

## MEASURING CONSTRUCTION & MUNICIPAL COMPLIANCE

### *Stormwater News*

EPA announced plans to develop a national rule to regulate post-construction discharges from new and redeveloped sites by Nov. 2012. The process begins next June with a questionnaire to 2,600 construction companies, municipalities, and state government. Responses will be due by August 2010. The proposed regulation is scheduled to be published in late 2010. See the related article on page three.

**The U.S. Environmental Protection Agency has cited 14 municipalities in Pennsylvania and Maryland for stormwater violations, nine of which are within the Chesapeake Bay watershed.**

In Pennsylvania, EPA issued orders to Birdsboro Borough and Ontelaunee Township in Berks County; Mechanicsburg Borough in Cumberland County; Atrim Township in Franklin County; East Donegal Township, Terre Hill Borough, Pequea Township, Akron Borough and East Earl Township in Lancaster County; Myerstown Borough in Lebanon County; and, Monaghan and Newberry Townships in York County.

In Maryland, EPA issued orders to Baltimore City and Anne Arundel County.

EPA requires the cited municipalities to correct problems with their respective municipal separate storm sewer (MS4) programs and come into compliance with their state-issued discharge permits. (Continued on Page 3)

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## EPA Ratchets-Up

## Permit Conditions

All construction permits will phase in numerical discharge limits within five years. Sites that disturb ten acres or more will sample their discharge for turbidity compliance.

EPA is developing post construction discharge limitations beginning with a survey of 1,000 construction companies and 1,000 municipalities.

The Executive Order for cleaning up the Chesapeake Bay requires five states to issue and enforce more stringent state issued permits for industry, construction and municipal governments. Failure of the states to do so will result in grant reductions and federal issued permits.

A senate bill will codify the Executive Order and provide over \$2.125 billion in grants.

The Clean Water Act clearly expected NPDES permits to have end-of -pipe effluent limitations. However, stormwater permits must regulate runoff discharges that are irregular in volume and intensity. In such a case, the Act allows permits to be issued with best management practices (BMP) using best professional judgement (BPJ).

Expect future permits to have both BMPs and discharge limitations. \*

## EPA Sets Nationwide Standards at 280 Turbidity Units

# Construction Industry Will Get New Permits

All construction disturbing 10 or more acres will sample all discharges from the site. This is the new nationwide standard that will be phased-in over four years.

EPA's decision published December 1, 2009 came with several surprises. EPA had proposed 13 Nephelometric turbidity units (NTUs) but picked 280 NTUs. (Not exactly clear water.) Another surprise was requiring the 10 acre threshold, rather than 30 acres as proposed. Finally, EPA dropped the rainfall and clay content threshold.

This is a very simple national standard. EPA also simplifies the narrative standards. Gone are the words "eliminate" and "implement." They are replaced with the words "minimize" and "as feasible."

Expect a judicial challenge from the National Association of Home Builders and the Associated Contractors of America. However, the rule is likely to continue without significant changes in content or schedule.

The 280 NTU limitation and related sampling will begin after August 2, 2010 and when existing permits are renewed, but only for construction sites of 20 acres or more.

The 10 acre rule becomes effective on February 2, 2014 and after existing permits are renewed. Ten states have construction permits expiring within 18 months. States that are very late revising permits can expect citizen suits.

EPA and authorized states will include the 280 NTU standard and the non-numerical effluent limitations in revised permits. They may simply add the EPA standard to their permit or they may elect to make more stringent standards.

The non-numerical standards are in these

categories: (a) Erosion and Sediment Controls, (b) Soil Stabilization, (c) Dewatering, (d) Pollution Prevention Measures, (e) Prohibited Discharges and (f) Surface Outlets.

### **Minimize is a Requirement**

The effluent limitation requires the permittee to 1) minimize soil erosion; 2) 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, 6) minimize soil compaction and, unless infeasible, preserve topsoil.

Minimize the discharge of pollutants from wash waters.

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;

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

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### **EPA DOES NOT DEFINE "MINIMIZE"**

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### **Other requirements**

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.

*(See Construction Standards on page 5)*

# Business, MS4 & States Surveyed for Post Construction

EPA intends to develop national post construction discharge standards beginning next June with a questionnaire to approximately 1,000 construction companies, 1,000 municipalities and all state governments. EPA is soliciting comments on its draft questionnaires by Dec. 29, 2009.

The draft construction questionnaire is 61 pages and will require 53 hours to complete. It will require information on each company's stormwater management practices for up to 10 construction jobs completed during FY2009, including design, installation and maintenance costs of such practices.

The draft questionnaire is online at [http://www.epa.gov/npdes/pubs/ind\\_questionnaire.pdf](http://www.epa.gov/npdes/pubs/ind_questionnaire.pdf)

Different questionnaires will be sent to municipal and state governments. The MS4 and state questionnaires will characterize the current scope of the various regulatory programs; incentives and disincentives for best management and the current burden expenditures to comply with and enforce existing requirements.

The MS4 questionnaire is located at [http://www.epa.gov/npdes/pubs/ms4\\_questionnaire.pdf](http://www.epa.gov/npdes/pubs/ms4_questionnaire.pdf) and the state questionnaire at [http://www.epa.gov/npdes/pubs/state\\_questionnaire.pdf](http://www.epa.gov/npdes/pubs/state_questionnaire.pdf)

Completing the questionnaire is mandatory. Late filing of the questionnaire, or failure to follow any related EPA instruction, may result in civil penalties, criminal fines, or other sanctions. \*

## Stormwater News

(Continued From Page 1)

**EPA will soon publish guidance for the federal agencies on how to meet strict stormwater requirements for controlling post-construction runoff from federal facilities.** This is required by Section 438 of the Energy Independence and Security Act of 2007 entitled "Storm Water Runoff Requirements For Federal Development Projects.

The law requires the sponsor of any development or redevelopment project involving a federal facility with a footprint that exceeds 5,000 square feet "shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow."

**A tugboat company manager has been indicted in federal court in San Francisco on charges of polluting the Delta by dumping dredged materials into waters near Pittsburgh.** Mark Guinn, 41, of Elk Grove, the general manager of Northern California operations of Brusco Tug & Barge Inc., was indicted by a federal grand jury on four counts of violating the U.S. Clean Water Act. Each count carries a possible maximum sentence of three years in prison,

He is accused of dumping or causing other company workers to dump dredged materials directly into Delta waters surrounding Winter Island, northeast of Pittsburgh, three times in 2003 and once in 2007.

**Judge sides with environmental groups in coal case.** — Tim Huber, *The Associated Press*, November 24, 2009  
The U.S. Army Corps of Engineers violated federal environmental laws by failing to give the public enough of a say before issuing permits for mountaintop removal coal mines in West Virginia, according to a federal judge.

The decision by U.S. District Judge Chuck Chambers involves permits issued to subsidiaries of Consol Energy and Penn Virginia Resources. But it could have far-reaching implications for the ongoing debate over mountaintop removal coal mining. \*

## Grants with Stringent Enforcement by Next Summer

# Chesapeake's New Rules + A New Law

EPA's draft strategy for compliance with the Presidential Executive Order to clean Chesapeake Bay met with mixed reviews. The Chesapeake Bay Foundation (250,000 members) stated "what is still missing are clearly identified bold, specific, and measurable pollution reductions EPA will pursue today."

The Strategy is required by the May 12, 2009 Executive Order that requires federal agencies to create and implement effective strategies to restore water quality in the Bay.

The draft strategy focuses almost entirely on actions. EPA intends to require the states to do more to implement the Clean Water Act, to expand the reach of its own regulatory programs, and to work closely with other federal agencies to better target financial and technical resources.

Additional support for the Bay cleanup is a bill introduced by Senator Ben Cardin on October 19, 2009 called *The Chesapeake Clean Water and Ecosystem Act of 2009*. The Bill would codify the Chesapeake Bay Executive Order and offer \$2.125 billion in new grant authorization with strong new enforcement tools.

Following are several stormwater permit related highlights of the EPA draft strategy and the Senate Bill.

### **EPA Strategy Highlights**

\* All federal agencies will maintain or restore predevelopment hydrology with regard to temperature, rate, volume, and duration of flow for new development or redevelopment projects that exceed 5,000 square feet.

\* In December 2010, EPA will establish a Total Maximum Daily Load (TMDL) for the

Bay. EPA intends to provide the watershed states with draft loading reduction targets for nitrogen and phosphorus for each major river basin.

\* Create accountability programs that (1) achieve the pollutant reductions needed from all sources through regulations, permits, or enforceable agreements, and (2) include commitments to dates by which any necessary regulations or other instruments would be established and implemented

\* Create a series of 2-year milestones detailing near-term actions and loading reduction targets to evaluate state progress toward water quality goals

\* Failure to achieve milestones would result in "consequences" such as:

1. Assign more stringent pollutant reduction responsibilities to point sources of nutrient and sediment pollution
2. Objecting to state-issued CWA National Pollutant Discharge Elimination System (NPDES) permits
3. Limit or prohibit new or expanded discharges of nutrients and sediments
4. Withholding, conditioning, or reallocating federal grant funds

\* EPA would initiate rulemaking:

1. Expand the universe of regulated confined Animal Feeding Operations (CAFO) and set new minimum performance standards for permits, including regulating the land application of animal manure.
2. Expand the jurisdiction of the regulatory MS4 program to include high-growth areas and establish stringent minimum performance standards within permits consistent with Bay water quality goals.
3. Ensure that any new or expanding discharges are offset by reductions from other sources.

(Continued on the next page)

## Senate Bill 1816 Highlights

Introduced in the Senate October 11, 2009.

\* The EPA must assign nutrient and sediment targets to each state that are adequate to restore Bay water quality. All needed actions must be in place by 2025.

\* States must submit "implementation plans" to the EPA showing how they will reach nutrient and sediment goals, and must set two-year milestones to keep progress on track. States are given broader regulatory authority to develop programs adequate to meet the goals.

\* Implementation plans must be approved by the EPA. If states do not submit plans, or miss milestones and fail to make corrections, the EPA may impose "consequences," which could include withholding some state Clean Water Act grants, or developing its own implementation plan for the state that would require a 2-to-1 offset program for any new discharges of nitrogen and phosphorus and could include new regulations to control pollution.

\* An interstate nutrient trading program would be established.

\* The EPA would be required to develop new stormwater standards to minimize or eliminate runoff from new development and redevelopment projects.

\* The bill would authorize \$1.5 billion in grants to local governments to support projects that reduce stormwater runoff.

\* The bill would authorize \$625 million in spending to implement other state nutrient control programs, improve monitoring and providing increased technical assistance for farmers.

\* Citizens would be authorized to file suits against states or the EPA for failure to carry out the law. \*

## Construction Standards

*(Continued from page 2)*

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

Where construction has ceased for 14 days or more, stabilization must be completed within a period of time determined by the permitting authority.

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

When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

### Prohibited Discharges

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

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

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

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

### Sampling

The 280 NTU limitation applies to all discharges from the site except on days when total precipitation during that day exceeds the local 2-year, 24-hour storm event.

Revised permits will specify conditions and procedures for representative sampling. EPA will publish a technical resource guide for state permit writers. *(Continued on the next page)*

Generally a minimum of three samples must be collected to assure valid statistical results. Permittees may use automated samplers and/or turbidity meters with data loggers.

The numeric limitation applies to all discharges from construction sites.

If the permitting authority samples the discharge, those samples may be averaged with the measurements taken by the permittee for the same discharge event.

For example, if the permittee takes three samples and the permitting authority takes one sample, then these four samples may be averaged to determine the daily value.

### State Permit Writers

In addition to deciding on monitoring rules, permitting authorities may establish controls on dosage and usage, protocols for residual toxicity testing, require prior approval before the use of particular polymers, training requirements for site operators or other measures they deem appropriate.

The state may require permittees to notify them when the 10 acre threshold of disturbed land is exceeded and when sampling will begin.

States must decide the time frame for stabilization where construction has ceased for 14 days.

States may designate additional stormwater discharges for regulation under the law in order to protect water quality.

Finally, states may approve a “qualifying local program” for sediment and erosion control. The local program would replace the construction permit.

The following table shows the expiration dates for construction general permits. Proposed permits should be made available six months prior to the expiration date. \*

State	Expiration
Alabama	1/23/2008
Arkansas	10/31/2011
Connecticut	4/1/2010
Delaware	2/11/2011
Florida	2/17/2014
Georgia	7/31/2013
Illinois	7/31/2013
Indiana	11/26/2008
Kentucky	6/29/2014
Maine	1/20/2008
Maryland	12/31/2013
Michigan	5/7/2008
Minnesota	8/1/2013
Mississippi (large)	5/31/2010
Mississippi (small)	12/31/2012
New Jersey	2/28/2012
New York	4/30/2010
N. Carolina	12/31/2009
Ohio (Big Darby)	10/26/2011
Ohio	4/20/2013
Pennsylvania	12/7/2009
Rhode Island	9/25/2013
S. Carolina	8/31/2011
Tennessee	5/30/2010
Vermont	9/13/2011
Virgin Islands	11/30/2012
Virginia	6/30/2014
West Virginia	12/4/2012
Wisconsin	9/30/2011

# State Activity

## California

On October 20, 2009, California approved a watershed cleanup plan for polychlorinated biphenyls (“PCBs”) in the San Francisco Bay that represents the first major regulatory effort in the country to set enforceable numeric pollutant load allocations in stormwater permits. This represents a significant departure from the traditional reliance on best management practices (“BMPs”) to address stormwater pollution.

## Florida

EPA has agreed to establish numeric water quality criteria for Florida's lakes and rivers by January 14, 2010. The agency has until January 14, 2011, to establish numeric water quality criteria for Florida's coastal and estuarine waters. The ruling comes in response to a lawsuit brought by environmental groups seeking water quality standards for nutrients in public waters. The suit has nationwide implications. All but one state and two territories have listed impaired waters for nutrient pollution.

## Iowa

According to the *Des Moines Register*, Environment Iowa released a report outlining the state's top 10 polluted waterways. Their report also blamed two Tyson Fresh Meats facilities as major contributors of the toxic releases sent into waterways. Environment Iowa insists that the state and federal government should get tough with its permit process and establish concrete numbers specifying the limits for toxic pollution discharge.

## Alaska

The approved state NPDES program is called Alaska Pollutant Discharge Elimination System (APDES) Program. The transfer of full program responsibilities is a four-phase process that will be completed on October 31, 2011. The 2<sup>nd</sup> phase began October 31, 2009, and includes the storm water program.

## 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.

## Idaho

Developers conducting work in Idaho are facing \$125,000 in proposed penalties for violating the Clean Water Act at a construction site in Smiths Ferry, Idaho, according to a complaint issued by the U.S. Environmental Protection Agency. Sal Gallucci, JJS Southwest LLC and Whitehawk Land Development Corporation failed to apply for a Construction General Permit prior to building and improving roads at the Whitehawk Subdivision from 2005-2009, according to the complaint.

## Maine and Vermont

*The Associated Press*, Nov.24, 2009

Maine and Vermont are moving ahead of other states on regulating pollution in stormwater running off roofs and parking lots, which often carries oil and other toxic substances.

## SE United States

John Wieland Homes (builder in Georgia, North Carolina, South Carolina and Tennessee) agreed to pay a \$350,000 civil penalty to resolve alleged violations of the Clean Water Act . The agreement requires stormwater compliance at their construction sites that go beyond current regulatory requirements. They also must implement a management and internal reporting system to improve oversight of on-the-ground operations and submit annual reports to EPA. \*

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



- ▶ *Qualified Environmental Professional* 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

<u>2010 Schedule</u>			
<b>Certified Stormwater Inspector</b>			
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Raymond MS	Jan 19-20	Pennsylvania	Apr 26-27
San Juan PR	Feb 8 -9	Florida	May 10-11
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East Coast	Mar 15-16	Virginia	Jun 7-8
Malibu CA	Mar 29-30		
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(Now you can renew your CSI certification online! Prior experience is recommended as course prerequisite)			
California	Jan 7	East USA	Apr 7
West USA	Feb 17	California	May 5
Midwest	Mar 10	West USA	Jun 17
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Stockton CA	Jan 13-14	Louisiana	Apr 14-15
Raymond MS	Jan 21-22	Pennsylvania	Apr 28-29
San Juan PR	Feb 10-11	Florida	May 12-13
Central TX	Feb 24-25	North. CA	May 26-27
East Coast	Mar 17-18	Virginia	Jun 9-10
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**National Stormwater Center**  
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