The EPA'S New Effluent Guidelines for Construction Sites: Troubled Waters for Contractors and Developers

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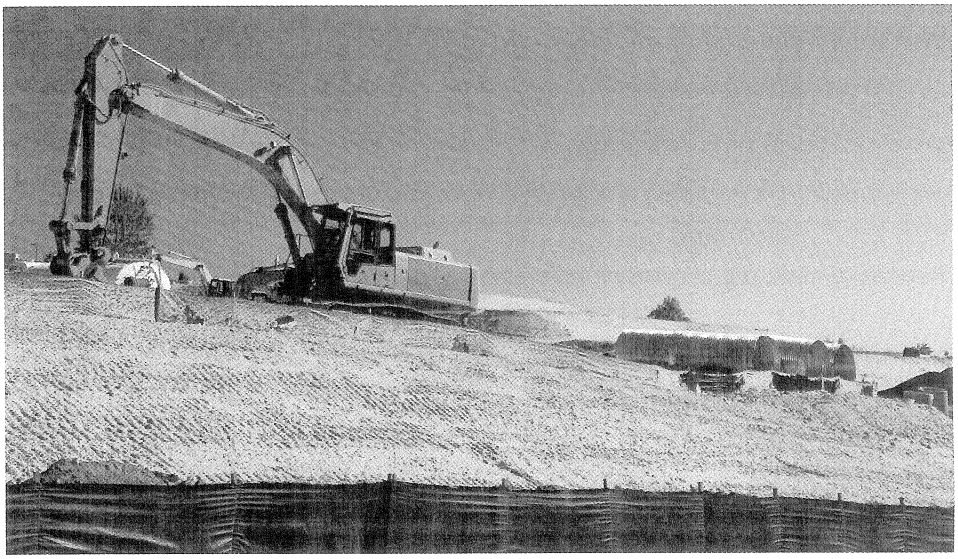

On December 1, 2009, the Environmental Protection Agency (EPA) issued a major new regulation relating to stormwater runoff on construction sites.[1] The EPA's regulation establishes effluent guidelines for the construction and development industry and sets forth a numeric limit for the amount of turbid water[2] that can be discharged from a construction site. Stormwater runoff from construction sites, mainly sediment, often reaches adjacent waterways and affects the clarity of the water. In most instances, the turbid water from construction sites is due to clearing, excavation or grading of the land followed by a rain event that erodes the disturbed land. The erosion sometimes results in sediment laden stormwater breaching erosion and sediment control measures and entering adjacent surface waters. By enacting the new effluent guidelines, the EPA is seeking to reduce the amount of sediment and other pollutants contained in stormwater runoff at construction sites from entering surface waterways. However, the new regulation has tremendous ramifications for contractors and developers because for the first time, they will be held responsible for ensuring that turbidity levels do not exceed 280 Nephelometric Turbidity Units (NTU).[3] Contractors and developers will also be required to monitor and test the turbidity levels of stormwater discharges.[4]

The Clean Water Act

The EPA's new effluent guidelines for construction sites were enacted pursuant to the Clean Water Act, 33 U.S.C. § 1251 et seq. (CWA). The legislation commonly known as the Clean Water Act originated from the Federal Water Pollution Control Act of 1948. Congress substantially reorganized and amended the CWA in 1972 and 1987. As its name implies, the intent of the CWA is to protect and restore the nation's waters. The CWA made it unlawful to discharge any pollutant from an industrial or municipal source into surface waters unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained.[5] For example, industrial manufacturers and others cannot discharge polluted wastewater—via a pipe or ditch—into a waterway without first obtaining an NPDES permit. In most instances, the NPDES permit program is run by state environmental agencies. However, the EPA administers the NPDES permit program for Idaho, Massachusetts, New Hampshire, New Mexico and Washington, D.C.[6]

In addition to the NPDES permit program, the CWA requires the EPA to issue effluent guidelines for certain industries.[7] The main purpose of effluent guidelines is to specify a maximum numeric limit of pollutants that a facility in a particular industry can discharge. The EPA's effluent limits are technology based—meaning that conventional and/or available pollution control technology is a major factor in establishing the specific numeric limit and in complying with the specified limit.[8] Once the EPA establishes effluent guidelines for a particular industry, any specified effluent numeric limits are incorporated into the facility's NPDES permit.

Construction Industry: Best Management Practices

Pursuant to the 1987 amendments to the CWA, the EPA began to regulate stormwater under its NPDES permit program.[9] In 1990, the EPA issued regulations that required "operators" on construction sites that disturbed five acres or more[10] to obtain an NPDES permit before construction activity could take place.[11] Operators are generally considered to be the contractor and developer.[12] In 1999, the EPA expanded this regulation to require an NPDES permit for construction sites that disturbed one acre or more.[13] In accordance with the NPDES permit program, each state environmental agency publishes what is typically called a General Permit that outlines and describes the stormwater regulations.[14] Similarly, the EPA publishes a Construction General Permit (CGP) for the jurisdictions that it manages.[15]

The key component of the states' General Permits and the EPA's CGP is the requirement that the contractor and developer use Best Management Practices (BMP) to control stormwater runoff on their construction sites.[16] BMPs refer to various erosion and sedimentation control measures such as seeding and mulching, silt fence, fabric rolls, rock check dams, diversion channels, sediment basins, etc. The BMPs help in reducing the occurrence of erosion and—once erosion does occur—reducing the amount of sediment that enters surface waters. The NPDES permit program usually requires the contractor or developer to devise a Stormwater Pollution Prevention Plan (SWPPP) that specifically details how the BMPs will be used on the construction site.[17] In accordance with its NPDES permit and SWPPP, the contractor and developer are required to select appropriate BMPs; inspect and maintain the BMPs; and keep accurate records.[18]

Although the BMP standard requires the contractor and developer to be proactive in controlling erosion and sedimentation, the BMP standard is not nearly as stringent as effluent guidelines which set forth a numeric effluent limit that permittees must comply with. Under the BMP standard, the contractor and developer were not in violation of their permit or the CWA if turbid water

overran the erosion and sedimentation controls so long as they complied with the BMP requirements. Prior to the EPA's recent effluent guidelines for construction sites, contractors and developers were not required to monitor and test the turbidity of stormwater runoff that is discharged from the construction site. More importantly, prior to the new effluent guidelines, contractors and developers were not responsible for ensuring that stormwater runoff met a certain turbidity level.

Establishing Effluent Limits for Construction Sites: Natural Resources Defense Council v. U.S. Environmental Protection Agency

Environmental interest groups had been aggressively pursuing the establishment of effluent guidelines for the construction and development industry for many years. They were finally successful in the case of *Natural Resources Defense Council v. U.S. Environmental Protection Agency*, 542 F.3d 1235 (9th Cir. 2008). The Natural Resource Defense Council (NRDC) sued the EPA on grounds that the EPA was required to issue effluent guidelines for the construction and development industry pursuant to the CWA.[19] Section 304(m) of the CWA requires the EPA to (1) identify industries that discharge toxic or nonconventional pollutants (point-source categories); and (2) publish effluent guidelines for such point-source categories within three years.[20] In 2000, the EPA, under the Clinton administration, published an effluent guidelines plan that identified the construction industry as a point-source category.[21] On June 24, 2002, the EPA, under the Bush administration, issued a proposed rule to address effluent guidelines for construction sites.[22] The proposed rule listed three options under consideration: mandatory control requirements, effluent limits and no new requirements.[23]

However, on April 26, 2004, the EPA withdrew its proposed rule citing that the cost of the regulation would far outweigh the benefits.[24] The EPA later delisted the construction industry as a point-source category under Section 304(m). The EPA stated that it should not have identified the construction industry as a point-source category under Section 304(m) because stormwater runoff from construction sites consists mainly of conventional pollutants (*i.e.* sediment)—not toxic or nonconventional pollutants.[25] In its litigation against the EPA, the NRDC argued that Section 304(m) required the EPA to issue effluent guidelines for the construction industry because it was previously identified as a point-source category in 2000 and 2002. The U.S. Court of Appeals for the Ninth Circuit agreed with the NRDC. The court held that Section 304(m) clearly mandates that the EPA had a non-discretionary duty to issue effluent guidelines within three years of identifying a point-source category.[26] The court rejected the argument that the EPA had discretion to delist the construction industry as a point-source category.[27] The court never addressed the substantive issue of whether the construction industry was lawfully identified as a point-source category that discharges toxic or nonconventional pollutants. Based upon the Ninth Circuit's decision, the EPA was required to issue effluent guidelines for construction sites.

The EPA's New Regulation: 40 CFR Part 450

The EPA issued its Final Rule regarding effluent guidelines for construction sites on December 1, 2009.[28] The most significant portion of the new regulation mandates that the average turbidity of any stormwater discharge for any day must not exceed 280 NTU.[29] The contractor and developer must monitor the turbidity and take samples consistent with the requirements established by the permitting authority.[30] Beginning August 1, 2011, the numeric effluent limit is applicable to construction sites that disturb 20 or more acres of land at one time.[31] Beginning February 2, 2014, the numeric effluent limit is applicable to construction sites that disturb 10 or more acres of land at one time.[32] The effluent limitations will not apply on any day in which a rain storm larger than the local 2-year, 24-hour rain event occurs.[33] However, the contractor and developer would still be required to monitor the discharges on that day and the effluent limitations would apply the day after the storm.[34]

The numeric limit is based upon the technology of passive treatment systems (PTS) rather than active treatment systems (ATS).[35] PTS involve all of the BMPs (silt fence, sediment basin, etc.) plus the use of chemical flocculants and polymers to reduce sediment in the stormwater. ATS involve water treatment equipment that filters the sediment out of the stormwater. The EPA rejected the use of ATS because the costs would have been too extreme.[36] By adopting PTS technology as the basis for its effluent limit, the EPA believes that construction sites can meet the 280 NTU limit by continuing the use of BMPs and using flocculants and polymers when necessary.[37]

The EPA is giving discretion to the permitting agencies to detail the monitoring requirements and equipment.[38] However, the EPA expects that at least three samples per day will be taken at each discharge point when a discharge is occurring.[39] The numeric limitation applies to all discharge locations. However, the EPA has stated that a representative sampling of discharge points could be used on linear projects.[40] Also, non-channelized flow through a silt fence that infiltrates a vegetated area would not generally require sampling.[41]

Ramifications for Construction Projects

The EPA's new effluent guidelines create an economic and regulatory burden on contractors and developers. For the first time, contractors and developers will be responsible for the turbidity levels of stormwater runoff even where erosion and sedimentation controls are properly installed, inspected and maintained.[42] In addition, contractors and developers must monitor and test the turbidity levels of stormwater discharges.[43]

The EPA estimates that the effluent guidelines will reduce stormwater pollutants by approximately 4 billion pounds per year.[44] However, environmental benefits come at a very steep price. The EPA estimates that the annual cost of the regulation, once it is fully implemented, will be approximately $953 million per year.[45] This cost is based upon the use of PTS technology. The cost could substantially increase if ATS technology is required. The EPA estimates that 147 firms will go out of business and 7,257 jobs will be lost as a result of the regulation.[46] The increased costs associated with the regulation will increase the economic difficulties of an industry that has been severely impacted by the recent recession.

Under the BMP standard, the contractor and developer were not in violation of the NPDES permit or the CWA so long as they followed their BMP requirements. That is no longer the law. If the turbidity level of a discharge exceeds 280 NTU, the contractor and developer will be in violation of the NPDES permit and the CWA.[47] The contractor and developer will now be responsible for meeting the numeric limit regardless of whether BMPs and

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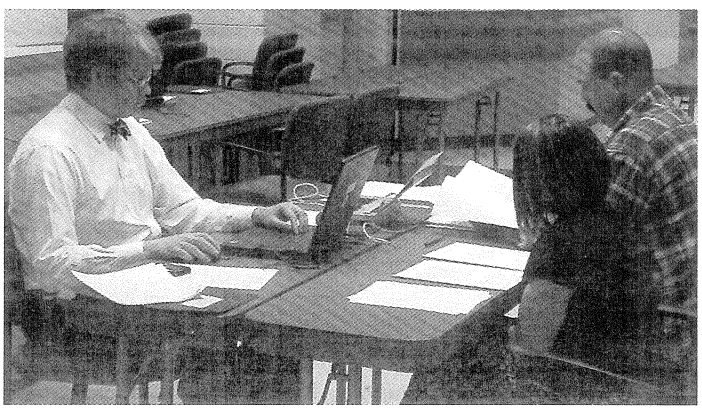
PTS are properly installed and maintained. If PTS do not work for certain discharges, contractors and developers may have to use expensive ATS in order to comply with the 280 NTU limit. Indeed, contractors are very concerned that PTS will not satisfy the 280 NTU limit in most discharge events and that the new effluent guidelines will effectively require the use of ATS technology. It remains to be seen whether the new effluent limitations will require the use of ATS technology. Nevertheless, even if ATS are not used, contractors and developers will incur increased costs in monitoring turbidity levels and applying PTS to meet the numeric limit.

When sediment and turbid water escape from a construction site, contractors are often quick to point out that erosion and sediment *control*—not prevention—is the applicable standard. The EPA's new effluent guidelines for construction sites have significantly increased this erosion and sediment control standard. On construction sites that disturb 10 or more acres of land at one time, Contractors and developers will now be required to prevent turbid water in excess of 280 NTU from being discharged.[48]

Notes

1) 40 CFR Part 450, EPA, Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category; Final Rule, Fed. Reg. Vol. 74, No. 229 (Dec. 1, 2009) ("EPA Final Rule").
2) Turbidity is a measure of water clarity. Turbid water from construction sites mainly consists of sediment.
3) 40 CFR § 450.22(a)(1). The effluent limitations are applicable to construction activity that disturbs 20 or more acres of land beginning August 1, 2011. 40 CFR § 450.22(a) The effluent limitations are applicable to construction activity that disturbs 10 or more acres of land beginning February 2, 2014. Id. *See infra* note 31.
4) 40 CFR § 450.22(a)(2).
5) Summary of the Clean Water Act, Laws, Regulations, Guidance & Dockets, U.S. EPA at http://www.epa.gov/lawsregs/laws/cwa. html.
6) EPA Final Rule at 63,000. The EPA also administers the NPDES permit program for U.S. territories except the U.S. Virgin Islands.
7) 33 U.S.C. § 1314(m).
8) The EPA has different technology standards that it uses to determine effluent limits: Best Practicable Control Technology Currently Available (BPT); Best Conventional Pollutant Control Technology (BCT); Best Available Technology Economically Achievable (BAT); and New Source Performance Standards (NSPS). *See* 33 U.S.C § 1314(b); EPA Final Rule at 63,002. The effluent guidelines do not require facilities to install a particular technology identified by the EPA. See Frequent Questions, Effluent Limitations Guidelines, U.S. EPA at http://www.epa.gov/water-science/guide/questions. However, the facility must comply with the numeric limit and often times this can only be done by using the technology identified by the EPA.
9) EPA Final Rule at 62,999. See 33 U.S.C. § 1342(p).
10) The regulation also applied to construction sites that disturbed less than five acres if the disturbed area is part of a larger common plan of development or sale and the larger common plan will *ultimately* disturb five acres or greater. 40 CFR § 122.26(b)(14)(x). Disturbed land means to clear, excavate or grade the land without stabilizing the area with vegetation.
11) EPA Final Rule at 62,999; 40 CFR § 122.26(b)(14).
12) The EPA's Construction General Permit defines operator as any party that: (1) has control over the construction plans and specifications; and/or (2) has day-to-day operational control of the site, including activities necessary to implement the Stormwater Pollution Prevention Plan.
13) EPA Final Rule at 62,999; 40 CFR § 122.26(b)(15). The regulation also applies to construction sites that disturb less than one acre if the disturbed area is part of a larger common plan of development or sale and the larger common plan will *ultimately* disturb one acre or greater.
14) EPA Final Rule at 63,000.
15) *Id.*
16) *Id.*
17) *See* "Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites," (EPA 833/R-060-04, May 2007; available on EPA's Web Site at http://www.epa.gov/npdes/stormwater).
18) *See id.*
19) *Natural Resources Defense Council v. U.S. Environmental Protection Agency*, 542 F.3d 1235, 1239 (9th Cir. 2008).
20) 33 U.S.C. § 1314(m).
21) *Natural Resources*, 542 F.3d at 1239.
22) *Id.* at 1240.
23) *Id.*
24) *Id.*
25) *Id.* at 1240-41.
26) *Id.* at 1250.
27) *Id.* at 1252.
28) *See* EPA Final Rule.
29) 40 CFR § 450.22. The effluent limitation is a daily maximum limitation meaning that the permittees may sample the turbidity multiple times during the day and the average of all measurements may not exceed 280 NTU. EPA Final Rule at 63,048. The EPA also established a national standard for non-numeric effluent guidelines. *See* 40 CFR § 450.21.
30) *Id.*
31) 40 CFR § 450.22. The 20 acre requirement also includes disturbance of non-contiguous land of a larger common plan of development or sale that is less than 20 acres if the total disturbance occurring at the same time adds up to 20 acres. The effluent limitation would apply if four separate 5 acre tracts are being disturbed at the same time. However, the effluent limitation would not apply if the areas are not disturbed at the same time. For instance, 20 acres are disturbed but the contractor later stabilizes 5 acres of the 20. Once the 5 acres are stabilized, the effluent limits are not applicable for the remaining 15 disturbed acres. This provides an incentive for the contractor to stabilize disturbed areas as soon as possible and to phase the work. This acreage requirement in the regulation is different from the acreage requirements in 40 CFR § 122.26(b)(14) and (15) which establish the applicability of the NPDES permits program for construction sites. *See* EPA Final Rule at 63,047-48; *supra* notes 10 and 13.
32) *Id.*
33) 40 CFR § 450.22(b).
34) *See* EPA Final Rule at 63,049.
35) *Id.* at 63,019.
36) *Id.* at 63,005.
37) *Id.* at 63,022.
38) *Id.* at 63,048. The monitoring requirements must be specified in the NPDES permit. *Id.* at 63047.
39) *Id.*
40) *Id.* at 63,049.
41) *Id.*
42) 40 CFR 450.22(a)(1).
43) 40 CFR 450.22(a)(2).
44) *Id.* at 62,997.
45) *Id.* at 62,998.
46) *Id.* at 63,023.
47) 40 CFR 450.22(a)(1).
48) *Id. See supra* note 31. The 20 acre requirement begins August 1, 2011. The 10 acre requirement begins February 2, 2014.



Wills for Heroes Event a Huge Success

The YLD Wills for Heroes committee sponsored an event in May in Roanoke. The program provides wills, durable powers of attorney, and advanced medical directives to first responders in Virginia on a *pro bono* basis. With over 50 volunteers, 137 first responders left with legal documents!

For more information about the program or to get involved, visit the VBA website (www.vba.org).