

EXCERPT FROM FEDERAL REGISTER

OF DECEMBER 1, 2009 -

EFFLUENT GUIDELINES FOR
NPDES PERMITS REGULATING
STORM WATER RUN-OFF FROM
CONSTRUCTION SITES**PART 450—CONSTRUCTION AND
DEVELOPMENT POINT SOURCE
CATEGORY****Subpart A—General Provisions**

Sec.

450.10 Applicability.

450.11 General definitions.

**Subpart B—Construction and Development
Effluent Guidelines**

450.21 Effluent limitations reflecting the best practicable technology currently available (BPT).

450.22 Effluent limitations reflecting the best available technology economically achievable (BAT).

450.23 Effluent limitations reflecting the best conventional pollutant control technology (BCT).

450.24 New source performance standards reflecting the best available demonstrated control technology (NSPS).

Authority: 42 U.S.C 101, 301, 304, 306, 308, 401, 402, 501 and 510.**Subpart A—General Provisions****§ 450.10 Applicability.**

(a) This part applies to discharges associated with construction activity required to obtain NPDES permit coverage pursuant to 40 CFR 122.26(b)(14)(x) and (b)(15).

(b) The provisions of § 450.22(a) do not apply to discharges associated with interstate natural gas pipeline construction activity.

(c) The New Source Performance Standards at § 450.24 apply to all new sources and are effective February 1, 2010.

(d) The BPT, BCT and BAT effluent limitations at § 450.21 through 450.23

apply to all sources not otherwise covered by paragraph (c) of this section and are effective February 1, 2010.

§ 450.11 General definitions.

(a) *New Source.* New source means any source, whose discharges are defined in 40 CFR 122.26(b)(14)(x) and (b)(15), that commences construction activity after the effective date of this rule.

(b) [Reserved]

**Subpart B—Construction and
Development Effluent Guidelines****§ 450.21 Effluent limitations reflecting the best practicable technology currently available (BPT).**

Except as provided in 40 CFR 125.30 through 125.32, any point source subject to this subpart must achieve, at a minimum, the following effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available (BPT).

(a) *Erosion and Sediment Controls.* Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

(1) Control stormwater volume and velocity within the site to minimize soil erosion;

(2) Control stormwater discharges, including both peak flowrates and total stormwater volume, to 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. 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;

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

(7) Minimize soil compaction and, unless infeasible, preserve topsoil.

(b) *Soil Stabilization.* Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have

permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permitting authority. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority.

(c) *Dewatering.* Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls.

(d) *Pollution Prevention Measures.* Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

(1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

(2) 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; and

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

(e) *Prohibited Discharges.* The following discharges are prohibited:

(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; and

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

(f) *Surface Outlets.* When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

§ 450.22 Effluent limitations reflecting the best available technology economically achievable (BAT).

Except as provided in 40 CFR 125.30 through 125.32, any point source subject to this subpart must achieve, at a

minimum, the following effluent limitations representing the degree of effluent reduction attainable by application of the best available technology economically achievable (BAT).

(a) Beginning no later than August 2, 2010 during construction activity that disturbs 20 or more acres of land at one time, including non-contiguous land disturbances that take place at the same time and are part of a larger common plan of development or sale; and no later than February 2, 2014 during construction activity that disturbs ten or more acres of land area at one time, including non-contiguous land disturbances that take place at the same time and are part of a larger common plan of development or sale, the following requirements apply:

(1) Except as provided by paragraph (b) of this section, the average turbidity of any discharge for any day must not exceed the value listed in the following table:

Pollutant	Daily maximum value (NTU) ¹
Turbidity	280

¹ Nephelometric turbidity units.

(2) Conduct monitoring consistent with requirements established by the permitting authority. Each sample must be analyzed for turbidity in accordance with methods specified by the permitting authority.

(b) If stormwater discharges in any day occur as a result of a storm event in that same day that is larger than the local 2-year, 24-hour storm, the effluent limitation in paragraph (a)(1) of this section does not apply for that day.

(c) *Erosion and Sediment Controls.* The limitations are described at § 450.21(a).

(d) *Soil Stabilization.* The limitations are described at § 450.21(b).

(e) *Dewatering.* The limitations are described at § 450.21(c).

(f) *Pollution Prevention Measures.* The limitations are described at § 450.21(d).

(g) *Prohibited Discharges.* The limitations are described at § 450.21(e).

(h) *Surface Outlets.* The limitations are described at § 450.21(f).

§ 450.23 Effluent limitations reflecting the best conventional pollutant control technology (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any point source subject to this subpart must achieve, at a minimum, the following effluent limitations representing the degree of effluent reduction attainable by application of the best conventional pollutant control technology (BCT). The effluent limitations are described at § 450.21.

§ 450.24 New source performance standards reflecting the best available demonstrated control technology (NSPS).

Any new source subject to this subpart must achieve, at a minimum, the following new source performance standards representing the degree of effluent reduction attainable by application of the best available demonstrated control technology (NSPS): The standards are described at § 450.22.

[FR Doc. E9-28446 Filed 11-30-09; 8:45 am]

BILLING CODE 6560-50-P

Storm Water Discharges from Construction Implementation of Effluent Guidelines

A Contractor Should Not Have to Follow the EPA Effluent Limitations Until:

- a. The State Permit is Re-Issued in the Normal Timing, or is Modified.
- b. The State Permit Gives Instructions on:
 - i. How the Effluent Limitations Will Be Handled in the State
 - ii. When Different Projects Have to Comply With The Effluent Limits on Turbidity and With The Required Monitoring:
 1. Larger Projects (> 20 Acres Disturbed At One Time)
Starting No Later Than August 2011 for Permit Issued Before Then,
 2. Smaller Projects (> 10 Acres Disturbed At One Time)
Starting No Later Than February 2014 for Permits Issued Before Then,
 3. Permits Issued After Those Dates Must Make the Limits Become “Effective” the Date the Permit is Issued.
- c. EPA will be Tracking Costs, Problems, Technology and the Need for Adjustments.

Background Reading

EPA Effluent Limits & State Permits – EXCERPTS from the rule preamble.
(**Federal Register** /Vol. 74, No. 229 /Tuesday, December 1, 2009)

(Editorial notes have been added in italics).

“III B 1 c. State Construction General Permits (*pg. 63000*)

Whether EPA, a state or a tribe issues the general permit, the CWA and EPA regulations require that NPDES permits must include technology-based effluent limitations. 40 CFR 122.44. In addition, where technology-based effluent limitations are insufficient for the discharge to meet applicable water quality standards, the permit must contain water quality-based effluent limitations as necessary to meet those standards. See sections 301, 304, 303, 306, and 402 of the CWA. *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 704–705 (1994).

For the most part, state-issued general permits for stormwater discharges associated with construction activity have followed EPA’s CGP format and content, starting with EPA’s first CGP issued in 1992 (57 FR 41176; September 9, 1992). Over time, some states have changed components of their permits to better address the specific conditions encountered at construction sites within their jurisdiction (e.g., soil types, topographic or climatic

characteristics, or other relevant factors). For example, the States of Washington, Oregon, Georgia and Vermont's CGPs include discharge monitoring requirements for C&D sites applicable to all or a subset of construction sites. In addition, the State of California's current CGP contains monitoring requirements as well as numeric effluent limitations for a subset of construction sites within the state."

XIX. B. Implementation (pg. 63050)

While pursuant to the CRA this entire rule is effective February 1, 2010 the numeric effluent limitation and the associated monitoring requirements for sites with 20 or more acres of land disturbed at one time will become applicable to discharges associated with construction activity 18 months following the effective date of this final rule on August 2, 2010 (*Actually August 1, 2011 – this error will be formally changed*). The numeric effluent limitation and the associated monitoring requirements for sites with 10 or more acres of land disturbed at one time will become applicable to discharges associated with construction activity four years following the effective date of this final rule on February 2, 2014. The non-numeric effluent limitations in Option 4 will become applicable when the rule is effective or 60 days after the final rule is published in the **Federal Register** on February 1, 2010..

(Permits)

Once EPA has promulgated effluent limitations and standards under CWA sections 301 and 306, and those limitations and standards become effective, the permitting authority must incorporate those limitations into NPDES permits as effluent limitations. 40 CFR 122.43–44. For discharges associated with construction activity, once the ELGs and NSPSs become effective the permitting authority must include permit limitations at least as stringent as those promulgated in this regulation in any individual NPDES permits or in the next construction general permit issued after the effective date of this regulation. EPA anticipates that the permitting authorities, particularly those whose construction general permits will expire within the next 18 months, would like time to develop guidance on the new requirements given the change in focus from past construction permits of nonnumeric effluent limitations and BMPs to numeric limitations and monitoring requirements. EPA is aware of at least 10 states whose construction general permits are scheduled to expire within the first 18 months after the effective date of this final rule, in addition to the 4 states and other jurisdictions who are permitted by the EPA CGP, proposed to expire on June 30, 2011. In order to provide permitting authorities time to develop guidance on the requirements of this rule, including monitoring requirements, EPA is providing a 18 month lead time for the permitting authorities between the effective date of this final rule and when the numeric limitation and monitoring requirements are applicable to stormwater discharges associated with construction activity. The C&D ELG, including the numeric limitations and monitoring requirements, will be effective February 1, 2010, even though the numeric limit will not be applicable to discharges for 18 months (*August 1, 2011*) from the effective date of this rule for sites with 20 or more acres of land disturbed at one time and four years after the effective date for sites with 10 or more acres of land disturbed at one time. Thus, the permitting authorities whose construction general permits will expire after the effective date of the C&D ELG must still incorporate the numeric limitation and monitoring requirements into their newly issued CGPs even though it will not be applicable until 18 months from the effective date for sites with 20 or more acres of land disturbed at one time and four years after the effective date for sites with 10 or more acres of land disturbed at one time. After the effective date of this rule, permitting authorities must incorporate the requirements into newly issued permits. Without an 18 month lead time in the applicability of the numeric limitation and monitoring requirements permitting authorities and the permittees in those states would have, what EPA believes, an unreasonably short time period to digest these new requirements and plan

accordingly. While it is impossible to determine exactly how much time is necessary for permitting authorities and permittees, EPA weighed the need to provide enough time, for the reasons stated below, against the desire to apply these important numeric limitations and monitoring requirements in a timely manner in order to achieve important reductions in pollutant discharges from C&D sites and determined that 18 months for sites with 20 or more acres of land disturbed at one time and four years for sites with 10 or more acres of land disturbed at one time are reasonable periods of time.

(Monitoring)

In this rule EPA has determined that passive treatment technologies and a numeric effluent limitation with monitoring requirements is BAT and NSPS. As discussed above, it is clear that passive technologies are technologically available, as they are used widely throughout the U.S., however before this rule there were no nationwide numeric limitations or monitoring requirements connected with the construction industry, and particularly with the use of passive treatment technology at C&D sites. Monitoring requirements are a critical part of any numeric limitation. Given the sea change to the regulated industry there may be implementation issues associated with incorporation of monitoring requirements into permits, for example, permitting authorities may specify the frequency of monitoring; the location of monitoring; The duration of monitoring in relation to storm events; the samples that will be representative of the flow and characteristics of the discharges from the C&D site; whether it will approve the use of automated samplers and/or turbidity meters with data loggers; and establish procedures for analyzing the sample for turbidity and appropriate quality assurance/quality control procedures. The 18 month period will also allow permitting authorities to develop any necessary training or certification programs. An important factor in the effective implementation and compliance with this rule will be the permitting authority being able to digest the numeric limitation and monitoring requirements and developing guidance and outreach to the regulated community to provide assistance so the requirements are understood and can be effectively met by owners and operators of C&D sites. This will provide the regulated industry with the guidance, knowledge and tools necessary in order to effectively monitor their discharges in order to ensure they are meeting the numeric limitation.

(Guidance)

In addition to the reasons stated above regarding the permitting authority having the time to develop guidance to assist C&D site operators, for this industry, it is necessary to allow it a period of time to become accustomed to monitoring discharges and understand how different passive approaches impact the level of turbidity in their stormwater discharges. Allowing a phase-in of the monitoring requirements and turbidity limitation will allow the industry time to adjust their controls to determine what the most effective passive technology or combination of technologies are to reduce levels of turbidity, and to train personnel on any new techniques or technologies implemented at the site, how to sample and analyze stormwater discharges, and how to correctly apply polymers or treatment chemicals, if necessary, without causing environmental harm. As noted previously, the monitoring requirements are a critical part of the numeric limitation developed as BAT and NSPS and the establishment of a numeric limitation and monitoring requirements for discharges associated with the construction industry represents a sea change for the industry and permitting authorities. This change is in line with the technology forcing nature of the CWA; however, it may require significant time and resources for many construction firms to adapt their operations in light of the new stormwater control measures.

(Firms Affected)

Learning how to use what for many firms will be new control techniques will likely require some initial period of adjustment, modification, and revision to ensure that the selected

control measures achieve the required discharge limitation. EPA would expect that most of the firms affected in the first phase will be relatively large firms with inhouse expertise or access to the necessary resources to implement passive treatment technologies. Because, as noted, the final rule requires a significant change in the controls necessary for the discharges associated with construction activity from current practices for many firms, there may be, at least in the near term, a limited universe of available expertise in passive treatment in the form of available guidance information and trained engineering personnel specialized in these treatment measures. EPA also expects that expertise and understanding will grow over time and that technologies may well both improve and decrease in cost. In these circumstances, phasing in the application of the numeric limitations provides time to facilitate the efficient development and transfer of this expertise, and allows the industry to explore opportunities for cost savings.

(Benefits)

EPA estimates that sites which disturb 20 or more acres at any one time represent 48 percent of all sites subject to the numeric limits. The pollutant reduction associated with these sites is estimated to represent 69 percent of the pollutants discharged by construction sites. Expanding the application of the numeric limit after two and a half years to sites that disturb 10 or more acres at any one time will achieve a 77 percent sediment reduction over baseline discharges. EPA has determined that phasing the application of the limitation ensures that effective progress is made towards achieving the pollutant reductions and benefits associated with BAT and BADT while providing the construction industry with additional time to implement the regulation in recognition of the current economic downturn.

(Adjustments)

EPA plans to work closely with states and industry to ensure effective implementation of this rule. EPA will also monitor progress with respect to a range of variables, including appropriate technologies and their performance, costs, and overall industry conditions, with the ability to make adjustments if warranted.