

**INFORMATION COLLECTION REQUEST  
SUPPORTING STATEMENT**

**FOR**

**TURBIDITY MONITORING REQUIREMENTS FOR CONSTRUCTION SITES  
REGULATED BY THE EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS  
FOR THE CONSTRUCTION AND DEVELOPMENT POINT SOURCE CATEGORY  
(40 CFR PART 450)**

**EPA ICR No. 2336.01**

**DRAFT**

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U.S. Environmental Protection Agency  
Office of Water  
Engineering and Analysis Division  
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Washington, D.C. 20460

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## **1. IDENTIFICATION OF THE INFORMATION COLLECTION**

### **1(a) Title of the Information Collection**

ICR: Turbidity Monitoring Requirements For Construction Sites Regulated By The Effluent Limitations Guidelines and Standards For The Construction and Development Point Source Category (40 CFR Part 450) (EPA ICR No. 2336.01).

### **1(b) Short Characterization/Abstract**

This Information Collection Request (ICR) presents estimates of the burden and costs to the regulated community associated with implementation of the monitoring requirements of the Effluent Limitations Guidelines and Standards For The Construction and Development Point Source Category (40 CFR Part 450). The guidelines require regulated operators to perform turbidity monitoring through the measurement and recording the levels of effluent nephelometric turbidity units (NTU)

EPA estimates that total annual burden and costs of the proposed guidelines are 223,800 hours and \$11.2 million, affecting approximately 5,595 regulated entities. “Regulated entities” are defined, for purposes of this ICR, as construction sites larger than 30 acres, with 10 percent or greater, by mass, of soils less than 2 microns in diameter (down to the graded level of the site), and with rainfall erosivity factors (R factors) of 50 or higher, as defined by the Revised Universal Soil Loss Equation (for construction activity located in Alaska or a U.S. territory where the R factor applicable to the activity has not been calculated, the 30-year average total annual precipitation of 20 inches or more shall be used in place of the R factor).

This is a new ICR.

## **2. NEED FOR AND USE OF THE COLLECTION**

### **2(a) Need/Authority for the Collection**

As mentioned above, EPA established monitoring requirements for construction sites under authority of Clean Water Act (CWA) Section 308 to demonstrate compliance with effluent limitations and standards for turbidity promulgated under 40 CFR Part 450. Sediment, created as a result of construction and development (C&D) activity and measured by turbidity, is the primary pollutant that causes water quality impairment for streams and rivers. It is also one of the leading causes of lake and reservoir water quality impairment and wetland degradation. The sediment entrained in stormwater discharges from construction activity can harm aquatic ecosystems, increase drinking water treatment costs, and degrade recreational uses of impacted waters. Sediment can also accumulate in rivers, lakes, and reservoirs, leading to the need for dredging or other mitigation. Additionally, Section 402(a)(2) of the CWA directs EPA to prescribe permit conditions to assure compliance with requirements “including conditions on data and information collection, reporting and such other requirements as [the Administrator] deems appropriate.”

### **2(b) Practical Utility/Users of the Data**

The primary users of the data are the owners and operators of construction sites and NPDES permitting and enforcement authorities. Citizen groups also use this data to independently assess compliance.

EPA expects that the monitoring reports will be used by NPDES control authorities to determine compliance with the effluent limitations and standards. EPA, States, and local authorities also analyze monitoring data when establishing permit conditions and revise permit requirements based on data from monitoring reports. Furthermore, EPA and States refer to discharge monitoring reports and monitoring data on pollutants when developing lists of waters not meeting applicable water quality standards. EPA anticipates that State NPDES permitting authorities will only need to conduct detailed technical reviews of monitoring reports in the event the monitoring reports indicate noncompliance with the NPDES permit conditions.

EPA anticipates that permittees will use the monitoring data to track the effectiveness and progress of reducing pollutant discharges. Collection and reporting of data to permitting authorities also provides permittees with an incentive to remain in compliance with their established permit limitations and conditions.

As public information, monitoring data is used by public environmental/citizen groups for a variety of purposes. Citizen groups review monitoring data to independently assess discharger compliance. In some instances the data forms the basis for citizen suits that are authorized under Section 505 of the CWA. In addition, environmental groups, academicians and others use monitoring data to estimate pollutant loadings to streams, lakes, oceans, and estuaries.

### **3. NON-DUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA**

#### **3(a) Non-duplication**

EPA has examined all other reporting requirements contained in the Clean Water Act and 40 CFR Parts 122, 123, 124, 125, 430, 501, and 503. The Agency also has consulted the following sources of information to determine if similar or duplicate information is available elsewhere:

- EPA Information Systems Inventory,
- State permits,
- Government Information Locator System (GILS), and
- Toxic Chemical Release Inventory.

Examination of these databases revealed no duplicate collection requirements. EPA has concluded that there is no other way to obtain the compliance demonstration information addressed in this ICR.

#### **3(b) Public Notice Required Prior to ICR Submission**

EPA intends to solicit comment on this draft ICR prior to formal submission to OMB. A notice is being published in the **Federal Register** indicating this intent. Interested parties have 60 days to submit comments on the ICR to EPA. See 5 CFR 1320.8 (d)(1).

#### **3(c) Consultations**

As mentioned above, EPA solicits public comments on the current draft ICR. Additionally, EPA will consult with the public, industry, and States on the monitoring requirements during the rulemaking process.

#### **3(d) Effects of Less Frequent Data Collection**

EPA has established its turbidity monitoring frequency to coincide with effluent discharges from construction sites. Since this frequency depends on local weather conditions and sediment basin characteristics, monitoring will be somewhat sporadic. EPA determined that this minimum required monitoring frequency was necessary because of the degree of the temporal variability in effluent discharges from construction sites that can and do occur frequently and at any time. Therefore, EPA was concerned that less frequent monitoring would not provide the information necessary to ensure compliance with the effluent limitations guidelines and standards promulgated for this industry.

In establishing the minimum monitoring frequency for turbidity, EPA has struck a balance between the cost of the monitoring regimen and the need to ensure that sufficient data is consistently available to permitting authorities. Permitting authorities need to have an adequate basis to verify compliance with the effluent limitations guidelines and standards, given the environmental significance of large discharges of sediment, and the generation of which is variable, as available data clearly demonstrate. This monitoring regimen also ensures sufficient data is available to the site operator so that it may quickly become aware of noncompliance with the limits of the rule and remedy it as soon as practicable.

**3(e) General Guidelines**

This information collection is consistent with OMB guidelines contained in 5 CFR 1320.5(d)(2).

**3(f) Confidentiality**

EPA does not expect that confidential business information (CBI) or trade secrets will be required from C&D site operators as part of this ICR. Where information submitted in conjunction with this ICR contains CBI, the respondent may request that this information be treated as confidential business information. All data so designated will be handled pursuant to 40 CFR Part 2 when EPA is the permitting authority, and pursuant to applicable state rules and regulations governing CBI when states are the permitting authorities. Pursuant to Section 308(b) of the Clean Water Act, effluent data may not be treated as confidential.

**3(g) Sensitive Questions**

The reporting requirements addressed in this ICR do not include sensitive questions.

**4. THE RESPONDENTS AND THE INFORMATION REQUESTED**

**4(a) Respondents and SIC Codes**

The respondent universe for this ICR will be approximately 5,595 construction sites. These construction sites are, as noted above, larger than 30 acres, with 10 percent or greater, by mass, of soils less than 2 microns in diameter (down to the graded level of the site), and with R factors of 50 or higher (for construction activity located in Alaska or a U.S. territory where the R factor applicable to the activity has not been calculated, the 30-year average total annual precipitation of 20 inches or more shall be used in place of the R factor).

**4(b) Information Requested**

The following sections outline the monitoring, reporting, and recordkeeping requirements for construction sites under 40 CFR 450. Table 4.1 outlines the information requirements for respondents and the data requirements are listed by regulation number.

<b>Table 4.1: Turbidity Monitoring Requirements for Construction Sites</b>		
40 CFR Citation	Regulatory Description	Monitoring and/or Reporting Frequency
<i>Monitoring Requirements: Sample Collection and Analysis</i>		
450.22(a)(2)	For each construction site larger than 30 acres, with 10 percent or greater, by mass, of soils less than 2 microns in diameter (down to the graded level of the site), and with R factors of 50 or higher (for construction activity located in Alaska or a U.S. territory where the R factor applicable to the activity has not been calculated, the 30-year average total annual precipitation of 20 inches or more shall be used in place of the R factor): <ul style="list-style-type: none"> <li>• Turbidity.....</li> </ul>	Upon all instances of discharge of stormwater
<i>Reporting and Recording Requirements</i>		
122.41(l)(4)	Requires direct dischargers to report all monitoring results to the permitting authority using Discharge Monitoring Reports (DMRs).	Permit-specific/At Least Annually
122.41(j)(2)	Requires direct dischargers to retain ongoing monitoring records and copies of all reports for at least 3 years from the date of the sample.	

Should a permittee choose to collect and analyze more samples than specified in its permit, the permittee must include all monitoring data in the reports. See 40 CFR 122.41(j)(4)(ii). As indicated in Table 4.1, submission of reports shall be at the frequency established by the NPDES permit authority, but in no case less than once per year. Also, the permittee must collect and analyze representative samples and must conduct all monitoring requirements according to permit specific conditions and/or approved test procedures as set forth under 40 CFR Parts 136, 430, and 503. See 40 CFR 122.41(j).

A sample of a pre-printed discharge monitoring form may be obtained from the



NPDES/Sewage Sludge Monitoring Reports ICR. Direct dischargers are required to maintain monitoring records, copies of all reports required by the NPDES permit agreement and records of all data used to complete the permit application for at least 3 years. See 40 CFR 122.41(j)(2).

Construction site respondent activities include the following:

- **Preparing basic information.** All permittees must conduct a variety of basic activities, including reviewing regulatory and permit requirements, conducting monitoring; preparing DMRs, and submitting reports to the NPDES permit authority.
- **Maintaining records.** All permittees must keep records of monitoring information as required by the regulation.

NPDES-authorized States respondent activities include the following:

- DMR Review
- Follow-up Activities
- Reporting and Recordkeeping Requirements

Data review varies from State to State. Generally, the permitting authority routinely screens data to identify permit violations and conducts a more thorough technical review and follow-up when violations are detected. Follow-up activities may include informal contact with the permittee (by telephone or letter) requesting prompt corrective action, technical assistance, field inspections to further substantiate violations, or a formal enforcement action, such as an Administrative Order or referral to the EPA regional office and/or the U.S. Attorney (or State's Attorney General in the case of NPDES-authorized States). Table 4.2 summarizes NPDES-authorized State requirements.

<b>Table 4.2: NPDES-authorized State Requirements (As Users of Data)</b>		
40 CFR Citation	Regulatory Description	Response Frequency
<u>DMR Data Review</u> 123.26(a)	Requires the NPDES permitting authority to have procedures for reviewing DMR submissions, using the reported data to evaluate permittee compliance. The permitting authority must also have procedures for conducting an initial screening of compliance-related information.	Variable/Permit-specific
123.26(e)	When warranted, requires the permitting authority to have procedures to follow-up the initial screening with a substantive technical evaluation to determine permittee compliance with permit	As Necessary

*Turbidity Monitoring Requirements for Construction Sites*

<u>Recordkeeping Requirements</u> 123.26(e)(4)	conditions.  Requires the permitting authority to have the procedures and ability for maintaining a management information system that supports the compliance evaluation activities.	Ongoing
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## **5. THE INFORMATION COLLECTED--AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT**

### **5(a) Agency Activities**

Activities undertaken by EPA under this information collection primarily include oversight of the NPDES programs and, where EPA is the NPDES permitting authority, review of monitoring data and, where necessary, follow-up actions.

The extent to which EPA reviews data in assessing permit compliance may vary. For example, EPA may conduct a more extensive review of permittees that are, or have been, in violation of their permit requirements, than of permittees who have been in full compliance. In cases of continued noncompliance, EPA may use monitoring report data to identify patterns of non-compliance and/or to support Agency enforcement efforts. EPA and/or the permitting authorities may limit its review of data submitted by fully compliant permittees to a simple determination of continuing compliance. EPA may also review data from minor permittees that may cause water quality problems (i.e., significant minors). EPA may review data from other minor permittees less frequently. In most cases, EPA will forward copies of reports to the States. EPA does not require the unauthorized States to review data, but several States voluntarily conduct the review and use the results in their own programs.

EPA regions may also review data from major direct discharging permittees while performing program oversight functions (e.g., during file audits and when compiling statistical compliance summaries). Reported data is often stored in the Permit Compliance System (PCS) for reference. EPA and States may use this data to evaluate potential compliance problems, focus inspection efforts, conduct spot check reviews and determine appropriate enforcement action. PCS is available for public review at the following location:

[http://www.epa.gov/enviro/html/pcs/pcs\\_overview.html](http://www.epa.gov/enviro/html/pcs/pcs_overview.html).

### **5(b) Collection Methodology and Management**

Respondents typically report collected compliance data for all pollutant parameters on Discharge Monitoring Reports (DMRs). Use of preprinted DMR forms is one method that EPA has used to improve its collection methodology. EPA has developed policy guidance for the electronic submission of data (see 61 FR 46683-46694). The electronic submission of DMR data is voluntary and will be an alternative to the paper submissions. EPA makes use of the PCS database to store, track and access this information.

### **5(c) Small Entity Flexibility**

EPA has certified that effluent guidelines for C&D sites, including the monitoring requirements considered by this ICR, will not have a significant economic impact on a substantial number of small entities and therefore is not establishing any reporting or recordkeeping alternatives for small entities. See Section XII.7 of the Preamble.

**5(d) Collection Schedule**

The information collection activities included in this ICR are anticipated to coincide with existing reporting schedules. The timeframes for submitting compliance assessment information and associated activities are outlined below:

- Monitoring, reporting, and recordkeeping are performed on a continual basis;
- Reports are to be prepared for submission to NPDES permit authorities at a frequency to be determined by these authorities, but no less than once per year. EPA expects that such reporting frequencies will be consistent with existing reporting requirements already applicable to permittees.

## 6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

### 6(a) Estimating Respondent Burden

This section describes the methods EPA used to estimate the burden to respondents associated with the monitoring and reporting requirements reports of 40 CFR Part 450. The number of sites potentially affected by this ICR is estimated at 5,595 and the number of rain events that would subsequently require effluent monitoring is estimated at 20. For purposes of calculating the response burdens of control authorities, EPA estimates that activities at construction sites persist for nine months out of every year.

#### (i) *Sampling and Reporting Activities*

All construction sites larger than 30 acres, with 10 percent or greater, by mass, of soils less than 2 microns in diameter (down to the graded level of the site), and with rainfall erosivity factors (R factors) of 50 or higher, as defined by the Revised Universal Soil Loss Equation (for construction activity located in Alaska or a U.S. territory where the R factor applicable to the activity has not been calculated, the 30-year average total annual precipitation of 20 inches or more shall be used in place of the R factor) will be required to monitor effluent turbidity following rain events that lead to stormwater discharges from the sites. The Agency assumes the use of simple turbidimeters and basic automated data loggers and two hours per rain event for sampling and recordkeeping. The annual permittee burden is, therefore, estimated as follows:

$$(2 \text{ hours/rain event}) * (20 \text{ rain events/site/year}) = 40 \text{ hours/site/year}$$

#### (ii) *NPDES-authorized State Respondent Burden*

The burden and associated costs to NPDES-authorized State authorities for reviewing DMRs, revising NPDES permits, and conducting follow-up actions are estimated at 0.5 hours per site per month. The annual State respondent burden is, therefore, estimated as follows:

$$(0.5 \text{ hours/site/month}) * (9 \text{ months construction/year}) = 4.5 \text{ hours/site/year}$$

A summary of permittee and control authority burden is presented in Table 6.1, below.

<b>Table 6.1 Total Respondent Burden</b>			
Respondent Type	Annual Burden/Site (hours/site/year)	Sites	Total Annual Burden (hours)
Permittee	40	5,595	223,800
States	4.5	5,595	25,178
			<b>248,978</b>

**6(b) Estimating Respondent Cost**

**(i) Estimating Labor Costs**

Estimates for respondent labor costs were prepared using industry-specific labor rates identical to those used for the cost model in the rulemaking and are assumed to be \$50/hour. Annual labor costs for permittees are, therefore, estimated as follows:

$$(\$50/\text{hour}) * (40 \text{ hours/site/year}) = \$2,000/\text{site/year}$$

Similarly, annual labor costs for NPDES-authorized States are as follows:

$$(\$50/\text{hour}) * (4.5 \text{ hours/site/year}) = \$225/\text{site/year}$$

**(ii) Operations and Maintenance (O&M) Costs**

The Agency assumes no O&M costs due to the fact that effluent treatment systems usage at construction sites is on a rental basis and all monitoring equipment costs are subsumed within the leasing arrangements and, therefore, not directly borne by the sites.

**6(c) Estimating Agency Burden and Cost**

EPA burden is based on management and support activities for construction sites located in the following:

- **States without NPDES authority:** EPA activities include analysis of monitoring data and review of DMRs (12 total construction sites); this would translate to an incremental burden in addition to current activities. Recurring incremental EPA burden for processing and analyzing monitoring data, including entry into the PCS database (reporting and recordkeeping), is estimated to be 30 minutes (0.5 hour) per site per DMR. In addition, EPA assumes that approximately 10 percent of all DMRs submitted will require follow-up action, with an estimated burden of one hour per DMR.
- **States with NPDES control authority:** EPA activities include program support, such as review of NPDES permit renewal applications and draft permits, and review of monitoring data (5,583 total construction sites). To estimate Agency burden support activities, EPA assumes that approximately 10 percent of all DMRs submitted will require follow-up assistance from EPA with an estimated burden of one hour per DMR.

The total annual Agency burden and costs are summarized in Table 6.2, assuming an hourly rate of \$50, as follows:

<b>Table 6.2: Summary of Annual Agency Burden and Costs</b>				
Category	Sites	Activity	Annual Labor Hours	Annual Cost
States without NPDES Permit Authority	12	Processing and analyzing monitoring data	54	\$2,700
		Follow-up actions for 10 percent of DMRs	11	\$550
States with NPDES Permit Authority	5,583	Follow-up actions for 10 percent of DMRs	5,025	\$251,250
<b>Total Annual Agency Burden and Costs</b>	<b>5,595</b>		<b>5,090</b>	<b>\$254,500</b>

**6(d) Estimating the Respondent Universe and Total Burden and Costs**

Table 6.3 summarizes the total annual industry burden and costs inclusive of the sampling, analysis, reporting, and recordkeeping burden and annual burden and costs to State NPDES permitting authorities.

<b>Table 6.3: Summary of Annual Respondent Burden and Costs</b>		
Category	Annual Labor Hours	Annual Cost
Respondents – Construction Sites	223,800	\$11,190,000
Respondents – NPDES-authorized States	25,178	\$1,258,900
<b>Total Annual Respondent Burden and Cost</b>	<b>248,978</b>	<b>\$12,448,900</b>

**6(e) Bottom Line Burden Hours and Costs**

**(i) Respondent Tally**

The bottom line burden and costs for respondents are presented in Table 6.3 above.

**(ii) Agency Tally**

The bottom line Agency tally is presented in Table 6.2 above.

**6(f) Burden Statement**

EPA estimates that there are 5,595 affected construction sites in the Construction and Development Point Source Category. These sites will perform additional sample collection and pollutant analyses and reporting and recordkeeping to permit authorities, as part of NPDES permit requirements. EPA estimates affected sites to incur a burden of 223,800 hours per year

for these activities, corresponding to a cost of \$11,190,000. On a per-site basis, sites are anticipated to incur an average of 40 hours per year for sampling, reporting and recordkeeping for monthly DMRs for an average annual cost of \$2,000.

NPDES-authorized States are estimated to incur 25,178 burden hours for processing and analyzing monitoring data captured in submitted DMRs and for follow-up activities associated with 10 percent of all DMRs submitted. This hourly burden translates to an estimated \$1,258,900 annually for these activities.

EPA burden is estimated to be 5,090 hours per year for support of State follow-up activities, as well as acting as the NPDES permit authority for 12 sites where the States are not authorized NPDES authorities at a cost of \$254,500.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number [EPA-HQ-OW-2008-0465], which is available for online viewing at [www.regulations.gov](http://www.regulations.gov), or in person viewing at the Water Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center 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 Reading Room is (202) 566-1744, and the telephone number for the Water Docket is (202) 566-2426. An electronic version of the public docket is available at [www.regulations.gov](http://www.regulations.gov). This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OW-2008-0465 and EPA ICR Number 2336.01 in any correspondence.