necessitates the use of best management practices (BMPs) in discharge permits. As a result, permittees have focused on documenting BMPs rather than polluted runoff discharges. BMP permits are difficult to enforce; end-of-pipe performance standards are not.

Effluent limitations can be numerical or narrative, or both. Reasonable technology standards for turbidity and pH can be sampled with field instruments. A narrative “no sediment discharge” can and should be achieved with insignificant visual monitoring costs.

North Carolina Sediment Control Law is performance oriented - it prohibits visible off-site sedimentation from construction sites, but allows the owner or developer to determine the most economical and most effective methods for achieving erosion and sedimentation control. (<http://www.dlr.enr.state.nc.us/pages/manualsandvideos.html>, Chapter 1)

The construction industry should recognize the value of performance standards in a construction permit instead of the existing permit. The industry should insist on relief from the SWPPP requirements, unless the discharger fails the performance standard.

(Fixing Stormwater Permits - Continued on Page 7)

Qualified or Certified - Just Do It -

Stormwater certification programs are becoming popular. The National Stormwater Center began monthly certification courses six years ago. Now the International Erosion Control Association (IECA) offers a series of certified programs. Both of these nonprofit organizations require pass/fail examinations.

The *Certified Stormwater Inspector (CSI)* Course by the National Stormwater Center includes sediment control BMPs, but is focused on stormwater permit compliance. Visit NPDES.com for details

The *Certified Professional in Erosion and Sediment Control (CPESC)* Course by IECA teaches compliance, but has a focus on erosion and sediment control technologies. Visit IECA.org.

States that have certification programs include Washington, Georgia, Florida, Delaware, Michigan, Maryland, and New Jersey. California has published a draft construction general permit that would require all SWPPPs be developed by a Qualified SWPPP Developer.

The state of Florida Course is required for all state development projects. To date, more than 14,000 people have completed the two-day course and examination.

EPA stormwater regulations require that the management official certifying permit compliance must rely on personnel that are “qualified” by experience or by training.

Having a stormwater certification is good evidence that qualified personnel properly completed the required actions. Due to changing permit requirements, continuous training is a good idea. *

Stormwater News

(Continued From Page 1)

The EPA filed a civil lawsuit against Massey Mining Company accusing the company of 4,633 violations of the Clean Water Act over the past six years. According to Credit Suisse analyst David Gagliano in a note to clients, Massey could face \$2 billion in fines based on 69,000 days of non-compliance.

The suit was filed May 10 by the U.S. Environmental Protection Agency in U.S. District Court in Charleston, West Virginia, alleging illegal discharges from mines in West Virginia and Kentucky. Massey and more than a dozen subsidiaries were named as defendants. In March, the company was fined \$1.5 million for safety violations that federal regulators said contributed to the deaths of two West Virginia coal miners.

EPA announced that Wal-Mart will pay a civil penalty of \$24,000 for stormwater permit violations at its Supercenter construction site in Caguas, Puerto Rico. The company will also provide at least \$98,000 for the preservation of land in the area of Las Cucharillas Marsh, part of the San Juan Bay Estuary Watershed.

Wal-Mart de Puerto Rico, Inc. failed to obtain the appropriate stormwater construction permit on time, failed to promptly develop a plan to control stormwater pollution, failed to prepare and maintain inspection reports and failed to carry out best management practices during construction of the Caguas Supercenter.

Kmart was also in trouble with EPA and will pay a \$102,422 fine to settle self-disclosed permit violations. Violations were discovered (by Kmart) at 17 distribution centers in 13 states. The company reported violations of clean water, hazardous waste, and emergency planning and preparedness regulations. If EPA had discovered Kmart’s violations through an inspection, the company would have faced a fine of more than \$1.6 million.

Kmart corrected the violations found during a 2004 audit. The company prepared and implemented spill prevention control and countermeasures plans, applied for appropriate stormwater permits, complied with hazardous waste generator requirements, and submitted reports to state and local emergency planning and response organizations informing them of the presence of hazardous substances. *

Polluters vs. Environmentalist

Several Supreme Court decisions have restricted the applicability of Clean Water Act Permits. A new bill in the House of Representatives sets the stage for an enormous Washington Beltway fight between environmental groups and trade associations.

The bill, called the Clean Water Restoration Act of 2007, was introduced by Representatives James Oberstar (D-Minn.), John Dingell (D-Mich.), and Vernon Ehlers (R-Mich), along with a bipartisan group of 158 co-sponsors.

Over 300 environmental and river restoration groups have written to congressional representatives helping Congressman Dingle get bipartisan co-sponsors, giving the bill a chance to pass the House. *The Waters Advocacy Coalition*, a large group of associations including the National Association of Home Builders, oppose the bill.

Who Needs A Permit?

The NPDES permit program (Section 402 of the CWA) and the Dredge and Fill permit program (Section 404 of the CWA) require permits for discharges and fills to navigable waters.

The CWA only defines navigable water as “waters of the U.S.” For 35 years the EPA and Corps of Engineers’ rules further defined the term for the purpose of regulatory clarity. However two Supreme Court decisions have restricted those rules.

Supreme Court Decisions

This bill is intended to reestablish the commonly held understanding of the Clean Water Act prior to the U.S. Supreme Court's decisions in the *Solid Waste Agency of Northern Cook County v.*

Corps of Engineers (SWANCC) in 2001 and Rapanos et. al. v. United States in 2006.

In SWANCC, the Court ruled that non-navigable, isolated, intrastate waters do not fall under the jurisdiction of the Clean Water Act. In Rapanos, the Court overturned the lower court ruling to prevent filling wetlands to build a shopping mall and condos. The court was evenly split over defining the term “navigable waters”. The remaining Justice (Kennedy) relied on the term “significant nexus to waters of the U.S.”

The bill completely deletes the term “navigable” from the Act to clarify that the Clean Water Act is principally intended to protect the nation’s waters from pollution, and not just maintain navigability.

Waters of the US Defined

The bill amends the Clean Water Act (CWA) to delete the word “navigable” and, instead, define jurisdiction under the CWA by the phrase “waters of the United States.” That phrase would be defined as:

“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, natural ponds, and all impoundments of the foregoing, to the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution.”

(Continued on Page 5)

Waters Advocacy Coalition (WAC)

In an unsigned letter to Congress on April 4, WAC stated: “Instead of creating regulatory certainty, replacing “navigable waters” with a new definition would result in significant litigation and may not even stand up to future legal challenges.”

Member of the WAC Group are:

American Farm Bureau Federation
American Forest & Paper Association
American Road and Transportation Builders Association
Associated General Contractors of America
CropLife America
Edison Electric Institute
Foundation for Environmental and Economic Progress
International Council of Shopping Centers
National Association of Counties
National Association of Home Builders
National Association of Industrial and Office Properties
National Association of Manufacturers
National Cattlemen’s Beef Association
National Corn Growers Association
National Mining Association
National Multi Housing Council
National Stone, Sand and Gravel Association
Responsible Industry for a Sound Environment

The National Association of Counties recently joined the WAC group and published the following on its web site: In the role of regulator, counties administer a number of CWA programs that regulate water quality: stormwater management and flooding, water quality management plans and Total Maximum Daily Load (TMDL).

An increase in the scope of CWA jurisdiction would increase the local scope in all these programs. In addition, counties have many local ordinances that would be affected. Some examples of infrastructure that could be affected by any proposed legislation may include:

- man-made ditches, culverts and pipes
- roads, curbs and sidewalks (may include stormwater runoff from forest roads)
- water and water transfer rights

- rainspout drainage from homes
- 100- and 300-year floodplains
- routine maintenance (clean-up of debris) in flood control channels
- desert washes
- stormwater infrastructure and runoff (sheet flow)
- waste treatment systems, and
- construction and maintenance of county-owned buildings.

Because most states now oversee the National Pollutant Discharge Elimination System (NPDES) permitting authority, the workload under the NPDES program would also increase.

Many counties, in the role of regulator, have their own watershed/stormwater management plans that would also need to be modified based on federal and state changes. Counties would then have to oversee all of the “waters” within their borders.

The National Corn Growers Association President Ken McCauley said, “We do not believe that it is in the nation’s interest to regulate ditches, culverts and pipes, desert washes, dry arroyos, farmland and treatment ponds as ‘waters of the United States’ and therefore subject such waters to all of the requirements of federal regulation.”

Let the Games Begin

In addition to defining waters of the U.S., the stated purpose of the bill is “to provide protection to the waters of the United States to the fullest extent of the legislative authority of Congress under the Constitution.” This phrase is exactly why associations, representing polluters, are waging war on this bill - it will give full authority to protect the quality of all waters of the United States to the federal government. **Editors Comment:** Permittees should not be offended by the use of the word “polluter.” All NPDES permits are issued to polluters to reduce pollution.

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EPA Supports Low Impact Development (LID) for Stormwater Permitting

Post Construction Runoff = Pre Construction

The Stormwater General Permit for municipal type governments (MS4) includes a Minimum Control Measure (MCM) to:

- Develop and implement strategies which include BMPs
- Use an ordinance to address post construction runoff from new development and redevelopment projects
- Ensure adequate long-term operation and maintenance of BMPs.

This MCM can, and should be, achieved by requiring Low Impact Development (LID).

Wasting Good Stormwater

Stormwater flowing off parking lots, buildings, and roadways to streams, lakes and ultimately to oceans is a waste of good water. Water is too precious a commodity to be lost.

Along with wasting water, the runoff either carries pollutants to water bodies or it is treated to remove pollutants.

For too long we have permitted development to pollute our streams by not requiring smarter, cleaner development practices that could protect waters from pollution. It is time to require cleaner development.

Since the mid-1970s, a planning-based approach to stormwater management, termed variously as Conservation Design, Better Site Design, Low Impact Development or Environmentally Sound Design, has been available and has been successfully demonstrated in full-scale residential and commercial developments around the country.

LID is not only suitable for low-stormwater volume, “water quality” retention, and treatment (typically defined as the first inch of runoff) but, particularly when applied in a greenfield setting and for projects at greater than 5 acres.

The problem is that this effective and successfully demonstrated technology has largely been ignored by developers and regulators alike for the past thirty years, thus its high potential for stream protection has gone unrealized.

LID standards are cheaper for developers to implement and cheaper for taxpayers because they prevent pollution in the first place.

Maryland

Maryland has enacted a law that requires developers to use environmental site design as the primary method for managing stormwater, and requires no net increase in runoff from a development site.

The Stormwater Management Act of 2007 requires the State Department of the Environment to publish a model ordinance to manage stormwater runoff. Cities and counties must change local zoning codes to allow for low impact development (LID) techniques.

Environmental Protection Agency Goes Green

EPA and thirty national groups signed a statement of intent to promote the use of green infrastructure to help solve stormwater runoff and sewer overflow problems.

The statement of intent pledges cooperation among these groups to promote the use of various green infrastructure techniques such as rain gardens, bioretention cells, infiltration swales, green parking lot design, rain barrels, and many others.

The agreement, with signatures, is at http://www.epa.gov/npdes/pubs/gi_supportstatement.pdf

Post construction national standards is a perfect place for EPA to keep its commitment. The standard for new construction greater than five acres should require post construction runoff no greater than pre construction runoff. *

Fixing Stormwater Permits

(From Page 2)

Fixing Stormwater Permits - Regulatory Activity

Currently there are three efforts to fix the stormwater permit program. Each has a similar mission and time period:

1. EPA's Office of Water has commissioned a two-year study by the National Research Council,
2. The U.S. District Court for the Central District of California ordered EPA to develop effluent limitations for the construction and development industry, and
3. California has published a draft construction permit with end-of-pipe performance standards.

First, EPA is sponsoring a twenty-six month study titled Reducing Stormwater Discharge Contributions to Water Pollution. The National Research Council study began in January 2007. EPA expects to receive recommendations to modify the permit program to better protect water quality. The study will examine:

- a protocol linking runoff to water quality,
- effluent parameters, limits and benchmarks,
- the relationship of SWP3s to water quality,
- permit conditions to ensure water quality,
- stormwater permitting program design.

The second activity is the development of national effluent standards by EPA for the construction and development industry. A federal court in California ordered EPA (on Dec. 1, 2006) to develop effluent limitations for discharges from the construction and development industry.

The agency proposed standards in 2002, but abandoned its plans for effluent limitations for the construction industry in 2004.

The court order requires all data be collected by Dec. 1, 2007 with the proposed rule by Dec. 2008. The judge made it clear that the date for the promulgated effluent guidelines and standards would not be extended beyond Dec. 1, 2009.

Finally, the California Water Resources Control Board has taken the position that the current construction permit is "inadequate" and needs enforceable performance standards. As a result, the Board is revising their construction general permit.

The draft permit calls for numeric end-of pipe action levels (AL) and numeric effluent limitations (NEL). The AL for turbidity is 500 Nephelometric Turbidity Units (NTU). The NEL for turbidity is 10 NTU where advanced treatment is required.

Advanced treatment is required if the soils contain more than ten percent (by weight) particle sizes smaller than 0.02 mm. Exceeding action levels and effluent limitations requires immediate corrective actions and exceeding the NEL is a permit violation.

Two public workshops on the draft permit were held in April and thirty-five written comments were received and are on the Board's web site. A scrutiny final draft will likely be released this summer followed by another Water Board hearing this fall.

Fixing Stormwater Permits - Conclusion

The stars are aligned for a permit change to performance standards. The industry and their associations are expected to oppose such a change and continue to protest their perceived over-regulation.

But, without permit performance standards, the construction industry will continue to face the burdens of paperwork, inspections and public scrutiny.

The hope is that industry will accept performance standards and oppose unnecessary restrictions on business activity. *

**John Whitescarver,
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- ▶ *Qualified Environmental Professional* Board Certification by the Institute of Professional Environmental Practice
- ▶ Team to Organize US EPA & Write Clean Water Act Rules; National Expert, Municipal Permitting Policy; Awarded EPA Bronze Medal by US EPA, 1970-1979
- ▶ 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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