must be submitted for inclusion in the public docket.

2. *Tips for Preparing Your Comments.* When submitting comments, remember to:

- Identify the notice by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Describe any assumptions and provide any technical information and/or data that you used.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Make sure to submit your comments by the comment period deadline identified.

Dated: December 15, 2011.

Susan E. Bromm,

Director, Office of Federal Activities.

[FR Doc. 2011–33462 Filed 12–30–11; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OW–2010–0884, FRL–9615–3]

Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency is issuing a notice to solicit data and information associated with revisions to the Effluent Limitations Guidelines and New Source Performance Standards for the Construction and Development Point Source Category issued under the Clean Water Act. The regulation, as originally issued on December 1, 2009, established requirements that reduce pollutants discharged from construction and development sites, including requirements for a subset of sites to comply with a numeric effluent limitation for turbidity. On November 5, 2010, EPA published a direct final rule and companion proposal staying the numeric turbidity limitation established by the December 2009 rule to correct a calculation error. The Agency received no adverse comments regarding the stay, and therefore, effective on January 4, 2011, the numeric turbidity limitation was stayed. In today's notice, EPA is seeking data on the effectiveness of technologies in controlling turbidity in discharges from construction sites and information on other related issues. Today's notice also seeks comment on passive treatment data already available to the Agency.

DATES: Comments must be received on or before March 5, 2012, 60 days after publication in the **Federal Register**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OW–2010–0884, by one of the following methods:

- *http://www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *Mail:* Water Docket, U.S. Environmental Protection Agency, Mailcode: 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460.
- *Hand Delivery:* Water Docket, USEPA Docket Center, Public Reading Room, 1301 Constitution Avenue NW., Room 3334, EPA West Building, Washington DC 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OW–2010–0884. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *http://www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or email. The *http://www.regulations.gov* Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through *www.regulations.gov* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the *http://www.regulations.gov* index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *http://www.regulations.gov* or in hard copy at the Water Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Water Docket is (202) 566–2426.

FOR FURTHER INFORMATION CONTACT: Mr. Jesse W, Pritts, Engineering and Analysis Division, Office of Water (4303T), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: (202) 566–1038; fax number: (202) 566–1053; email address: *pritts.jesse@epa.gov.*

SUPPLEMENTARY INFORMATION:

A. Does this action apply to me?

Entities potentially affected by this action include:

Category	Examples of affected entities	North American Industry Classification System (NAICS) Code
Industry	Construction activities required to obtain NPDES permit coverage and performing the following activities:	
	Construction of buildings, including building, developing and general contracting	236
	Heavy and civil engineering construction, including land subdivision	237

EPA does not intend the preceding table to be exhaustive, but provides it as a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed on the table could also be affected. To determine whether your may be affected by this action, you should carefully examine the applicability criteria in Section 450.10 of the December 1, 2009 final rule (74 FR 62995) and the definition of ''storm water discharges associated with industrial activity'' and ''storm water discharges associated with small construction activity'' in existing EPA regulations at 40 CFR 122.26(b)(14)(x) and 122.26(B)(15), respectively. If you have questions regarding the applicability of this action to a particular activity, consult one of the persons listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Table of Contents

I. Overview

EPA promulgated Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category (hereafter referred to as the ''C&D rule'') on December 1, 2009 (74 FR 62995). The final rule established requirements based on Best Practicable Control Technology Currently Available, Best Available Technology Economically Achievable, Best Conventional Pollutant Control Technology, and New Source Performance Standards based on Best Available Demonstrated Control Technology.

The rule included non-numeric requirements to:

- Implement erosion and sediment controls;
- Stabilize soils;
- Manage dewatering activities;
- Implement pollution prevention measures;
- Prohibit certain discharges; and
- Utilize surface outlets for discharges from basins and impoundments.

The December 2009 final rule also established a numeric limitation on the allowable level of turbidity in discharges from certain construction sites. The technology basis for the final numeric limitation was passive treatment controls including polymer-aided settling to reduce the turbidity in discharges.

Since issuing the final rule, an error in EPA's interpretation of the data used to establish the numeric limitation was identified in petitions from the U.S. Small Business Administration and the National Association of Home Builders (NAHB). Today's notice seeks comment in the form of data and information on several of the issues raised in the petitions, as well as other topics.

II. Background

A. NPDES Regulations, Construction General Permits and Applicability of 40 CFR Part 450 Requirements

EPA promulgated the Phase I National Pollutant Discharge Elimination System (NPDES) stormwater regulations (55 FR 47990) on November 16, 1990. The Phase I regulations require that dischargers must apply for and obtain authorization to discharge (or ''permit coverage''). One of the categories of dischargers that must obtain permits is discharges associated with construction activity, including clearing, grading, and excavation, if the construction activity:

- Will result in the disturbance of five acres or greater; or
- Will result in the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or greater.

See 40 CFR 122.26(b)(14)(x).

The Phase II stormwater regulations, promulgated on December 8, 1999 (64 FR 68722) extended permit coverage to construction activity that:

- Will result in land disturbance of equal to or greater than one acre and less than five acres; or
- Will result in disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.

See 40 CFR 122.26(b)(15).

Since 1992, EPA has issued a series of Construction General Permits (CGPs) that cover areas where EPA is the NPDES permitting authority. At present, EPA is the permitting authority in four states (Idaho, Massachusetts, New Hampshire, and New Mexico), the District of Columbia, Puerto Rico, all other U.S. territories with the exception of the Virgin Islands, Federal facilities in four states (Colorado, Delaware, Vermont, and Washington), most Indian lands and other specifically designated activities in specific states (*e.g.,* oil and gas activities in Texas and Oklahoma).

In areas where EPA is not the NPDES permitting authority, states issue general permits for construction activity. Many state permits contain requirements similar to those contained in the EPA CGP. In addition, a few state permits contain monitoring requirements and/or requirements to comply with numeric effluent limitations. For example, California's, Washington's, Oregon's, Georgia's and Vermont's current CGPs include discharge monitoring requirements. In addition, California's current CGP contains numeric effluent limitations for a subset of construction sites within the State.

EPA issued new regulations at 40 CFR part 450 on December 1, 2009 (the C&D Rule). The C&D Rule applies to all construction stormwater discharges required to obtain NPDES permit coverage. The C&D rule applies to the entire country, not just the areas where EPA is the permitting authority. Any permit issued by a state or EPA after the effective date of the rule (which was February 1, 2010) must include the requirements contained in that rule. The requirements include BMPs but do not include a numeric limitation which was stayed on January 4, 2011.

B. Petitions for Administrative Reconsideration and Petitions for Review of the Final Construction and Development Regulation in the U.S. Circuit Court of Appeals for the Seventh Circuit

Following promulgation of the December 2009 final C&D rule, the Wisconsin Home Builders Association and the National Association of Home Builders (NAHB) filed petitions for review in the U.S. Circuit Courts of Appeals for the Fifth, Seventh, and DC Circuits. The petitions were consolidated in the Seventh Circuit. Subsequently, the Utility Water Act Group (UWAG) also filed suit in the Seventh Circuit. On July 8, 2010, the petitioners filed their briefs.

In April 2010, the Small Business Administration (SBA) filed with EPA a petition for administrative reconsideration of several technical aspects of the C&D Rule. SBA identified potential deficiencies with the dataset that EPA used to support its decision to adopt the numeric turbidity limitation. In June 2010, the National Association of Homebuilders also filed a petition for administrative reconsideration with EPA incorporating by reference SBA's argument regarding the deficiencies in the data.

C. EPA's Unopposed Motion

On August 12, 2010, EPA filed an unopposed motion with the Court seeking to hold the litigation in abeyance until February 15, 2012 (see DCN 70084) and asking the Court to remand the record to EPA and vacate the numeric limitation portion of the rule. In addition, EPA agreed to reconsider the numeric limitation and to solicit site-specific information regarding the applicability of the numeric effluent limitation to cold weather sites and to small sites that are part of a larger project.

On August 24, 2010, the Court issued its decision remanding the matter to the Agency but without vacating the numeric limitation. Subsequently on September 9, 2010, the petitioners filed an unopposed motion asking the Court to reinstate the litigation, hold it in abeyance until February 15, 2012, and vacate the numeric limitation. On September 20, 2010 the Court reinstated the litigation and held it in abeyance until February 15, 2012, but did not vacate the numeric limitation.

D. Stay of the Numeric Limitation

On November 5, 2010, EPA issued a direct final regulation and a companion proposed regulation to stay the numeric limitation at 40 CFR 450.22 indefinitely. The proposed rule solicited comment due no later than December 6, 2010. Since no adverse comments were received, the direct final rule took effect on January 4, 2011.

Since the numeric portion of the rule was stayed, states are no longer required to incorporate the numeric turbidity limitation and monitoring requirements found at § 450.22(a) and § 450.22(b). However, the remainder of the regulation is still in effect and must be incorporated into newly issued permits. The purpose of this notice is to solicit new data from the public and request comment on a number of issues that EPA would like to consider in the context of establishing numeric effluent limitations for construction site stormwater discharges.

III. Review of Treatment Data in EPA's Current Dataset

A. Approach To Calculating the December 2009 Turbidity Limitation

The December 2009 C&D rule established a numeric limitation for discharges of turbidity from construction sites. The final limitation was set at 280 nephelometric turbidity units (NTU) based on the application of polymer-aided settling, or passive treatment. The data used in the derivation of this limitation came from several construction sites that were using polymer-aided settling in impoundments or in channel applications. EPA's data represented treatment at eight separate construction sites located in Washington State, New York, and North Carolina.

The data used in the calculation of the December 2009 numeric limitation included data from ponds that were used to pre-treat stormwater prior to chitosan-enhanced sand filtration (CESF) active treatment systems (ATS). Data representing the final effluent leaving CESF had been used in the calculation of the November 28, 2008 proposed C&D rule numeric limitation (73 FR 72562), which was based on the performance of full CESF.

EPA considered effluent from the CESF pretreatment ponds as representing passive treatment, and used some such data in the calculation of the December 2009 limitation. An integral part of CESF and ATS is the ability to recirculate pretreated water or effluent from the filters back to the pretreatment ponds if turbidity levels are above pre-established thresholds. Although this recirculated water is above these thresholds, it may be lower in turbidity than the untreated stormwater entering the ponds, and/or water that is already in the ponds. The effect of recirculating water that is lower in turbidity than water contained in the pretreatment ponds would be to reduce the turbidity of the water in the pretreatment ponds. Concerns have been raised that such recirculation represents an additional level of ''treatment'' that goes beyond what is otherwise understood as ''passive'' treatment.

B. Passive and Semi-Passive Treatment Dataset

If EPA excludes data from the ATS pretreatment ponds, the remainder of EPA's passive treatment dataset used in the December 2009 final rule consists of data from three passive treatment systems. Since promulgation of this rule, EPA has received additional information and data from several sources on the performance of passive and semi-passive treatment approaches. As discussed below, EPA also had additional data in the record regarding passive treatment that was not used in calculating the December 2009 final rule. The following discussion summarizes the information and data that comprise EPA's currently reviewed dataset of passive and semi-passive treatment that is available in the docket. EPA continues to receive and review additional data as it becomes available. EPA may consider these data and any data submitted during the public comment period and collected by EPA in a future rulemaking to correct and remove the stay of the numeric turbidity limitation. Any data that EPA is considering for use in this rule making will be placed in the public docket once it has been reviewed.

Steeltown Road and Curley Maple Road, North Carolina (*DCN 70018 and 70065*). This study evaluated the performance of fiber check dams with polyacrylamide (PAM) on two mountain roadway projects in North Carolina. These data were available at the time of the December 2009 final rule, but additional information on sample collection times and turbidity were submitted to EPA in 2011 (DCN 70065).

Orange County, North Carolina Skimmer Basin (*DCN 70034 and 70065*). This paper evaluated a skimmer sediment basin with PAM at an institutional construction project. These data were available at the time of the December 2009 final rule, but additional information on sample collection times and turbidity were submitted to EPA in 2011 (DCN 70065).

Petersburg airport culvert replacement (*DCN 70000*). This study demonstrated the performance of two chitosan lactate biopolymer formulations in removing turbidity from pumped water at the Petersburg, Alaska airport. Water was semi-passively treated by pumping turbid water from one of five culvert locations through a cartridge applicator and then into sediment traps constructed of filter fabric. Additional treatment was accomplished by allowing the water to exit the trap and flow through a vegetated area (called a biofilter).

Testing at this site occurred during March and April of 2009. Reported air temperatures varied between −1.0 and 10 degrees Celsius and reported water temperatures varied between −0.1 and 1.0 degrees Celsius during the study, demonstrating the effectiveness of passive treatment during cold-weather conditions. The study did note that chitosan lactate dissolution rates were slower due to the cold temperatures. The study noted that average daily turbidity of discharge from the sediment trap was 248 NTU, and discharge from the biofilter was 102 NTU. Influent turbidities were reported as high as approximately 5,000 NTU. In order to overcome the slower dissolution rate of the chitosan lactate due to the cold temperatures, additional cartridges were installed in order to deliver the appropriate dosage. In addition, the vendor indicated that a new formulation has been developed that dissolves at a higher rate specifically for use in colder climates. This report also provides diagrams showing various forms of passive and semi-passive dosing that have been developed. Additional references describing this project are also included in the docket (see DCNs 70001 and 70002). EPA requests comment on whether this dataset should be considered representative of the BAT technology as described in the 2009 final rule.

Water Quality Improvements Using Modified Sediment Control Systems on Construction Sites (*DCN 70063*). This research project studied three types of sediment capture and treatment systems at a highway construction project (I–485) between 2003 and 2006 in North Carolina. The first type of system consisted of unlined diversion ditches with rock check dams leading to a standard sediment trap with a rock dam outlet. The second type of system added a forebay, porous baffles and PAM treatment in the diversion ditches and the forebay. The third type of system tested was the same design as the second system except the rock check dam was replaced with a floating outlet or skimmer. The author reported that the three sediment trapping systems with modifications including forebays, porous baffles, ditch lining, and PAM application had storm weighted average turbidity and peak turbidity of 990 and 1,580 NTU, respectively.

North Carolina State University Typar® Field Test (*DCN 70003*). North Carolina State University (NCSU) conducted a field test of the Typar® geotextile product at the university's field laboratory. The study evaluated the performance of the material in an in-channel application. The tests incorporated polyacrylamide to aid in sediment removal. Both total suspended solids and turbidity were evaluated. The study evaluated varying flow rates as well as varying sediment loading rates. The report contains a considerable amount of data. The report indicates that the system is expected to meet a 280 NTU limitation, but points out that field testing outside of the field laboratory setting, where turbidity and total suspended solids (TSS) levels may be higher, would provide additional insights into performance.

Other Research at North Carolina State University (*DCN 70004*). Researchers at NCSU have conducted research on a number of passive and semi-passive treatment approaches. Examples include fiber check dams with PAM, sediment basins and traps with PAM, PAM applied to erosion control matting down a slope, PAM application in pipes and geotextile filter bags with PAM. DCN 70004 contains data from a number of evaluations. Additional data on one of the projects identified in DCN 70004 is also presented in DCN 70053—70060 and 70062.

North Carolina Department of Transportation (*NCDOT*) (*DCN 70005, 70006*). NCDOT conducted a demonstration to evaluate the performance of a dual biopolymer system in removing turbidity. In this application, water from culvert sites and caissons at bridge construction sites that was impounded in a baffled skimmer basin was pumped through a manifold containing biopolymers. The biopolymers dissolve as water is pumped through the manifold, and mixing occurs in the manifold, which aids flocculation. The water then passes through a geotextile filter bag, which retains the flocculated solids. In this demonstration, turbidity in the water from the basin was 1,283 NTU, which was reduced to below 100 NTU following the filter bag.

StormKlear® (*DCN 70007 through 70013 and 70070 through 70080*). StormKlear®/HaloSource® provided information regarding a number of sites using both passive and semi-passive dosing of a dual biopolymer system. Sites described were Annapolis, Maryland (DCN 70007), Austin, Texas (DCN 70008), Beaverton, Oregon (DCN 70009), Griffin, Georgia (DCN 70010), Raleigh, North Carolina (DCN 70011), Memphis, Tennessee (DCN 70011), Jacksonville, North Carolina (DCN 70011), Birmingham, Alabama (DCN 70011), Tampa, Florida (DCN 70012), Tennessee (DCN 70013), Huntersville, North Carolina (DCN 70070), Hanover, Maryland (DCN 70071), Apex, North Carolina (DCN 70072), Bonita Springs, Florida (DCN 70073), Staten Island, New York (DCN 70074), Cabarrus County, North Carolina (DCN 70075), Anne Arundel County, Maryland (DCN 70076), Cartersville, Georgia (DCN 70077), Central, South Carolina (DCN 70078), Fairview, North Carolina (DCN 70079) and Lavonia, Georgia (DCN 70080). The range of turbidity values reported at these sites is presented in Table 1.

TABLE 1—RANGE OF TURBIDITY VALUES REPORTED IN DUAL BIOPOLYMER FIELD TRIALS

Site	Untreated NTU	Treated NTU
Annapolis, MD	300–400	15.
Austin, TX	598	10.5–117.
Beaverton, OR	42–44	14.
Griffin, GA	2,189	21.1–433.
Raleigh, NC	2,500–3,000	14.
Memphis, TN	1,200	20.
Jacksonville, NC	300	15.
Birmingham, AL	1,500	20.
Tampa, FL	Not Reported	<1.
Huntersville, NC	950	425.
Hanover, MD	570	<50.
Apex, NC	3,787	297 (1.4 after basin).
Bonita Springs, FL	162–187	3.2–43.
Staten Island, NY	1,057	5–45.
Cabarrus County, NC	1,195	42.

TABLE 1—RANGE OF TURBIDITY VALUES REPORTED IN DUAL BIOPOLYMER FIELD TRIALS—Continued

Site	Untreated NTU	Treated NTU
Anne Arundel County, MD	547	120.
Cartersville, GA	>4,000	51.
Central, SC	687	32.
Fairview, NC	>4,000	731 (131 after basin).
Lavonia, GA	>4,000	32.8.

ALPURT B2 Motorway Construction Project (*DCN 70049*). The Auckland, New Zealand Regional Council evaluated the use of polyaluminum chloride (PAC) to reduce sediment discharges from a motorway construction project. A rainfall-activated dosing system was used to deliver PAC prior to settling in a sediment basin. Samples were analyzed for TSS, particle size distribution and dissolved aluminum. This study did not evaluate reductions in turbidity.

ALPURT and Greenhihte Trials (*DCN 70067*). The Auckland, New Zealand Regional Council conducted trials using alum, PAC and PAM at several sites. The study evaluated both rainfall-activated liquid chemical dosing systems as well as solid forms. This study evaluated reductions in TSS, but not turbidity.

Bluffs Community Baffle Grid System (*DCN 70050*). This project, located in the metropolitan Atlanta, Georgia area, was a residential construction project. A passive treatment system was utilized consisting of a grit pit followed by a polymer mixing chamber. The water then flowed into another grit pit and then into a baffle grid system. Polymer was dosed using polymer floc logs. Polymer was also applied to exposed soils up-slope of the treatment system. This system produced an average treated turbidity of 18 NTU, according to the study authors. The attached data file shows a range of turbidity after the baffle grid ranging from 1.0 to 703 NTU.

Cleveland Municipal Airport, Cleveland, Tennessee (*DCN 70085*). This site is a multi-year construction project that started in 2009. The site utilizes passive treatment including ditches lined with jute matting with PAM and sediment basins. Monitoring is conducted after the sediment basins as well as in-stream both upstream and downstream of the construction site. Only limited monitoring data was available for this site. The turbidity reported in effluent at the outfalls after implementation of the PAM treatment ranged from 23 to 280 NTU.

C. Additional Data

At the time of this notice, only one state (California) has a numeric effluent limitation for discharges from construction activities that applies to a subset of construction sites statewide. Other sites in the state are subject to monitoring requirements and action levels.[1] Between July 1, 2010 and June 20, 2011, permittees reported 735 daily average turbidity values. The range of these daily average turbidity values was zero to 1,572 NTU with a median value of 42 NTU (see DCN 70051). EPA did not obtain information about the individual sites and treatment systems (such as detailed site plans, SWPPPs, etc.), and has not evaluated the utility of this data in the context of establishing effluent guidelines. EPA has not evaluated whether any of these facilities were subject to numeric discharge standards for turbidity.

As described in the December 2009 final rule preamble, Warner et al. evaluated several innovative erosion and sediment controls at a full-scale demonstration site in Georgia. In this project, polymers or flocculants were not utilized, but instead a comprehensive system of erosion and sediment controls were designed and implemented to mimic pre-developed peak flow and runoff volumes with respect to both quantity and duration. The system included perimeter controls that were designed to discharge through multiple outlets to a riparian buffer, elongated sediment controls (called seep berms) designed to contain runoff volume from 3- to 4-inch storms and slowly discharge to down-gradient areas, multi-chambered sediment basins designed with a siphon outlet that discharged to a sand filter, and various other controls. Monitoring conducted at the site illustrates the effectiveness of these controls. For one particularly intense storm event of 1.04 inches (0.7 inches of which occurred during one 27-minute period), the peak sediment concentration monitored prior to the basin was 160,000 mg/L of TSS while the peak concentration discharged from the passive sand filter[2] after the basin was 168 mg/L. Effluent turbidity values ranged from approximately 30 to 80 NTU. Using computer modeling, it was shown that discharge from the sand filter, which flowed to a riparian buffer, was completely infiltrated for this event. Thus, no sediment was discharged to waters of the state from the sand filter for this event. For another storm event, a 25-hour rainfall event of 3.7 inches occurred over a two-day period. Effluent turbidity from one passive sand filter during this storm ranged from approximately 50 to 375 NTU, with 20 of the 24 data points below 200 NTU. For a second passive sand filter, effluent turbidity ranged from approximately 50 to 330 NTU, with nine of 11 data points below 200 NTU. In the Warner et al. study low levels of turbidity in discharges were achieved without relying on chemical flocculants or polymers or pumping of water. Although these data were available to EPA at the time, EPA did not use the Warner et al. data in calculating the limitation contained in the December 2009 final rule because the site did not use polymers. EPA requests comment on whether the Warner et al. data, data from passive sand filters in general as described by Warner et al., and data from sites not using polymers or flocculants should be used in evaluating the feasibility of a numeric effluent limitation and whether these data should be considered representative of

[1] In December 2011, the California Superior Court invalidated the California numeric standard of 500 NTU, which applied to a subset of construction projects, because the state did not evaluate performance data from available technologies under a variety of site conditions. Construction projects subject to the standard did not have ''reasonable assurance that the technologies are capable of achieving the turbidity NEL (numeric technology based effluent limitation).'' Decision at 16; California Building Industry Association v. State Water Resources Control Board, Case No. 34–2009–800000338 (Sacramento Superior Court) December 2, 2011. See DCN 70086.

[2] The term ''passive sand filter'' in this context is used to describe an in-ground filter constructed by placing sand and gravel into an excavated area. The filter receives surface discharge from up-slope sediment controls which is distributed across the filter surface using distribution pipes. Water flows down through the filter bed and is collected by an underdrain system where it is conveyed down-slope. All flow in this application is by gravity. The system did not incorporate any pumps or any treatment chemicals. A passive sand filter differs from the sand filters which are used as part of CESF, which are operated by a programmable logic controller or onsite personnel, are pressurized and operate at much higher flowrates, among other differences.

the BAT technology as described in the 2009 final rule.

IV. Solicitation of Data and Comments on Numeric Effluent Limitations for Turbidity

The following presents the issues and areas where EPA is soliciting feedback, data and information.

A. Control of Turbidity—Effectiveness, Costs and Feasibility of Different Technologies

On November 28, 2008 EPA issued a proposed rule that would have established a numeric effluent limitation for turbidity based on the application of what is termed active or advanced treatment, or ATS, specifically chitosan-enhanced sand filtration (CESF). ATS consists of a variety of technologies, the two most prevalent being CESF and electrocoagulation. The basic premise behind CESF is to collect the stormwater in a pond or basin, withdraw the water from the basin (using pumps), add a treatment chemical (in this case chitosan, although the technology is adaptable to other treatment chemicals), and remove the flocculated solids using filtration. Pretreatment with a treatment chemical (such as chitosan) is frequently used to reduce the turbidity of the stormwater withdrawn from the pond or basin to a range that will allow for efficient filtration. This is frequently done in dedicated pretreatment cells or tanks, but the configuration can depend on requirements specified by the regulatory agency or the operator. CESF typically incorporates a programmable logic controller to monitor turbidity and pH of the treated water continuously or during some specified time interval, and valves can be actuated automatically by the controller to recycle the treated water back to the pretreatment cells or storage pond if the discharge does not meet pre-established thresholds. Electrocoagulation does not use a polymer or treatment chemical, but rather uses an electrical process to destabilize the particles. Agglomerated particles are removed by settling and/or filtration. ATS, based on information available to EPA on the performance of CESF, appears capable of producing very low turbidity (generally less than 50 NTU, and in many cases less than 5 NTU) in treated stormwater from construction sites. Performance can be further enhanced by polishing the filtered water in bag or cartridge filters. EPA requests comment on this description of ATS.

Costs for ATS systems include equipment rental (pumps, filters, generators and control equipment), fuel, chemicals, labor, management of residuals, piping, and miscellaneous consumables (residual polymer test kits, filtration media, etc.) and data management and reporting. A stabilized area (such as a gravel pad) may be necessary in some cases. In colder climates, consideration of measures to prevent freezing of equipment may also be necessary. The requirement to store water in ponds and to pretreat water can add costs. Also, managing dewatering of a series of large impoundments on some sites may be complicated, particularly during extended periods of precipitation. The costs of large ponds may be offset to some extent if they are converted to post-construction stormwater water-quality or flood-control ponds. This is frequently accomplished by removing the accumulated sediment captured during the construction phase and altering the outlet structure of the basin to achieve the water quality and peak discharge rate control desired for the post-developed condition. This can result in considerable cost savings for the post-construction ponds, since significant costs are associated with excavation of the basins. However, recent trends toward use of decentralized stormwater management may be a disincentive toward utilizing large ponds (although the need for flood control ponds and ponds to control stream channel erosion may still exist). Practices such as bioretention, porous pavement, infiltration systems and harvest and use systems may replace, to some extent, centralized conveyance and stormwater detention and retention ponds. However, if decentralized controls are used for postconstruction stormwater management, then basins used during the construction phase may not need to be converted for post-construction use. In these cases, the construction phase basins may need to be filled in, at additional expense to the developer. In some instances, this may provide space where additional structures, parking or other amenities can be placed, which may provide a benefit to the developer.

Passive treatment systems (PTS) in the context of construction site stormwater management are practices that do not rely on computerized systems with pumps, filters and real-time controls but do incorporate a treatment chemical to aid in sediment and turbidity removal. Passive treatment could include pumps where they are necessary to move water around the construction site, and pumping may be integral to properly dosing the water with treatment chemicals in some cases. When pumps are utilized to pump the water through a manifold or other apparatus to dose the chemical, this type of treatment has been characterized by the industry as semi-passive treatment. In passive treatment, polymer can be placed in channels that convey water on the construction site, or they may be used prior to basins or other practices (such as a baffle-grid, in-ground sand filter or a geotextile filter bag) that allow for settling and/or filtration of the flocculated material. Treatment chemicals, either in solid or liquid forms, can be applied at various locations on the site. Common PTS include fiber check dams with PAM and sediment basins dosed with PAM as described by McLaughlin (see DCNs 70018, 70034 and 70063). The Auckland, New Zealand Regional Council also described a PTS that utilized a rainfall-actuated system to deliver liquid chemical (see DCN 70049 and 70067). Minton (see DCN 70069) described a ''pump and treat'' system whereby water was pumped from a basin, a treatment chemical was added, and the water was allowed to settle in dedicated treatment cells. Water can be re-circulated with the pump and additional chemical added if the settled water does not meet specifications. As stated above, the term semi-passive treatment has been used to describe practices that utilize pumped water to dose the chemical, or applications where the water is first held in a basin or other impoundment and withdrawn under more controlled conditions for subsequent treatment. Recent improvements to PTS incorporate the use of two polymers (see DCNs 70006–70013, 70070–70080), which can be placed in a manifold or in a channel. The use of baffles and floating outlets or ''skimmers'' on basins are frequently incorporated as part of PTS, and directing treated water to vegetated areas or ''biofilters'' can also provide additional sediment and turbidity removal prior to discharge. EPA requests comment on these descriptions of ''passive'' and ''semi-passive'' treatment systems and comments on what practices should be considered representative of the BAT technology as described in the 2009 final rule.

The performance of PTS varies based on the type of system, the method used to dose chemicals, as well as other factors. The performance of simple PTS appears to be sensitive to the type and frequency of maintenance and system configuration, as well as the intensity and duration of storm events. An advantage of simple PTS, such as fiber check dams w/PAM, is that they are very inexpensive and can be easily incorporated into sites at multiple locations and do not require large ponds for storage prior to treatment. A disadvantage may be that achieving a consistent level of performance may be more difficult due to variations in storm flows and sediment loads and little control over dosage rates. The data available to EPA does show high levels of turbidity in discharges for some events, indicating that simple passive treatment systems may not perform well during larger and/or more intense storm events. Data collected at a construction site in North Carolina that used passive treatment measured peak turbidity in excess of 40,000 NTU during an intense storm event (see DCN 70064.3).

Semi-passive approaches, which first hold the water in a basin, tank or impoundment and then release water either by gravity or with a pump to provide dosing, appear to be capable of providing lower, and perhaps more consistent, turbidity levels due to dampening of the storm flows by the basins. An advantage of semi-passive approaches is that since the water is withdrawn by pumping (although semi-passive dosing can be accomplished using gravity flow in certain cases), flowrates and dosing rates can be more easily controlled, allowing for more consistent and likely better performance. Since the water is withdrawn from the storage pond and dosed at a more controlled rate, the large variability and poorer performance that may occur under some precipitation conditions with simple passive treatment can potentially be avoided. A disadvantage may be that the stormwater must first be stored in ponds, tanks or other impoundments in order to provide a controlled release. As with ATS, these storage requirements can add costs and additional operational considerations to address, particularly during extended periods of precipitation. As described earlier, these costs may be offset to some extent depending on the nature of post-construction stormwater requirements in place.

An integral component of ATS and PTS is the use of a treatment chemical to aid in removal of sediment and turbidity. However, data presented by Warner and Collins-Camargo (see DCN 70052) indicates that a comprehensive suite of erosion and sediment controls is also capable of producing treated stormwater with low levels of turbidity. EPA has little data on which to base a numeric limitation on these types of practices as this level of management does not appear to be typical at most construction sites.

EPA is soliciting data and information on the costs, effectiveness and feasibility of different technologies to control TSS, settleable solids, suspended sediment concentration and turbidity in construction site stormwater discharges. EPA is also soliciting data on other water quality parameters, such as pH, nutrients and metals. EPA is especially interested in receiving data on the performance of passive and semi-passive treatment approaches. Data collected both before the treatment or management practice (influent data) as well as data after the treatment or practice (effluent concentration) would be useful. EPA already has a large dataset on the performance of ATS in removing turbidity, but additional data on the costs of ATS would potentially be useful to EPA. To be most useful, EPA requests that treatment performance data represent multiple discharge events, that samples are collected over regular intervals over the course of the event (or the discharge), and that the data contain, if available, the following descriptive information:

- Site information, such as project size, project type (residential, commercial, road/highway, etc.), location, phase of construction (e.g., before, during or after grading, site stabilization, etc), etc.;
- Sample date(s) and time(s) of collection and date(s) and time(s) of analysis;
- Sample type (grab sample, flow or time-weighted composite, continuous turbidity measurement, etc.);
- Analytical method and/or type of field instrument used to measure the parameter; and
- Description of the treatment technology, including method of treatment chemical dosing utilized.

Additional information that would be useful in evaluating these data includes:

- Estimates of the amount and intensity of precipitation for the time preceding and/or during sampling events;
- Drainage characteristics (predominant soil types/textures, drainage area, estimate of the quantity or percent of the drainage area that is disturbed);
- The ambient air temperature when the data is being collected;
- Date of last calibration if a field instrument was used; and
- Descriptions of any quality assurance/quality control procedures implemented for the data collection activity.

In order to be most useful, data on costs should include:

- Installation costs (both material and labor);
- Operation and maintenance burden (in terms of labor hours and/or costs);
- Quantity, cost and frequency of treatment chemical use; and
- Other costs (residuals management, consumables, energy use, etc.).

EPA requests comment on other factors EPA should consider other that those listed above in evaluating treatment performance data and what metadata commenters consider important to consider in the context of establishing effluent limitations.

B. Sampling and Data Collection—Procedures and Protocols To Ensure Representativeness of Data; Differences in Analytical Equipment

EPA is aware that there are several issues associated with collecting turbidity data in the field at construction sites. These issues are associated with sampling equipment limitations, turbidimeter limitations, differences between turbidity measuring equipment, and sample handling and analysis. The following discussion presents information that EPA is aware of with respect to these issues and solicits data and comment on these issues. These issues relate both to collecting samples for the purposes of establishing effluent limitations as well as collecting samples for compliance determination.

Sampling Equipment Limitations

Collecting samples of stormwater at construction sites can be accomplished using either automated equipment or by collecting grab samples. Automated equipment typically requires the use of a flow measuring device and an automated sampler. Flow measurement devices require that a weir, flume or other structure be installed in the conveyance that has a known rating curve (discharge vs. flow depth), or that a custom rating curve be developed for open channels based on surveyed channel geometry that can be used to estimate flow as a function of depth of water. Automated samplers can be set up to collect samples after a predetermined amount of flow has passed through the measuring device (flow-weighted) or after a predetermined amount of time has passed (time-weighted). In either case, the sample collection interval must be selected such that sufficient samples are collected over the course of the hydrograph to adequately characterize the discharge. This is frequently difficult, as it is not known in advance how much precipitation and flow will occur. If the sample collection interval is set too low, then the sampler may fill up before the end of the event. In this case, a portion of the hydrograph may not be sampled. If the interval is set too high, then too few samples may be collected to adequately characterize the event. Given the variability in stormwater flows, this may make the use of automated sampling challenging.

Grab samples are easier to collect than automated samples. However, collecting grab samples requires that someone be physically present on the site. Given the variable nature of storm events and that those events can occur during all hours of the day, collecting grab samples to characterize performance can also be challenging. This is particularly true when the site is not located in close proximity to field offices of the sampling personnel.

In the context of characterizing performance for establishing effluent limitations, both grab samples and automated samples are potentially useful. Generally, EPA believes that samples used to characterize performance should be collected regularly over the course of the event in order to capture variability in flows and associated pollutant parameters. This is particularly true in the case of passive treatment, which does not involve capture of the water in a pond or basin for controlled release, so that one would expect greater variability in sampled parameters. For treatment of water discharged in a controlled rate from a pond, one would expect less variability in flows and performance, so less frequent sample collection would likely be necessary in order to adequately characterize performance.

Turbidimeter Limitations

Samples collected for turbidity can be measured in the field using a hand-held turbidimeter, or can be sent to a laboratory for analysis using a benchtop turbidimeter. Both methods are simple and inexpensive. However, turbidimeters only operate within specific ranges. The high-end of the range is typically around 1,000 NTU or more. Samples with high amounts of turbidity may need to be diluted in order for the turbidity of the sample to be within the operating range of the instrument. This is a potential source of error, especially if done in the field. Another method for measuring turbidity is to use an in-situ meter coupled to a datalogger. In-situ meters can be programmed to record turbidity continuously at some specified time interval (such as every 15 minutes). As with other instruments, in-situ turbidimeters typically operate within a specific range. With these instruments, turbidity above the measurement range of the instrument cannot be determined, since a physical sample is not collected. This is a potential source of error, particularly during periods of peak flows where turbidity may be very high. This is a downside of in-situ meters because an average turbidity for an event cannot be determined if some of the data exceeds the measurement range of the instrument. In these cases, the use of both an in-situ meter as well as collection of a physical sample during peak flow periods may be necessary to accurately determine the average turbidity for the event. In-situ meters are also susceptible to failure, such as from battery failure or a piece of debris obscuring the detector.

Different types of turbidimeters may provide different measurements of turbidity for the same sample. This is due to differences in light sources and differences in the orientation of the light source with respect to the detector. In addition, while turbidity measured in NTUs is the standard contained in EPA's methods, turbidity can also be measured in other units, such as formazin turbidity units (FTUs). While EPA believes that NTUs are the appropriate units in the context of effluent limitations for construction site stormwater, EPA solicits comments on the types of equipment that should be allowable and other considerations related to differences in measurement equipment and measurement units.

Sample Handling and Analysis

EPA notes that some of the data in EPA's dataset did not follow the sample preservation protocols contained in EPA's approved analytical methods. EPA method 180.1 states that turbidity samples should be immediately refrigerated or iced to 4°C and analyzed within 48 hours. EPA is aware that many of the samples collected by researchers at North Carolina State University and described in DCNs 70004, 70018, 70034, 70053, 70054 and 70065 were collected using automated samplers, and that the samples were not analyzed within 48 hours or refrigerated or iced. In many instances, samples were analyzed several days or weeks after collection. While EPA notes the deviation from approved methods, EPA does not believe that this deviation would produce appreciable changes in measured turbidity in these cases. The sample refrigeration and analytical timeframe guidelines are intended to minimize changes in turbidity that would result due to microbial decomposition of solids in the sample. Since EPA expects little organic material to be present in samples of stormwater runoff from construction sites since the solids are primarily composed of inert soil particles, EPA would not expect biological activity to appreciably change the turbidity of the samples. EPA does note that since these samples incorporated polyacrylamides, some additional flocculation could occur in the sample bottles during the time period between collection and analysis or during transport from the field to the laboratory, if residual or un-bound polyacrylamide was present in the sample. EPA solicits comment on the appropriateness of using data from samples not analyzed within 48 hours or otherwise not in compliance with established analytical methods in the context of a future regulation.

EPA also notes that the samples collected by researchers at North Carolina State University were allowed to settle for approximately 30 seconds after mixing before a subsample was collected and analyzed for turbidity. EPA understands that this 30-second settling period after mixing was to allow large flocculated particles to settle, since analyzing turbidity of a sample that contains large agglomerates may prevent the turbidity meter from producing a stable reading or may underestimate turbidity of the sample. The EPA approved sampling method does not describe an appropriate period of time between mixing of the sample bottle and collection of the subsample for analysis. As described in EPA's method 180.1 for measuring turbidity, the approved analytical procedure is ''Mix the sample to thoroughly disperse the solids. Wait until air bubbles disappear then pour the sample into the turbidimeter tube. Read the turbidity directly from the instrument scale or from the appropriate calibration curve.'' (see DCN 70083), The method states that ''The presence of floating debris and coarse sediments which settle out rapidly will give low readings. Finely divided air bubbles can cause high readings.'' Floating debris and course sediments and finely divided air bubbles are therefore considered sources of interference when measuring turbidity. The practice utilized by researchers at North Carolina State University of allowing mixed sample bottles to sit for 30 seconds before collecting the subsample for analysis, which would allow any course sediments to settle, may be an appropriate means of addressing possible interferences due to the presence of large particles. EPA also acknowledges that allowing the sample to settle prior to collecting the subsample for analysis may result in fewer particles generally being present in the subsample and thus an artificially low turbidity reading. EPA solicits comment on the appropriateness of using turbidity data where a sample was allowed to settle for 30 seconds (or some other time period) after mixing before collection of the subsample for analysis for purposes of evaluating the performance of technologies and for compliance purposes and the expected magnitude of the effects of varying settling time on observed turbidity values.

EPA understands that the subsamples for TSS were collected by the researchers and analyzed immediately after mixing. As a result, there are certain cases where particular samples in these data had TSS concentrations (in mg/L) that would appear inconsistent when compared to the corresponding turbidity measurements (in NTU) since the large particles could be present in the TSS subsample. EPA notes that the ratios of TSS to turbidity for some samples are much higher than for other samples, which EPA believes can be attributed to the 30-second settling time prior to collection of the turbidity subsample. EPA welcomes comments on this topic.

In the context of compliance demonstration, the specifics of a particular site (such as the location of the site, the number of discharge points, proximity of discharge points, accessibility of discharge points, etc.) are important considerations in determining the type of sample to be collected. Generally, both automated samples and grab samples are potentially useful for compliance determinations. However, the inherent limitations with sampling equipment and equipment malfunctions may be important considerations. With grab samples, equipment limitations and equipment malfunctions are not of concern.

EPA solicits comment on the appropriate methods for sample collection in the context of both compliance sampling and analytical sampling for the purpose of setting limits for a turbidity effluent limitation for construction site stormwater discharges. EPA recognizes that logistics and cost are important considerations, and would like to better understand the potential costs and challenges of sample collection and analysis in these cases.

C. Effect of Storm Size, Intensity and Duration of Precipitation on Performance of Passive Treatment

In establishing effluent guidelines and new source performance standards, proper operation of the candidate best available technology economically achievable (BAT) and best available demonstrated control technology (BADCT) should result in meeting the numeric limitation a very high percentage of the time. In the case of industrial wastewater, treatment systems typically perform well within a range of flowrates and influent pollutant concentrations, and systems typically operate within these ranges. Due to variations in manufacturing production cycles, the flowrates and pollutant concentrations in wastewater can vary over the course of a day. Industrial wastewater treatment systems typically incorporate equalization to dampen these diurnal variations in flowrates and pollutant concentrations. This dampening assures that high flows and/or pollutant loads do not overwhelm the treatment system, or that low flows and/or pollutant loads do not compromise unit processes.

This same concept applies to stormwater treatment. Since precipitation is a stochastic process, there can be variation in stormwater flowrates and sediment loads during the course of a given precipitation event. Data available to EPA indicates that passive treatment with limited storage may perform well for some storm events, but that larger and/or more intense storm events may degrade the performance of these systems. The likely reasons for a decrease in performance include inadequate treatment chemical dosing during periods of higher flows, exhausting the treatment chemical during larger and/or longer storm events, high sediment loads during intense periods of precipitation that overwhelm the systems, and short-circuiting/overtopping of controls. These occurrences are difficult to address as they occur on construction sites in the context of passive treatment, which is not based on a high level of operator involvement.

A potential shortcoming of EPA's current dataset on passive treatment is that much of the data was collected during smaller storm events. EPA has little data available on the performance of this type of flow-through passive treatment during larger and/or more intense storm events, but the limited data available indicate that the performance of simple passive treatment approaches may not be as good for these events. The candidate BAT/BADCT should be capable of meeting the limitation up to whatever cutoff is established for the limitation. In the 2009 rule, the compliance storm event was the 2-year, 24-hour storm event (see Section IV.D for additional discussion of storm event exemptions).

EPA does not expect this concern to arise with treatment that first holds the water in a pond, basin or impoundment. Impounding the water has two primary benefits for subsequent treatment—equalization of flows and reduction/dampening of sediment/turbidity levels. The amount of sediment and turbidity mobilized during a storm event can vary greatly, depending on factors such as storm intensity, storm duration, soil type and composition, slopes of the contributing watershed, extent of soils exposed, and the extent and nature of construction activities occurring. When water is held in a basin, a significant portion of the settleable materials would be expected to be removed. When water is withdrawn for subsequent treatment, one would expect much lower variability in the amount of turbidity over the course of the treatment period.

D. Exemptions—Design Storm Depth vs. Intensity

The December 2009 final rule exempted discharges from compliance with the turbidity limitation on days where precipitation exceeded the local 2-year, 24-hour storm depth. The rationale for this exemption was that large storm events would potentially overwhelm the passive treatment systems, making compliance with the limitation difficult. If an impoundment is used to store water prior to treatment, a total storm depth may be an appropriate compliance threshold since impoundments are typically designed to store a certain quantity of water. Runoff in excess of that volume would either bypass storage or be discharged through an overflow riser or over a spillway. However, both storm depth and storm intensity may be important drivers for system performance and appropriate compliance thresholds for simple in-line passive treatment systems. Total storm depth (and the total volume of stormwater passing through the passive treatment system) is an important driver of performance because the amount of treatment chemical available in a simple passive treatment application is limited (unless more is applied during the event). At some point, available treatment chemical may be exhausted and treatment performance would be expected to decline. Storm intensity may be a much more important driver of performance of in-line simple passive systems than storm depth. During high intensity rainfall periods, which occur frequently in many parts of the country, sediment detachment and mobilization can be significant due to the high energy of the raindrops. This high level of sediment mobilization, coupled with flashy flows through conveyances, can deposit large quantities of sediment in passive treatment systems and flowrates can exceed the dosing capacity of these simple systems. Therefore, EPA solicits data indicating what critical storm intensity would render simple passive treatment systems ineffective. In addition, any compliance threshold tied to storm intensity would optimally specify both storm intensity as well as a duration over which that storm occurs. For example, a storm may have a peak five-minute intensity of two inches per hour, but if the storm only lasted for five minutes, then the total amount of runoff would be small. In addition, optimally, EPA would specify how long after the intensity threshold has been exceeded the site would qualify for an exemption from the limitation (e.g., for the rest of the day, only during the period when the peak storm intensity had been exceeded, for one hour after the peak storm intensity had been exceeded, etc.). EPA solicits data and information on what would be appropriate exemption criteria.

With semi-passive or ATS approaches, storm intensity would likely not be as critical, given that the water is first held in a basin or impoundment. Therefore, an exemption based on total storm depth may be appropriate, since the standard could specify a storage volume and a drawdown time (e.g., basins must be sized to store runoff from the 2-year, 24-hour storm and the treatment system sized to dewater the entire storage volume in 48 hours). Any flow going over the riser or emergency spillway during that time period could be exempt from the limitation.

E. Use of Treatment Chemicals, Disposal and Toxicity Concerns

ATS, passive and semi-passive treatment practices on construction sites utilize a variety of treatment chemicals. Common treatment chemicals include chitosan, polyacrylamides (PAM), alum, polyaluminum chloride (PAC), diallydimethyl-ammonium chloride (DADMAC) and gypsum. These chemicals are used to help destabilize and flocculate soil particles, allowing for removal by filtration, adhesion or settling. Additional chemicals may be used to adjust pH or other water chemistry parameters. Treatment chemicals in use on construction sites have varying toxicity profiles. EPA has limited data on acute and chronic toxicity of these treatment chemicals in the context of their use to treat construction site stormwater; however it is generally known that unbound cationic chemicals can exhibit mechanical lethality to some species in some instances. The degree of toxicity of any treatment chemical is a function of the organism, chemical formulation, charge density, dose rate, exposure time, and degree of sediment/turbidity in the receiving environment. Some states have approved specific chemicals and formulations for use on construction sites. Some stakeholders raised concerns about the toxicity of the treatment chemicals in comments received on the November 2008 proposed rule. EPA is also aware that some states do not currently allow addition of any treatment chemicals to stormwater on construction sites. In these cases, it is unclear how permittees would comply with a numeric limitation, although as stated earlier, a comprehensive suite of conventional practices was demonstrated to produce low turbidity in discharges at the project described in Warner et al.

As mentioned above, stakeholders have raised concerns regarding acute and chronic aquatic toxicity effects due to the use of chemicals in treatment of construction site stormwater. The concerns are related to the lack of control of dosage rates in passive treatment, operator error in passive, semi-passive and ATS applications, and other accidental or unintended releases. Anionic granular and water-based PAMs that are used in surface water treatment applications (such as for managing construction site stormwater and in agricultural applications) are generally considered to have a low toxicity profile when used appropriately and within established dosing ranges (see DCN 70081). Oil-based PAM and cationic PAM are known to exhibit acute and chronic aquatic toxicity. The Auckland, New Zealand Regional Council evaluated the ecotoxicological and environmental risk of polyelectrolytes and inorganic aluminum salts (see DCN 70082) and found that ''there appears to be a small risk to the natural aquatic environment arising from potential losses of unbound residual flocculants from treatment ponds on construction sites. Impacts are likely to be low level and also likely to not be significant in relation to other factors which govern the health of aquatic communities. The benefit of reduced sediment levels in discharges is considered to outweigh the risk of any low level impacts attributable to residual flocculants.''

There are also concerns related to flocculated material containing polymers or other treatment chemicals that may pass through passive or semi-passive treatment systems. Anecdotal information indicates that PAM bound to soil particles may be discharged to receiving waters in certain cases in simple passive treatment systems, either due to the flocculated material not being removed by the practice or previously-removed material being re-suspended during subsequent storm events. It is unclear what, if any, downstream effects may be attributable to these discharges, as sediment-bound PAM is thought to have limited bioavailability (see DCN 70081). It is also unclear how any detrimental effects due to discharged chemical would compare to the detrimental effects of the additional sediment and turbidity that would be discharged had the chemical not been used. Additional concerns have been raised regarding the disposal of treatment residuals, which consist of sediment bound with treatment chemicals. Common practice is to use treatment residuals as fill material. If fill material is placed in locations that are not adjacent to surface waters and in areas where they cannot be re-mobilized, then the potential for subsequent release may be minimized. However, EPA is not aware of data or studies that have looked at the fate and transport of treatment chemicals contained in residuals. It is, however, generally known that components of some chemicals, such as polysaccharides, will readily degrade into benign compounds. And, as stated in the previous paragraph, sediment-bound PAM is thought to have limited bioavailability since there is little or no desorption from soil particles.

EPA is seeking comment and additional data on the toxicity associated with the use of chemicals in controlling sediment discharge in construction stormwater.

F. Cold Weather Considerations

EPA solicits information and data on the performance of polymers as an aid to reducing turbidity in cold weather. EPA is aware that temperature may affect dissolution rates of treatment chemicals and therefore may impact the performance of polymer-aided settling and filtration (see DCN 70000, 70001 and 70002). Data contained in DCN 70000 indicates that while dissolution rates may be lower, there are methods available to mitigate detrimental effects on treatment system performance, such as providing additional application in order to provide the proper dosing rates and/or use of product formulations designed specifically for use in colder climates. Directing discharges to a vegetated buffer (or biofilter) would also be expected to provide additional removal (see DCN 70000, which illustrates such an application in a cold climate). This issue was addressed in EPA's comment response document for the December 2009 final rule (EPA–HQ–OW–2008–0465–1660, page 507):

EPA expects that NPDES permittees working in cold-climate regions, such as Alaska, shall be able to comply with the requirements of the final rule. Very little surface runoff (and hence discharges) occurs during freezing conditions. As temperatures warm and snow and ice melt and discharges occur, the limitation would apply to discharges on those sites that meet the applicability criteria. In some cases, permittees may need to consider the need for freeze protection for items such as pumps and polymer dosing systems, if permittees elect to use these or other items as components of their treatment systems. Stormwater infiltration may be limited in cold climates, but the ELGs are flexible enough to allow permittees to comply with the regulation regardless of frozen soil/ground conditions.

In addition, comments submitted by the National Association of Home Builders on the November 29, 2008 proposed rule (EPA–HQ–OW–2008–0465–1360.2, page 188) indicate that little, if any, runoff would be expected during the cold months:

In very cold climates, erosion and sediment movement is nonexistent during the cold months. Once the freeze sets in, the soil does not move since the freeze penetrates to well below the surface. Typically builders and contractors do their land disturbing activities during the summer months. (Home builders line up a number of home foundations where the building of the houses can proceed during the winter without the need to move soil.) If digging is done on site during the winter to put in a foundation, the soil removed will remain in place until the thaw. Permitting authorities normally require that sites are stabilized prior to freezing and inspections take place to ensure stabilization during the spring, including stabilization for any dirt dug out during the winter.

EPA solicits additional data on the performance of polymer-aided settling and filtration in colder climates.

G. Small Sites That Are Part of a Larger Common Plan of Development or Sale

EPA solicits comments on the ability to effectively treat discharges from small sites that are part of a larger common plan of development or sale. An example would be a site that is above any regulatory threshold requiring compliance with a turbidity limitation, but has a portion of the site (such as an individual lot or small group of lots) that may not be treated in a common system that treats discharges for the entire site. These small areas would still be subject to any numeric limitation because the overall size of the construction site exceeds the size threshold, and therefore these sites would need to treat any discharge from their area if there is a concentrated point of discharge that would be subject to the numeric limitation. EPA is soliciting data and information on the ability to apply treatment to small areas within a larger common plan of development or sale.

Information in the record for the C&D rule indicates polymer-aided settling and filtration is scalable, and that therefore there are technologies available that can be used on any size site and any drainage area. Some of the data used to calculate the December 2009 numeric limitation, such as the North Carolina roadway project and the North Carolina institutional project, were collected on small drainage areas. Small drainage areas need only provide a sufficient storage volume (such as a sediment trap) or a conveyance system (such as a channel with check dams) to treat stormwater discharges.

For small drainage areas without appreciable slope, or where a conveyance or impoundment could not be feasibly installed, EPA would expect that stormwater would be conveyed primarily as overland flow, once the underlying soil has been saturated, which would be amenable to treatment through a filter berm, vegetated buffer or other appropriate control. EPA would not expect stormwater discharges to become concentrated to such a degree from small, flat drainage areas that monitoring and compliance with a numeric limitation would be required since channelization is likely not to occur, except for larger storm events. In addition, the use of surface covers, tackifiers and other covers have been shown to be highly effective in preventing mobilization of soil particles (see the Technical Development Document for the December 2009 rule for additional information). These practices can be used on any size area of disturbance and would be particularly effective on small, flat areas of disturbance. Therefore, EPA believes that technologies are available for managing any size site or drainage area.

EPA further believes that decisions the permittee chooses to make regarding how to grade the site and how to convey stormwater are important factors to consider during the planning phase of a project, and that these choices will affect the level of technology needed to meet a turbidity limitation and the number of discharge points that will require monitoring, particularly for smaller drainage areas. EPA solicits comment and data on this issue.

H. Electric Utility Transmission Line Construction

EPA solicits information and data on the costs and feasibility of implementing controls to achieve a numeric effluent limitation for turbidity in discharges from electric utility transmission line construction projects. As discussed below, the length of electric utility transmission line projects, the multitude of discharge points, the distance between such discharge points, and the relatively brief construction period would make it potentially difficult for permittees to identify all discharge points in advance and monitor at the numerous points where monitoring would potentially be required.

Since promulgation of the December 2009 C&D rule, EPA has received information from UWAG (see DCN 70031) regarding several attributes of construction for electric utility transmission line construction projects. Information provided to the Agency and the Agency's understanding of this information indicates that electric utility transmission line construction projects are different than other types of linear construction projects, such as roads. Electric utility transmission line construction projects can span anywhere from a few dozen miles to hundreds of miles in length and the area of disturbance is typically non-contiguous. Other linear construction projects, such as roads, typically do not span the longer distances in this range and typically have relatively contiguous areas of disturbance. EPA's understanding of the information provided by UWAG indicates that, given the considerable length of electric transmission projects and the number of individual areas where pads and/or poles are installed, the number of discharge points could run into the hundreds. This number of discharge points is unique to long, linear electric utility transmission line construction projects. Further, the distance between individual areas of disturbance for electric utility transmission line construction projects can be considerable. This differs from other linear projects, such as roads, in that other linear projects typically do not have such distances between areas of disturbance. For example, a typical road widening project could potentially be up to dozens of miles long, but the areas of disturbance are generally contiguous or in close proximity to each other.

Another significant difference between electric utility transmission line construction projects and other linear construction projects is that the duration of disturbance for a given piece of land is typically much shorter and the intensity of disturbance is much less for electric utility transmission line construction projects than for other linear construction projects, such as roads. Construction of a new roadway, or expansion of an existing roadway to add a new lane or lanes, typically takes many months and involves intensive land disturbance (clearing, grading, cut and fill, excavation, etc.), whereas construction of an individual pad for an electric utility transmission line tower and/or pole may last a matter of days or weeks.

Based on the length of such electric utility transmission line construction projects, the multitude of discharge points, the distance between such discharge points, and the relatively brief construction period, EPA solicits comments on whether it would be practical to require such dischargers to identify all discharge points in the notice of intent to be covered for their permit, for the permitting authority to determine representative discharge points, and for the discharger to monitor at the numerous points where monitoring would potentially be required for these types of projects. EPA solicits comments on the information provided to EPA by UWAG and additional data on construction of electric utility transmission lines to support or refute the ability of these projects to implement controls and monitor discharges.

Dated: December 27, 2011.

Michael H. Shapiro,

Acting Assistant Administrator for Water.

[FR Doc. 2011–33661 Filed 12–30–11; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

[FRL–9615–1]

Final Reissuance of General NPDES Permits (GP) for Facilities Related to Oil and Gas Extraction

AGENCY: Environmental Protection Agency, Region 10.

ACTION: Final Notice of reissuance of a general permit.

SUMMARY: A GP regulating the activities of facilities related to oil and gas extraction on the North Slope of the Brooks Range, Alaska expired on January 2, 2009. On July 2, 2009, EPA proposed to reissue the GP expanding the coverage area to the TransAlaska Pipeline Corridor along with other potential corridors. There was a 45 day comment period. During the comment period, EPA received many comments and decided to make changes to the draft based on the comments received. On August 2, 2011, EPA re-noticed the GP with a new Fact Sheet requesting new comments. The comment permit ended on September 17, 2011.

EPA received several comments, the major one being a request not to cover the pipeline corridors under this GP. EPA agreed so the final coverage area reverts back to the North Slope Borough, Alaska. EPA has also renumbered the permit to distinguish it from the previous GP which covered more types of discharges.

DATES: The GP (Permit Number AKG–33–1000 formerly AKG–33–0000) will be effective February 2, 2012. Facilities with administratively extended coverage under the expired GP whose discharges are covered by the GP will be covered on the effective date of this GP thus ending any administrative extension for those permittees. Facilities that are not covered by the new GP but have administratively extended coverage under the previous GP will continue to have coverage under AKG–33–0000 until a new permit is issued to address those discharges.

ADDRESSES: Copies of the GP and Response to Comments are available upon request. Written requests may be submitted to EPA, Region 10, 1200 Sixth Avenue, Suite 900, OWW–130, Seattle, WA 98101. Electronic requests may be mailed to: *washington.audrey@epa.gov* or *godsey.cindi@epa.gov*

FOR FURTHER INFORMATION CONTACT: The GP, Fact Sheet and Response to Comments may be found on the Region 10 Web site at *http://yosemite.epa.gov/r10/water.nsf/NPDES+Permits/General+NPDES+Permits.* Requests by telephone may be made to Audrey Washington at (206) 553–0523 or to Cindi Godsey at (907) 271–6561.

SUPPLEMENTARY INFORMATION:

Executive Order 12866: The Office of Management and Budget has exempted this action from the review requirements of Executive Order 12866 pursuant to Section 6 of that order.

The state of Alaska, Department of Environmental Conservation (ADEC), certified on December 19, 2011, that the subject discharges comply with the applicable provisions of Sections 208(e), 301, 302, 306 and 307 of the Clean Water Act.

Regulatory Flexibility Act: Under the Regulatory Flexibility Act (RFA), 5 U.S.C. 601 *et seq.,* a Federal agency must prepare an initial regulatory flexibility analysis ''for any proposed rule'' for which the agency ''is required by section 553 of the Administrative Procedure Act (APA), or any other law, to publish general notice of proposed rulemaking.'' The RFA exempts from this requirement any rule that the issuing agency certifies ''will not, if promulgated, have a significant economic impact on a substantial number of small entities.'' EPA has concluded that NPDES general permits are permits, not rulemakings, under the APA and thus not subject to APA rulemaking requirements or the RFA. Notwithstanding that general permits are not subject to the RFA, EPA has determined that these general permits, as issued, will not have a significant economic impact on a substantial number of small entities.

Dated: December 22, 2011.

Michael A. Bussell,

Director, Office of Water & Watersheds, Region 10, U.S. Environmental Protection Agency.

[FR Doc. 2011–33663 Filed 12–30–11; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

[FRL–9615–2]

Proposed CERCLA Administrative Cost Recovery Settlement; North Hollywood Operable Unit of the San Fernando Valley Area 1 Superfund Site

AGENCY: Environmental Protection Agency.

ACTION: Notice; request for public comment.

SUMMARY: In accordance with Section 122(i) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (''CERCLA''), 42 U.S.C. 9622(i), notice is hereby given of a proposed administrative settlement for recovery of response costs concerning the North Hollywood Operable Unit of the San Fernando Valley Area 1 Superfund Site, located in the vicinity of Los Angeles, California, with the following settling party: Waste Management Recycling & Disposal Services of California, Inc., dba Bradley Landfill & Recycling Center. The settlement requires the settling party to pay a total of $185,734 to the North Hollywood Operable Unit Special Account within the Hazardous Substance Superfund. The settlement also includes a covenant not to sue the settling party pursuant to Section 107(a) of CERCLA, 42 U.S.C. 9607(a). For thirty (30) days following the date of publication of this notice, the Agency will receive written comments relating to the settlement. The Agency will consider all comments received and may modify or withdraw its consent to the settlement if comments received disclose facts or considerations which