

WILL SUPREME COURT EXPAND NPDES TO INCLUDE DISCHARGES THROUGH GROUNDWATER?

Stormwater Permit News

The Environmental Protection Agency has redefined defined “waters of the United States” (WOTUS) and significantly reduced water protected by the Clean Water Act including NPDES. The rule is anticipated to be published in the Federal Register in late February and will become effective 60-days following publication.

The rule eliminates Clean Water Act protections on 18% of waterways nationwide, according to the U.S. Geological Survey's National Hydrology Dataset, (*Greenwire*, Dec. 11, 2018). The rule erases protections for wetlands that do not have surface water connections to intermittent or perennial streams, which account for more than 51% of the nation's wetlands.

The Spring Issue of The Stormwater Quarterly will contain a full report.

ST. PAUL, MN The Minnesota Court of Appeals overturned state permits today that would allow PolyMet to construct Minnesota's first copper-sulfide mine, ordering a new hearing before an administrative law judge.

In a 36 page decision, the court sent the dam safety permits and permit to mine awarded by the Minnesota Department of Natural Resource back to the DNR and said the agency must hold a contested case hearing, which would require an administrative law judge to examine additional evidence and testimony on the project.

Then, with information from the contested-case hearing in hand, the DNR must decide whether or not to reissue the permits.

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Will NPDES Apply to Indirect Discharges?

Last Fall the U.S. Supreme Court heard arguments that could expand the jurisdiction of the Clean Water Act to discharges through ground water to surface waters.

At issue is County of Maui v. Hawaii Wildlife Fund. Maui County has been running millions of gallons of treated sewage through underground injection wells. Those wells are designed to discharge pollution into groundwater that then flows to the Pacific Ocean.

The text of the Clean Water Act of 1972 prohibits any unpermitted “**discharge** of pollution to navigable waters **from** any point source.” The law does not say “direct discharge.”

Maui County argued that “from” in this statute means the most immediate, intervening conveyance before pollution touches a protected body of water. The county argued that the groundwater is the “source” and not Maui County treatment facility.

During the oral argument last Fall, several Justices questioned Maui County's effort to accept responsibility. Justice Stephen Breyer asked, “So what happens if you just take the pipe and you decide what we'll do is we're going to end the pipe 35 feet from the river or the ocean or something? Is there no liability under the law?”

Although the Supreme Court, being conservative, may want to restrict the expansion of NPDES to include indirect discharges, they are stuck with this problem. Simply moving an outfall pipe back from the water's edge would be enough to avoid that permitting process.

We will hear the Court's decision by June. ♦

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Multi Sector General Permit (MSGP)

EPA to Propose New Industrial Permit

The US EPA is under a court order to reissue their Multisector Stormwater permit this year. EPA personal told the National Stormwater Center (Center) to expect their proposed permit in February 2020. The final permit must be promulgated within nine months of the proposal. The comment period will be 60 days. While EPA will offer a webinar to the public, the Center has scheduled one day meetings in Massachusetts and in Puerto Rico to explain the logic of the proposed changes and to gather comments from the participants to submit to EPA before the comment period ends.

Expect the permit to propose a tiered approach to monitoring that recognizes the varying levels of risk among different industrial activities. Low-risk facilities could opt for a permit-term rigorous inspections and reporting by a certified inspector in lieu of monitoring. For a site to be considered at low risk of impacting water quality, it should have a low likelihood of discharging toxic substances, generally have a small area of exposed industrial activity, and be well managed.

EPA will propose a low risk facility consider the following criteria:

- No discharge to an impaired water body
- Has been inspected by a governmental agency and not charged with a monitory violation
- No reportable spills in the last 3 years
- No fueling
- Less than one acre of industrial activity
- No area of exposed industrial activities including storage

Many very small facilities (less than one acre of industrial activities) have relatively few activities exposed to stormwater that pose a pollution risk to water quality, assuming that the facility is not part of larger network of integrated operations at multiple facilities.

Additionally, a site that has little area of exposed industrial activities reasonably may be expected to discharge lower volumes of industrial runoff (and corresponding lower mass load of pollutants) for a given rain or snow event compared to facilities with larger exposed areas.

Of interest to industrial permittees, the proposed permit is expected to require the inspector for the industrial permittee be qualified by formal training or by independent certification. More importantly, the inspector may not be directly involved in the day-to-day operation or oversight of the facility being inspected. The industrial inspector could be an employee of a municipal separate storm sewer system (MS4), a private third-party company, or a parent corporation, but not the boss.

The proposed permit will likely require a rigorous inspection that should include determining whether the SWPPP meets the requirements of the permit. The inspector should walk the site and verify that the SWPPP is accurate and that the controls are in place and functioning properly.

All of the above permit requirements come from two sources. These are the WaterKeepers International settlement agreement with EPA and the National Science Foundation's study (the contractor to EPA). The EPA process is to consider both document and public comments and then promulgate the final permit. This is frequently followed by litigation that is usually resolved rather quickly. The permit applies only to four states and the U.S territories.

States with expired industrial permits will go through a similar process to draft a proposed permit and to consider public comments. While the states must consider the new EPA permit, they are not required to adopt any of the permit conditions. However, states may not issue a permit that is less stringent than the previous permit or less stringent than EPA regulations.

The Center's CSI Industrial classes in Massachusetts and Puerto Rico in March will group comments to EPA in these categories:

1. Tiered Approach,
2. Inspector Qualifications,
3. Inspection Process,
4. Analytical Benchmark Monitoring,
5. Industrial Waste Management

Why the General Public is involved in NPDES Permits

By John Whitescarver, Founder

Small stormwater regulated municipalities have the six minimum control measures (MCMs) in their permit. The reason that public participation and public information are not joined is because they are different and must be measured using different criteria. The Clean Water Act separates them.

Section 101. (e) of the Act requires the EPA and the State to provide, encourage, and assist public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program.

Section 104. (a)(2) requires the government to encourage, cooperate with, and render technical services to pollution control agencies and other appropriate public or private agencies, institutions, and organizations, and individuals, including the general public, in the conduct of activities research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of pollution.

Note that public participation is very broad. It begins with development and ends with enforcement of **any** activity including the regulations, standards, effluent limitations, plans or programs. That includes each of the six minimum control measures.

The public information goes well beyond a public notice. The law requires EPA and states to encourage, cooperate with, and render technical services to eliminate pollution.

Both public participation and public information are in the small municipal permit to accomplish different clean water objectives. A compliance audit should judge the number of activities and the number of participants. A compliance audit should look beyond a public notice.

Industrial and construction permits meet the public requirement by making their permit application (NOI) and SWPPP available for public comment.

Editor's Note: The National Stormwater Center offers training to public volunteers to help them offer assistance to both permittees and local government to facilitate a positive relationship that can achieve clean water for their community.

Stormwater Permit News

(Continued From Page 1)

"The DNR's decision to deny a contested-case hearing in relation to the NorthMet project was based on errors of law and unsupported by substantial evidence, and the DNR also erred by failing to include a definite term in the NorthMet permit to mine,"

Chief Judge Edward Cleary wrote in the decision. "For these reasons, we reverse the DNR's decisions granting the permit to mine and dam-safety permits for the NorthMet project, and we remand for the DNR to hold a contested-case hearing."

The DNR said it was reviewing the decision and noted it had 30 days to file an appeal to the Minnesota Supreme Court.

Sacramento, CA—Effective January 1, 2020, every business seeking a new or renewed business license in California must prove it is registered under the State's General Permit for Storm Water Discharges Associated with Industrial Activities ("Industrial General Permit" or "IGP"), that it has an individual stormwater permit, or that it is not required to have a stormwater permit.

This new requirement, mandated by California's Senate Bill 205 ("SB 205"), will likely trip up some unsuspecting businesses and could delay or even prohibit the issuance or renewal of a business license.

The storm water laws and regulations are not new and the IGP itself remains unchanged; however, SB 205 now requires cities and counties that issue business licenses to confirm that anyone applying for a new business license or seeking to renew an existing business license either has registered for coverage under the State's storm water regulations or is not required to register with the SWRCB.

Cashmere, WA—Columbia Riverkeeper ("Riverkeeper") and Crunch Pak, LLC, ("Crunch") entered into a January 7th Consent Decree in the United States District Court (Eastern District of Washington).

The Consent Decree provides that since Crunch's receipt of the Notice of Intent to Sue it has invested significant efforts and resources in reducing discharges of stormwater and improving the quality of the discharges that remain. Such efforts are stated to include:

- Retaining engineering consultants to assist in the completion of a Level Three Corrective Action
- Additional treatment of industrial stormwater
- Rerouting stormwater from areas in the northern portion of the Facility to an onsite infiltration pond
- Purchase and installation of stormwater treatment systems

The Consent Decree requires certain actions by Crunch which include:

- Revision of the Stormwater Prevention Pollution Plan
- Providing Riverkeeper copies of certain NPDES permit-related documents
- In lieu of a penalty, make a payment in the amount of \$150,000 to the Rose Foundation for Communities and the Environment for projects to improve the water quality of the Columbia River basin
- Pay Riverkeeper's litigation expenses and costs.

Future Directions for EPA Recommendations by Retired EPA Employees

John E. Reeder, Executive in Residence at American University, has published *Moving Forward: Future Directions for EPA and Environmental Protection*, based on information from EPA Alumni Association focus groups and an 1800-member survey, as well as dialog from a conference hosted by the University. He concludes six key “future directions” for EPA.

Pursue State-of-Art Science Capability. EPA's ability to lead in a future landscape involving many entities pursuing the goals of sustainability and environmental protection (in many different ways) starts with its own credibility and demands a solid foundation in state-of-the-art science.

Renew the U.S. "Environmental Protection Enterprise." The integrated system of state / tribal and EPA programs -- the foundation for 50 years of environmental progress - must be renewed with fresh energy and shared governance, and be broadened to include a role for nongovernmental organizations, industry, local government, and others who can bring resources, expertise, and ideas.

Strengthen International Cooperation. EPA and its partners (old and new) should embrace international cooperation as part of the future environmental protection enterprise because climate change and other complex challenges call for a worldwide response, and the benefits of exchanging technical expertise accrue globally.

Harness Markets and Consumer Choice in Concert with Regulations. EPA should accelerate the use of market approaches that are already proven, such as regional cap-and-trade systems, and give the public and/or consumers information on the sustainability of products and processes. In many cases market approaches can achieve more than regulations alone.

Advance a Forward-Looking Regulatory System. Regulations will remain critical for meeting future challenges, but should be designed to embrace technological innovation

and the best new models for achieving outcomes and rewarding sustainability.

Engage the Public to Raise Awareness About the Environment. Public confidence in EPA and support for its mission are critical. EPA and partners need to redouble efforts to engage the public - both to listen and to educate - about critical public health and environmental threats and clearly communicate necessary actions.

Comments by John Whitescarver, Founder

Pursue State-of-Art Science Capability —The science behind the warming of our earth includes evaporation of water to form additional clouds causing increase of precipitation resulting in increases to quantity of stormwater that must be managed.

Earth warming is expected to increase stormwater volume, longer duration of storms, and the possibility of more frequent storm events.

Also, the science may have a impact on the jet stream that changes locations of precipitation events causing unexpected flooding and droughts.

Renew the U.S. "Environmental Protection Enterprise." - Enterprise drainage zones is a tool for local governments to create geographical drainage areas for pollution cleanup and runoff control. The result can be tax credits after the project is completed.

Strengthen International Cooperation — Stormwater utilities exist all over the world. The exchange of information in the management of stormwater utilities is shared in international conferences, webinars and reports.

Harness Markets and Consumer Choice in Concert with Regulations - Stormwater is ripe for market based solutions. Land developers applying controls on each residential or commercial facility allows for profitable land that would otherwise be used for treatment facilities

Advance a Forward-Looking Regulatory System - EPA now offers the integration of wastewater and stormwater permit conditions to achieve compliance at lower costs.



Post Construction Advanced Controls

by Laurie Murphy

Section 502 of the Clean Water Act defines green infrastructure as "...the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspiration stormwater and reduce flows to sewer systems or to surface waters."

While conventional piped drainage and water treatment systems are designed to move urban stormwater away from the built environment, advanced controls should be an overarching goal of a complete treatment train approach to stormwater management.

This approach should be designed to include controls that reproduce the predevelopment hydrologic regime through innovative site design and distributed engineering techniques aimed at infiltration, filtering, evaporation, harvesting, and runoff detention. Combined with conventional piped drainage and water treatment, such a treatment train can deliver environmental, social, and economic benefits.

Forty states have implemented numeric, retention-based performance standards for Phase II MS4 Post Construction requirements for newly developed and redeveloped sites.

This includes strategies to implement programs to ensure long-term operation and maintenance of BMP's.

These standards typically require Post Construction to control a specified volume of stormwater. Controlling stormwater volume and velocity is critical to the reduction of pollutant loads of all water quality parameters and to the reduction of erosion to the receiving waterbody.

Like all stormwater infrastructure, advanced Post Construction controls require regular inspections and maintenance to assure proper functioning. Maintenance of these controls generally requires more labor and less heavy equipment than maintenance of traditional piped drainage systems. A successful Post Construction controls maintenance program is a crucial part of the inspection process.

Proper training on how to inspect and maintain Post Construction Stormwater Controls is the most cost-effective way to manage them long-term, and it *always* begins with the design and construction phase.

It's imperative that inspectors understand how to inspect, when to inspect, and what to document during each phase of the project.

Control measures are site specific and have different BMP's and inspection requirements. This means that not all designs are site interchangeable due to soil science, hydrology, pollutants of concern, and other mitigating factors.

To achieve success inspectors must understand the four types of Post Construction inspection activities:

- Construction
- Transfer
- Routine Operations
- Maintenance & Performance Verification

These activities assure long-term controls functioning, and identification of common pitfalls, to avoid structural failures.

Traditional Erosion and Sediment Control training courses, which are all about controlling the dirt, need to be augmented by Post Construction controls training, which are designed to be all about the water.

If we control the volume and velocity of the stormwater runoff, we can better achieve pre-development hydrology, and we can better control the dirt on construction sites. By so doing, we also achieve the Clean Water Act's goal of reducing flows to sewer systems and surface waters.

Editor's Note: Advanced Construction Controls training is available through National Stormwater Center as instructor-led on location and via interactive webinar classes.

<https://npdes.com/class-descriptions/certified-stormwater-inspector-construction-controls>

RURAL STORMWATER MANAGEMENT

BY DON GREEN, LEED AP

In 1990 after many years of addressing mostly industrial point source pollution, the first municipal separate stormwater sewer system (MS4) permits were issued to municipalities across the US. The first MS4 'Phase I' permits covered our largest urbanized areas, which relatively speaking, are small in comparison to the remainder of our country. So in 2003 EPA issued its second level permits, "Phase II," to smaller municipalities.

Inside an MS4

The Small MS4 Phase II permit areas cover thousands of municipalities, development projects, residential areas, commercial, and industries sites.

Municipalities develop ordinances that support the regulatory authority's requirements as well as satisfy the municipality's responsibilities. They incorporate those ordinances into all inspection and maintenance activities they conduct. Informing, educating, and involving the public is a crucial part of the process.

Stormwater inspectors and municipal stormwater personnel are integral to the educational process. Most pet owners now walk their dogs with bags in hand — something we didn't see several years ago.

Outside an MS4

The human and land use impact on our waters outside of MS4 permitted areas can be significant. Construction projects, industrial activities (including landfills and treatment works), and CAFOs are permitted. But there are other activities, mainly agricultural, that impact water quality.

If a GIS map existed that showed aquifers, karst areas, and ground water recharge areas, we would see many rural streams, lakes, and wetland waters have 'urban' pollution problems affecting them, water treatment systems, and water wells.

As an example, in Tennessee only about one-half of the population lives in incorporated areas, and of that population, about one-half are covered by MS4 permits — resulting in approximately only one-fourth of the state's population exposed to the regulations, education, and outreach of a

municipal stormwater program.

With nearly 77% of surface water and 23% of ground water being sources of drinking water and food growth, it is important to address rural water quality.

The National Academies of Sciences, Engineering, and Medicine conducted a study of southwest Pennsylvania (including Pittsburgh), citing the region faces "complex water quality problems, due in large part to aging wastewater infrastructures that cannot handle sewer overflows and stormwater runoff, especially during wet weather."

The report identifies four causes of water quality impairment:

- Acid mine drainage
- Agriculture
- Stormwater runoff
- Wastewater

This is where organizations such as the National Rural Water Association make significant contributions. From the NRWA website, they are "dedicated to training, supporting, and promoting the water and wastewater professionals that serve small communities across the United States."

Recently, National Stormwater Center teamed with the Granite State Rural Water Association to deliver its Certified Stormwater Inspector training course to its members. This NRWA Affiliate offered 36 different training opportunities to its members in 2019.

There is an important opportunity to reach the public beyond urbanized areas. It is said that law schools do not teach people to become lawyers, but they train people how to think like lawyers. I believe organizations such as the Rural Water Associations can help train everyone to think like stormwater inspectors.

By doing so they help build on the foundation of our clean water history. Together, regulated and unregulated entities can improve water quality across America, inside and outside of urbanized areas.



COURT DECISIONS: INDUSTRIAL PERMITS

Association of American Railroads Petition For Declaratory Order

In 2016 a U.S. District Court in Washington State held that the federal Clean Water Act prohibited the "discharge" of any quantity of coal dust from a rail car into a waterway. That case was brought by the Sierra Club against BNSF Railway, but all legal issues were not resolved. *Sierra Club v. BNSF Ry. Co.*, Docket C13-967-JCC (W.D. Wash. Oct. 25, 2016) The parties settled before the court could decide whether the Clean Water Act would be preempted by another law specifically regulating railroads, and whether that same railroad law would preempt the state-by-state "point source" permitting system that allows most industries to secure a permit to discharge specified quantities of materials into waterways.

In Surface Transportation Board Finance Docket No. 36369 the railroads have asked the STB to issue a declaratory order that 49 USC Sec. 10501(b) of the Interstate Commerce Commission Termination Act assigns the authority of the STB over "transportation by rail carriers," including that rail practices and the operation of rail facilities is exclusive, thereby preempting the CWA. Several members of Congress and the Railway Supply Institute, which represents companies that manufacture railcars and lease over 700,000 cars in service today, have weighed in asking the STB to act favorably on the railroads' petition. With that kind of support, it is likely that the STB will open a proceeding to consider the matter.

However, 49 U.S. Code § 310 also directs that the Department of Transportation "shall develop a coordinated and concurrent environmental review and permitting process" and "in coordination with the heads of Federal agencies likely to have substantive review or approval responsibilities under Federal law."

Columbia Riverkeepers, et al, vs. Wheeler

In 18-35982 D.C. No. 2:17-cv-00289-RSM, the Ninth District Court sided with environmental groups pressing EPA to set temperature limits in the Pacific Northwest's Columbia and Snake rivers to help endangered salmon and steelhead.

A three judge panel said EPA has failed to develop

temperature limits as required under the Clean Water Act. They upheld a lower court ruling for Columbia Riverkeeper, Idaho Rivers United and other groups, giving EPA 30 days to move forward.

Rising temperatures caused by dams that stagnate water flows, as well as discharges and climate change, are deadly to migrating fish like salmon. Anything above 68 degrees Fahrenheit makes it nearly impossible for fish to migrate upstream to spawn.

Environmentalists filed the current lawsuit in 2017, using a new legal argument that Washington, Oregon, and EPA are required under the Clean Water Act to issue total maximum daily loads, or TMDLs, for not just common pollutants such as agriculture runoff, but also for temperature.

Judge Margaret McKeown, writing for the court, said the "parties agree that dams and more than 100 point-source discharges" into the two rivers are the cause of rising water temperatures which are projected to rise with increased human activity on the rivers, further endangering salmon and trout populations.

In the early 2000s, the Washington, Idaho, Oregon, and EPA entered into an agreement under which the agency would develop and issue the temperature limits. In 2003, EPA released a draft of the TMDL but faced significant opposition from other federal agencies.

"Then," McKeown wrote, "nothing happened."

The legal issue in the case concerns where the lack of action constitutes a "constructive submission" by the states that EPA is required to act upon under the Clean Water Act. The court held that it is.

"Where a state has failed to develop and issue a particular TMDL for a prolonged period of time, and has failed to develop a scheduled and credible plan for producing that TMDL, it has no longer simply failed to prioritize this obligation," McKeown said.

"Instead, there has been a constructive submission of no TMDL, which triggers the EPA's mandatory duty to act," she said.

**National Stormwater Center
John Penn Whitescarver
Founder**



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.

2020 Training Schedule

See www.npdes.com for complete listing

2/3-2/4	CSI-MS4	Lexington, KY Burlington, VT Morgantown, WV Savannah, GA Hawaii (Online Webinar)
2/6-2/7	CSI-MS4	Atlanta, GA Bowling Green, KY Charleston, WV Waltham, MA
2/10-2/11	CSI-MS4	Baton Rouge, LA Charlotte, NC Chicago, IL
2/10-2/11	FL-DEP	Erosion & Sediment Control Stuart, FL
2/13-2/14	CSI-MS4	Online Webinar Springfield, IL Raleigh, NC Shreveport, LA
2/24-2/25	CSI-MS4 & Military Online	
2/26	CSI-Industrial	Online

The Stormwater Quarterly

- ◆ Publisher Betty Stahm
- ◆ Editor Karen Sadowski

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Call or Email Us For More Information

888-397-9414

info@npdes.com



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