

**Information Collection Request for
Cooling Water Intake Structures at Existing Facilities (Final
Rule)**

OMB Control No. 2040-0257, EPA ICR No. 2060.07

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1. Identification of the Information Collection

1a. Title of the Information Collection

TITLE: Information Collection Request for Cooling Water Intake Structures at Existing Facilities (Final Rule)

OMB Control Number: 2060-0257

EPA ICR Number: 2060.07

1b. Short Characterization/Abstract

The Section 316(b) Existing Facility Final Rule (rule) applies to existing facilities that use cooling water intake structures to withdraw water from waters of the United States and have or require an NPDES (National Pollutant Discharge Elimination System) permit issued under section 402 of the CWA (Clean Water Act). See the preamble and rule at 79 FR 48300, August 15, 2014. If a facility meets the conditions specified below (from § 125.91), it is subject to the rule. If a facility has or requires an NPDES permit but does not meet the 2 mgd intake flow threshold, it is subject to permit conditions implementing CWA section 316(b) developed by the NPDES permit director on a case-by-case basis using BPJ (best professional judgment). The rule applies to owners and operators of existing facilities that meet all of the following criteria:

- The facility is a point source;
- The facility uses or proposes to use one or more cooling water intake structures with a cumulative design intake flow (DIF) of greater than 2 million gallons per day (mgd) to withdraw water from waters of the United States; and
- Twenty-five percent or more of the water the facility withdraws on an actual intake flow basis is used exclusively for cooling purposes.

Generally, facilities that meet these criteria fall into two major groups: steam electric generating facilities and manufacturing facilities. The rule also makes limited corrections to the requirements for Phase I facilities (i.e., new facilities).¹

The rule establishes national requirements applicable to the location, design, construction, and capacity of cooling water intake structures at existing facilities that reflect the best technology available for minimizing the adverse environmental impact – impingement and entrainment – associated with the use of these structures. The rule requires several types of information collection as part of the NPDES permit application. In general, the information would be used to identify both how the facility plans to meet the rule requirements and if the facility is meeting the rule requirements. Specific data requirements that apply to all facilities are:

- Source water physical data which shows the physical configuration of all source waterbodies used by the facility, identifies and characterizes the source waterbody's

¹ This ICR does not calculate the burden and costs associated with amendments related to the Phase I Rule, as the changes to the Phase I rule promulgated today do not materially affect the burden associated with compliance for Phase I facilities. See the preamble for a discussion of the amendments to the Phase I Rule.

hydrological and geomorphological features, and provides location through maps [§ 122.21(r)(2)].

- Cooling water intake structure data which shows the configuration and location of cooling water intake structures, provides details on the design and operation of each cooling water intake structure, and diagrams showing flow distribution and water balance [§ 122.21(r)(3)].
- Source water baseline biological characterization data that characterizes the biological community in the vicinity of the CWIS and characterizes the operation of the CWIS [§ 122.21(r)(4)].
- Cooling water system data that describes the operation of the cooling water system, its relationship to the CWIS, the proportion of the design intake flow used in the system, the number of days the cooling water system is operational and seasonal changes in operation, as well as, design and engineering calculations to support these descriptions [§ 122.21(r)(5)].
- Intended method of compliance information that describes how the facility will meet the impingement mortality standard; the specific requirements vary, depending on the compliance approach in § 125.94(c) chosen by the facility [122.21(r)(6)].
- Description of any biological survival studies conducted at the facility and a summary of any conclusions or results for entrainment related studies only [§ 122.21(r)(7)].
- Operational status data that describes the operational status of each generating, production, or process unit [§ 122.21(r)(8)].

In addition to the above requirements, existing facilities with actual intake flows in excess of 125 mgd actual intake flow are required as part of the permit application process to submit an entrainment characterization study and related supporting information [(§ 122.21(r)(9)-(13)]. Facilities that withdraw less than 125 mgd actual intake flow do not have specific requirements for (§ 122.21(r)(9)-(13)), but the Director may require additional information on a site-specific basis.²

Under the rule, a new unit at an existing facility that withdraws more than 2 mgd would have requirements similar to the requirements of a new facility in Phase I³. A new unit (as defined at § 125.92(u)) is required to reduce flow commensurate with closed-cycle cooling. As with Track II of the Phase I rule, a facility could demonstrate compliance with entrainment control requirements by establishing reductions in entrainment mortality for the new unit that are 90 percent of the reductions that would be achieved by closed-cycle cooling [§ 122.21(r)(14)].

Finally, facilities are required to maintain records of all submitted documents, supporting materials, and monitoring results for at least five years. Depending on the compliance method chosen, facilities may also be required to perform compliance monitoring to demonstrate that they are meeting the required level of impingement mortality.

² For this ICR, no burden has been assigned for entrainment-related studies at § 122.21(r)(9)-(13) for facilities that withdraw less than 125 mgd actual intake flow, as it is not possible to project which facilities might be required to submit these studies.

³ The Clean Water Act section 316(b) rulemaking was divided into three phases to facilitate its development. Phase I refers to new facilities with one or more cooling water intake structures. This ICR is for the Existing Facilities rule, which responds to the remnants of the Phase II and III rules. See Section II.C of the preamble for more information.

Authorized States would be required to update programs⁴ to be consistent with the rule requirements, once they are published. State Directors would be required to also review all materials submitted to them by the facilities within the scope of the rule, confirm their compliance with the rule, and issue NPDES permits with appropriate conditions or establish more stringent requirements applicable with State or Federal law in order to minimize adverse environmental impact associated with the use of the facilities' CWISs.

The primary users of the data collected would be States authorized to administer the NPDES permitting program, and the EPA. It is anticipated that other government agencies, both at the State and Federal level, as well as public interest groups, private companies, and many individuals would also use the data.

The annual average reporting and record keeping burden for the collection of information by facilities responding to the rule is estimated to be 588 hours per respondent (i.e., an annual average of 627,666 hours of burden divided among an anticipated annual average of 1,068 facilities). The state Director reporting and record keeping burden for the review, oversight, and administration of the rule is estimated to average 147 hours per respondent (i.e., an annual average of 6,930 hours of burden divided among an anticipated 47 States per year).

2. Need for and Use of the Collection

2a. Need/Authority for the Collection

The following sections describe the need for this information collection and the legal authority under which this information will be collected.

2a(i). Need for the Collection

The information requirements of the rule are necessary to ensure that existing facilities are complying with the rule's provisions, and thereby minimizing adverse environmental impact resulting from impingement and entrainment losses due to the withdrawal of cooling water.

2a(ii). Authority for the Collection

Section 316 was included in the Federal Water Pollution Control Act of 1972 for the express purpose of regulating thermal discharges and to address the environmental impact of CWISs. Moreover, Section 316(b) is the only provision in the CWA that focuses exclusively on water intake. Section 316(b) provides that, "[a]ny standard established pursuant to [CWA Section 301] or [CWA Section 306] and applicable to a point source shall require that the location, design, construction, and capacity of CWISs reflect the BTA for minimizing adverse environmental impact." The requirements of Section 316(b) are closely linked to several of the core elements (e.g., Sections 301, 304, 306 and 402) of the NPDES permit program established under the CWA. Conditions implementing Section 316(b) are and will continue under this rule to be included in NPDES permits issued under Section 402 of the CWA.

⁴ This ICR does not calculate the burden and costs associated with NPDES program modifications. Information requirements associated with NPDES program modifications are included in a separate ICR (OMB Control No. 2040-0004, EPA ICR No. 0229.20).

2b. Practical Utility/Users of the Data

The rule includes information that must be submitted to permitting authorities and data that must be collected and maintained on-site by the facility. Each existing facility maintains facility-level records of the characterization data, plans, measurements, diagrams, and calculations submitted to the Directors, as well as the analytical results of monitoring actions. Facilities could use the data to:

- Characterize environmental conditions and monitor existing CWIS performance;
- Determine appropriate design and construction technologies or operational measures; and/or
- Monitor the performance of design and construction technologies or operational measures.

Permit writers will also use these data to verify that the appropriate compliance actions are selected and implemented. Under the rule, EPA and State Directors are to maintain records compiled from the regulated facilities. Much of the basic information obtained from the NPDES permit application is stored in EPA's Integrated Compliance Information System (ICIS-NPDES). ICIS-NPDES is used to track permit limits, permit expiration dates, monitoring data, and other data, and provide EPA with a nationwide inventory of permit holders.

EPA Headquarters uses the information contained in ICIS-NPDES database to develop reports on permit issuance, backlog, and compliance rates. The Agency also uses the information to respond to public and congressional inquiries, develop and guide its policies, formulate its budgets, assist States in acquiring authority for permitting programs, and manage the NPDES program to ensure national consistency in permitting. States can use this initial permit information along with the additional documentation to track facility monitoring, compliance violations, and enforcement activities.

Permittees must reapply for NPDES permits every 5 years. The re-application process is the primary mechanism for obtaining up-to-date and new information concerning on-site conditions. Although under the rule, existing facilities provide data from self-monitoring activities in reports (frequency varies from monthly, quarterly, or annually) to the permitting authority, these reports are a less comprehensive information-gathering process than the permit application process. EPA and States will use re-application data to identify new species at risk or other potential concerns that could lead the permit writers to take the following actions:

- Specify additional permit limitations;
- Assess compliance with applicable standard requirements; or
- Place appropriate special conditions in permits.

Environmental and citizen groups are expected to use the data collected under the rule to independently assess impingement and entrainment rates for affected waterbodies in their location. In addition, the data will be useful for the scientific community for assessing the impact of CWISs on recreational and commercial fisheries productivity and aquatic ecosystem health.

3. Nonduplication, Consultations, and Other Collection Criteria

The following sections verify and affirm that this ICR satisfies the Office of Management and Budget's (OMB) data-collection guidelines, has public support, and does not duplicate another collection.

3a. Nonduplication

Given that the rule applies to existing facilities, current data sources may already exist for the information required under the rule. Therefore, it was important that EPA review existing data sources to identify currently available information on entities subject to Section 316(b) regulation and to ensure that the data requested by the rule are not otherwise accessible. Data sources reviewed included data collected by offices within EPA; data, reports, and analyses published by other Federal agencies; reports and analyses published by industry; and publicly available financial information compiled by government and private organizations. From this effort, EPA has determined that the information collection and reporting requirements considered in this ICR are not contained or duplicated in other routinely collected documents or reports.

3b. Public Notice Required Prior to ICR Submission to OMB

EPA proposed rule revisions in the Federal Register on April 20, 2011 (76 FR 22263) for a 90 day comment period, and extended the comment period by 30 days (76 FR 43230). In addition, EPA issued two supplemental notices of data availability each with a 30 day comment period on June 11, 2012 (77 FR 34315) and June 12, 2012 (77 FR 34927). The public was thus afforded multiple opportunities to comment on the proposed rule requirements and the related ICR. This ICR was revised and published in the *Federal Register* on May 28, 2014 (79 FR 30605). The notice included a request for comments on the content and impact of these information collection requirements on the regulated community. EPA received six comments on this ICR and has responded to these in a separate Response to Comments document.

3c. Consultations

The preamble to the rule describes how EPA actively involved interested parties in the development of the rule. EPA headquarters staff has worked extensively with its regional offices and numerous States to develop the requirements and related burden/cost assumptions described in this ICR.

EPA consulted with State governments and representatives of local governments in developing the rule. The outreach activities are discussed in section III.A.3 of the preamble to the proposed rule (see 76 FR 22268, April 20, 2011) and Chapter 2 of the TDD. EPA has also conducted additional outreach since the proposed rule, including several conference calls with the Association of Clean Water Administrators (including numerous states) and small business representatives (including some local government officials). EPA also combined its efforts and collected input from state and local government entities during development of the proposed Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, which shares many of the same affected facilities as today's final rule; see 78 FR 34530 (June 7, 2013) for more information. State and local officials attended numerous site visits with EPA's staff, enabling EPA to gather their input; see DCNs 10-6510, 10-6518, 10-

6520, 10-6521, 10-6523 and 10-6524. EPA also responded to requests for information from multiple state and local governments. EPA also attended conferences and participated in workgroups (such as NARUC's 2013 Winter Committee Meetings) where additional information about state and local government interests were presented. Historically, EPA has also conducted a great deal of outreach in developing the previous 316(b) regulations over the past decade; for example, see the Phase I final preamble (66 FR 65331, December 18, 2001), the Phase II final preamble (69 FR 41677, July 9, 2004), and the Phase III final preamble (71 FR 35037, June 16, 2006).

3d. Effects of Less Frequent Collection

EPA has concluded that less frequent data collection may fail to identify in a timely manner adverse environmental impact resulting from the operation of existing CWISs. In addition, less frequent collection would also hinder the ability of EPA, States, and facility operators to take advantage of technological improvements in impingement and entrainment technologies as they become available, or to track long-term trends.

3e. General Guidelines

The information collection requirements of the rule are in accordance with the PRA guidelines at Title 5 of the *Code of Federal Regulations* (CFR) 1320.5(d)(2). Requests for supplemental information for the purposes of emergency response or enforcement activities are exempt from the PRA requirements.

3f. Confidentiality

Applications for an NPDES permit may contain confidential business information. However, EPA does not consider the specific information being requested by the rule to be typical of confidential business or personal information. If a respondent does consider this information to be of a confidential nature, the respondent may request that such information be treated as such. All confidential data will be handled in accordance with 40 CFR § 122.7, 40 CFR Part 2, and EPA's Security Manual Part III, Chapter 9, dated August 9, 1976.

3g. Sensitive Questions

The rule does not require respondents to divulge information pertaining to private or personal information, such as sexual behavior or religious beliefs. Therefore, this section is not applicable.

4. The Respondents and the Information Requested

4a. Respondents/SIC/NAICS

The rule includes all existing facilities that were previously subject to the 2004 Phase II rule, but also expands the scope of the rule to include other groups of facilities that were previously addressed under the 316(b) Phase III rule, including existing small power producers and existing manufacturers of all sizes. The rule also clarifies the applicability of the rule to new units at existing facilities.

The rule would apply to owners and operators of existing facilities that meet all of the following criteria:

- The facility is a point source;
- The facility uses or proposes to use one or more cooling water intake structures with a cumulative design intake flow (DIF) of greater than 2 million gallons per day (mgd) to withdraw water from waters of the United States; and
- Twenty-five percent or more of the water the facility withdraws on an actual intake flow basis is used exclusively for cooling purposes.

As a result, the rule would apply to all existing power plants and all existing manufacturing facilities that meet the above criteria.

Respondents include existing electric power generating facilities, including traditional steam electric utilities and nonutility power producers. The rule also applies to existing manufacturing and industrial facilities. EPA anticipates that the regulated manufacturing facilities will be largely concentrated in five industrial sectors: chemicals and allied products; primary metals industries; paper and allied products; petroleum and coal products; and food and kindred products. The first four sectors use a significant portion of the cooling water withdrawn among all manufacturing industries, but EPA also anticipates respondents in other industries provided in Table 1 below, which lists industry sectors of facilities subject to this final rule. This table is not intended to be exhaustive; facilities in other industries not listed in Table 1 could also be regulated. Any facility that meets the criteria at § 125.91 is subject to the final rule, regardless of the industry sector. The 4-digit NAICS industry sectors may include 6-digit NAICS industry sub-sectors with operations not dependent on cooling water.

Table 1. Industry Sectors With Facilities Subject to the Final Rule

4-Digit NAICS Industry Sectors	NAICS Definition
Electric Power Industry	
2211	Electric Power Generation, Transmission and Distribution
Primary Manufacturing Industries	
3112	Grain and Oilseed Milling
3113	Sugar and Confectionery Product Manufacturing
3121	Beverage Manufacturing
3221	Pulp, Paper, and Paperboard Mills
3222	Converted Paper Product Manufacturing
3241	Petroleum and Coal Products Manufacturing
3251	Basic Chemical Manufacturing
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
3254	Pharmaceutical and Medicine Manufacturing
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing
3259	Other Chemical Product and Preparation

4-Digit NAICS Industry Sectors	NAICS Definition
	Manufacturing
3311	Iron and Steel Mills and Ferroalloy Manufacturing
3312	Steel Product Manufacturing from Purchased Steel
3313	Alumina and Aluminum Production and Processing
Other Industries	
1119	Other Crop Farming
2122	Metal Ore Mining
3133	Textile and Fabric Finishing and Fabric Coating Mills
3211	Sawmills and Wood Preservation
3314	Nonferrous Metal (except Aluminum) Production and Processing
3322	Cutlery and Handtool Manufacturing
3329	Other Fabricated Metal Product Manufacturing
3364	Aerospace Product and Parts Manufacturing
3391	Medical Equipment and Supplies Manufacturing

4b. Information Requested

The following sections provide details on data items requested and associated activities that are required under the rule. The two principal respondent categories are existing facilities subject to the rule and NPDES program Directors (i.e., States and Territories authorized under CWA Section 402(b) to administer the NPDES permit program, and EPA Regional offices). There are currently 46 States and the Virgin Islands authorized under CWA Section 402(b) to implement the NPDES permit program.

Information requirements for existing facilities will differ depending on the compliance alternative selected by the applicant. As discussed in Section VI of the final rule preamble, seven compliance alternatives are available to an existing facility. Facilities with pre-approved technologies or adopting the streamlined compliance alternatives have different or fewer information requirements. Certain information requirements are applicable to all existing permitted facilities; other information requirements apply on the basis of the volume of water that the facility withdraws. With the exception of reading the rule, all of the information collection requirements discussed in this section are explicitly required by the rule.

4b(i). Data Items, Including Record Keeping Requirements

Data items required by the rule are gathered for either record keeping or reporting purposes. There are several data items that are collected before permit application, other that are required during the permit application process and others that are required to be collected on an annual basis.

The rule requires Directors to prepare or submit only one additional report (see § 125.98(k)) beyond what is currently required of them under the NPDES program. This report is an

aggregation of any monitoring required of facilities for measures to protect threatened and endangered species. However, Directors need to review, maintain records of, and make permitting determinations on the basis of all documents and reports submitted to them by existing facilities.

Application Requirements

At the time a facility submits its NPDES application (as specified in the regulations), the rule requires all existing facilities to submit information demonstrating that it is or will be employing the best technology available for its cooling water intake structure to minimize adverse environmental impact in compliance with section 316(b) of the CWA. The information is used to identify which of the requirements in the rule apply to the facility, how the facility is meeting these requirements, and whether the facility is meeting the goal of minimizing adverse environmental impact. Seven types of information under § 122.21(r) are required to be included in the NPDES permit applications for all existing facilities: (1) § 122.21(r)(2), source water physical data; (2) § 122.21(r)(3), cooling water intake structure data; (3) § 122.21(r)(4), source water baseline biological characterization data; (4) § 122.21(r)(5), cooling water system data; (5) § 122.21(r)(6), intended method of compliance; (6) § 122.21(r)(7) performance studies; and (7) § 122.21(r)(8), operational status.⁵

Source Water Physical Data § 122.21(r)(2)

Existing facilities are required to submit the following information to evaluate potential impact to the waterbody in which the intake structure is placed:

- A narrative description and scaled drawings showing the physical configuration of all source waterbodies used by your facility, including areal dimensions, depths, salinity and temperature regimes, and other documentation that supports your determination of the waterbody type where each cooling water intake structure is located;
- Identification and characterization of the source waterbody's hydrological and geomorphological features, as well as the methods you used to conduct any physical studies to determine your intake's area of influence within the waterbody and the results of such studies; and
- Locational maps.

Cooling Water Intake Structure Data § 122.21(r)(3).

The facility must submit the following information for each cooling water intake structure used:

- A narrative description of the configuration of each of your cooling water intake structures and where it is located in the waterbody and in the water column;
- Latitude and longitude in degrees, minutes, and seconds for each of your cooling water intake structures;

⁵ For this ICR, the number of respondents for each application requirement varies. For requirements (r)(2)-(5), (7) and (8), the numbers of respondents is based on the total number of facilities covered by the final rule. For (r)(9)-(13), the number of respondents is based on the total number of facilities that withdraw more than 125 mgd AIF. For (r)(6), the number of respondents is apportioned at the intake level based on the estimated compliance approach for each model facility's intake structures. As a result, a given facility could have more than one submittal under (r)(6), if it chooses a different compliance option for each intake.

- A narrative description of the operation of each of your cooling water intake structures, including design intake flows, daily hours of operation, number of days of the year in operation and seasonal changes, if applicable;
- A flow distribution and water balance diagram that includes all sources of water to the facility, recirculating flows, and discharges; and
- Engineering drawings of the cooling water intake structure.

Source Water Baseline Biological Characterization Data § 122.21(r)(4)

Each facility must submit information in accordance with § 122.21(r)(4) in order to characterize the biological community in the vicinity of the cooling water intake structure and to characterize the operation of the cooling water intake structures. This supporting information must include any available existing data but can be supplemented using newly conducted field studies. The information the facility is required to submit must include:

- A list of the data in paragraphs § 122.21(r)(4)(ii) through (vi) that are not available and efforts made to identify sources of the data;
- A list of species (or relevant taxa) for all life stages and their relative abundance in the vicinity of each cooling water intake structure;
- Identification of the species and life stages that would be most susceptible to impingement and entrainment. Species evaluated must include the forage base as well as those most important in terms of significance to commercial and recreational fisheries;
- Identification and evaluation of the primary period of reproduction, larval recruitment, and period of peak abundance for relevant taxa;
- Data representative of the seasonal and daily activities (e.g., feeding and water column migration) of biological organisms in the vicinity of the cooling water intake structure;
- Identification of all threatened, endangered, and other protected species that might be susceptible to impingement or entrainment at the cooling water intake structures;
- Documentation of any public participation or consultation with Federal or State agencies undertaken in development of the plan in the case of a new facility or source water biological characterization for an existing facility; and
- If the information requested in paragraph § 122.21(r)(4)(i) is supplemented with data collected using field studies, supporting documentation for the Source Water Baseline Biological Characterization must include a description of all methods and quality assurance procedures for sampling and monitoring, and/or data analysis including a description of the study area; taxonomic identification of sampled and evaluated biological assemblages (including all life stages of fish and shellfish); and sampling and data analysis methods. The sampling, and/or data analysis methods you use must be appropriate for a quantitative survey and based on consideration of methods used in other biological studies performed within the same source waterbody. The study area should include, at a minimum, the area of influence of the cooling water intake structure.
- For the owner or operator of an existing facility, identification of protective measures and stabilization activities that have been implemented, and a description of how these measures and activities affected the baseline water condition in the vicinity of the intake.
- For the owner or operator of an existing facility, a list of fragile species, as defined at 40 CFR 125.92(m), at your facility. You need only identify those species not already identified as fragile at 40 CFR 125.92(m). New units at an existing facility are not

required to resubmit this information if the cooling water withdrawn for the operation of the new unit is from an existing intake.

- For the owner or operator of an existing facility that has obtained incidental take exemption or authorization for its cooling water intake structure(s) from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, any information submitted in order to obtain that exemption or authorization may be used to satisfy the permit application information requirement of paragraph 40 CFR 125.95(f) if included in the application.

Cooling Water System Data § 122.21(r)(5)

The existing facility must submit the following information for the cooling water system:

- A narrative description of the operation of the cooling water system and its relationship to cooling water intake structures; the proportion of the design intake flow that is used in the system; the number of days of the year the cooling water system is in operation and seasonal changes in the operation of the system, if applicable; at existing facilities, the proportion of design intake flow for contact cooling, non-contact cooling, and process uses; for existing facilities, a distribution of water reuse to include cooling water reused as process water, process water reused for cooling, and the use of gray water for cooling; for existing facilities, a description of reductions in total water withdrawals including cooling water intake flow reductions already achieved through minimized process water withdrawals; for existing facilities, a description of any cooling water that is used in a manufacturing process either before or after it is used for cooling, including other recycled process water flows; for existing facilities, the proportion of the source waterbody withdrawn (on a monthly basis);
- Design and engineering calculations prepared by a qualified professional and supporting data to support the description required by paragraph (r)(5)(i) of this section; and
- Description of existing impingement and entrainment technologies or operational measures and a summary of their performance, including but not limited to reductions in impingement mortality and entrainment due to intake location and reductions in total water withdrawals and usage.

Intended Method of Compliance with Impingement Mortality Standard § 122.21(r)(6)

The existing facility must identify the chosen compliance method under § 125.94(c) for the entire facility (or each cooling water intake structure).

If the facility chooses to comply via § 125.94(c)(5) or (6), it must also submit an impingement technology performance optimization study.

For facilities that choose to comply with § 125.94(c)(5), the impingement technology performance optimization study must include two years of biological monitoring measuring the reduction in impingement mortality achieved by the modified traveling screens as defined at 40 CFR 125.92(s) and demonstrating that its operation has been optimized to minimize impingement mortality. If the applicant intends to return organisms to a different waterbody from which they are withdrawn, the applicant must request that the Director consider this in the permit. The facility must include a complete description of its traveling screens and associated

equipment. The facility must also provide a description of any monitoring and monitoring approach used in measuring impingement mortality, including:

- For this demonstration, the facility must sample no less frequently than monthly. The Director may establish more frequent monitoring;
- Biological monitoring must be representative of the impingement and the impingement mortality at the intakes subject to this provision;
- A taxonomic identification to the lowest taxon possible of all organisms monitored;
- The method in which naturally moribund organisms are identified and taken into account;
- The method in which mortality due to holding times is taken into account;
- If the facility entraps fish or shellfish, the facility must count the entrapment of organisms as impingement mortality;
- The percent impingement mortality reflecting optimized operation of the facility's modified traveling screen and all supporting calculations.

For facilities that choose to comply with § 125.94(c)(6), the impingement technology performance optimization study must include biological monitoring measuring the reduction in impingement mortality achieved by operation of the system of technologies, operational measures and best management practices and demonstrating that operation of the system has been optimized to minimize impingement mortality. This system of technologies, operational measures and best management practices may include flow reductions, seasonal operation, unit closure, credit for intake location, and behavioral deterrent systems. The facility must document how each system element contributes to the system's performance. The facility must include a minimum of two years of biological monitoring measuring the reduction in impingement mortality achieved by its system. The facility must also include a description of any sampling or monitoring approach used in measuring the rate of impingement, impingement mortality, or flow reductions. The study must also incorporate the following elements, as described at § 125.94(c)(6)(ii) and only summarized here:

- If the facility's demonstration relies in part on a credit for reductions in the rate of impingement in your system, it must provide an estimate of those reductions to be used as credit towards reducing impingement mortality, and any relevant supporting documentation, including previously conducted performance studies not already submitted to the Director as part of (r)(7).
- If the facility's demonstration relies in part on a credit for reductions in impingement mortality already obtained at the facility, it must include two years of biological monitoring demonstrating the level of impingement mortality your system is capable of achieving.
- If the facility's demonstration relies in part on flow reduction to reduce impingement, it must include two years of intake flows, measured daily, as part of your demonstration, and describe the extent to which flow reductions are seasonal or intermittent.
- The facility must document the percent impingement mortality reflecting optimized operation of its total system of technologies, operational measures, and best management practices and all supporting calculations.

Entrapment Performance Studies § 122.21(r)(7)

Existing facilities must submit a description of any biological survival studies conducted at the facility and a summary of any conclusions or results, including the following: site-specific studies addressing technology efficacy, through-facility entrainment survival, and entrainment mortality studies, as well as studies conducted at other locations including a justification as to why the data are relevant and representative of conditions at the facility. Because of changes in the waterbody over time, studies older than 10 years must include an explanation of why the data are still relevant and representative of conditions at the facility. If the data are no longer relevant and representative, the Director may reject the data. The Director uses such studies when establishing technology-based requirements for entrainment. Permit applicants are not required to conduct new studies to fulfill this requirement; this requirement is intended to obtain results for relevant studies that have already been conducted as part of past permit proceedings or for other purposes even if those studies were not completed or conducted entirely as planned.

Operational Status § 122.21(r)(8)

The existing facility must submit a description of the operational status of each generating, production, or process unit, including but not limited to:

- For power production or steam generation, descriptions of individual unit operating status including age of each unit, capacity utilization (or equivalent) for the previous 5 years (including any extended or unusual outages that significantly affect current data for flow, impingement, entrainment, or other factors, including identification of any operating unit with a capacity utilization of less than 8 percent for each of the previous 5 years and maintained solely to generate power for emergency purposes), and any major upgrades completed within the last 15 years, including but not limited to boiler replacement, condenser replacement, turbine replacement, or changes to fuel type;
- Descriptions of completed, approved, or scheduled updates and Nuclear Regulatory Commission relicensing status of each unit at nuclear facilities;
- For processes other than power or steam generation, descriptions of individual production processes and product lines, operating status including age of each line, seasonal operation, including any extended or unusual outages that significantly affect current data for flow, impingement, entrainment, or other factors, any major upgrades completed within the last 15 years, and plans or schedules for decommissioning or replacement of process units or production processes and product lines;
- For all manufacturing facilities, descriptions of current and future production schedules; and
- Descriptions of plans or schedules for any new units planned within the next 5 years.

Additional Application Requirements for Entrainment

The rule requires existing facilities that withdraw more than 125 mgd AIF of water for cooling purposes to prepare several studies that would fully characterize the extent of entrainment at the facility. These facilities are required to submit to the Director additional application studies including entrainment characterization study § 122.21(r)(9); comprehensive technical feasibility and cost evaluation study § 122.21(r)(10); benefits valuation study § 122.21(r)(11); and a non-water quality environmental and other impacts study § 122.21(r)(12); and peer review of applicable studies § 122.21(r)(13).

Entrainment Characterization Study § 122.21(r)(9)

The Entrainment Characterization Study provides data necessary to evaluate entrainment for that facility. The study will include a minimum of two years of entrainment monitoring. The study will include an entrainment mortality data collection plan that will indicate, at a minimum, the specific entrainment monitoring methods, a characterization of all life stages of fish, shellfish, and any species protected under Federal, State, or Tribal Law (including threatened or endangered species), and documentation of the current entrainment of all those life stages of fish, shellfish, and any protected species.

Comprehensive Technical Feasibility and Cost Evaluation Study § 122.21(r)(10)

The facility must perform and submit, in accordance with § 122.21(r)(10), the results of a comprehensive technical feasibility and cost evaluation study that includes:

- An evaluation of technical feasibility of closed-cycle cooling and fine-mesh screens with a mesh size of 2mm or smaller, reuse of water or alternate sources of cooling water, and any other entrainment reduction [§ 122(r)(10)(i)(A)-(D)]; and any other entrainment reduction technologies identified by the facility or requested by the Director [§ 122(r)(10)(ii)]; and
- Engineering cost estimates for all technologies in § 122(r)(10)(i) and (ii). These costs must be presented as both the facility's compliance costs and the social costs, and in net present value (NPV) terms and the corresponding annual value.

Benefits Valuation Study § 122.21(r)(11)

The facility must submit a detailed discussion of the magnitude of water quality benefits, both monetized and non-monetized, of the candidate entrainment mortality reduction technologies evaluated in § 122.21(r)(10) and using the Entrainment Characterization Study completed in § 122.21(r)(9), including incremental changes in the impingement mortality and entrainment mortality of fish and shellfish, and monetization of these changes to the extent appropriate and feasible using the best available scientific, engineering, and economic information. This information must include but is not limited to:

- Incremental changes in the numbers of fish and shellfish, for all life stages, lost due to impingement mortality and entrainment as defined in § 125.92;
- Description of basis for any estimates of changes in the stock sizes or harvest levels of commercial and recreational fish or shellfish species or forage fish species;
- Identification of basis for any monetized or qualitatively assessed values assigned to changes in commercial and recreational species, forage fish, and shellfish, and to any other ecosystem or non-use benefits;
- A discussion of mitigation efforts completed prior to the effective date of the final rule including how long they have been in effect and how effective they have been;
- Identification of other benefits to the environment and local communities, including but not limited to improvements for mammals, birds, and other organisms and aquatic habitats and
- Estimates of benefits resulting from any reductions in thermal discharges from entrainment technologies.

Non-Water Quality Environmental and Other Impacts Study § 122.21(r)(12)

The facility must submit a detailed site-specific discussion of the changes in non-water quality factors and other environmental impacts attributed to each technology and operational measure considered in § 122.21(r)(10), including but not limited to both increases and decreases of each factor. The study must include the following:

- Estimates of changes to energy consumption, including but not limited to turbine backpressure energy penalties;
- Estimates of air pollutant emissions and of the human health and environmental impacts associated with such emissions;
- Estimates of changes in noise;
- A discussion of impacts to safety, including documentation of the potential for plumes, icing, and availability of emergency cooling water;
- A discussion of facility reliability, including but not limited to facility availability, production of steam, impacts to production based on process unit heating or cooling, and reliability due to cooling water availability;
- Significant changes in consumption of water, including a facility-specific comparison of the evaporative losses of both once-through cooling and closed-cycle recirculating systems, and documentation of impacts attributable to changes in water consumption; and
- A discussion of all reasonable attempts to mitigate each of these factors;

Peer Review § 122.21(r)(13)

Existing facilities must provide for peer review of the permit application studies required at § 122.21(r)(10) comprehensive technical feasibility and cost evaluation study, § 122.21(r)(11) benefits valuation study, and § 122.21(r)(12) non-water quality environmental and other impacts study. While facilities that withdraw more than 125 mgd AIF must conduct these studies and therefore must provide for peer review, facilities that withdraw equal to or less than 125 mgd AIF may have study requirements including peer review as determined by the Director.

Application Requirements for New Units

New Units at Existing Facilities § 122.21(r)(14)

The rule establishes requirements for a new unit constructed at an existing facility that are different than the requirements that otherwise apply at an existing facility. New units at existing facilities choosing to comply with § 125.94(e)(1) must provide an update to the facility's previously submitted information that describes the changes to these documents as a result of the addition of the new unit as described above for parts § 122.21(r)(2)-(5) and applicable provisions of (r)(6) and (r)(8).

New units at existing facilities will, in most cases, employ closed-cycle cooling and application materials required under § 122.21(r)(9)-(13) may not be necessary. However, if the facility chooses to comply with § 125.94(e)(2) then the facility would be required to submit the materials required under § 122.21(r)(9)-(13).⁶

⁶ The estimated number of new units is based on the analysis shown in Chapter 8 of the Technical Development Document. This analysis estimates the amount of electricity that will be brought online each year, including the

Annual Reporting Requirements

The rule requires a facility to submit an annual certification statement signed by the responsible corporate officer [§ 125.97(c)]. This statement will indicate that each technology is being maintained and operated as set forth in its permit, or a justification to allow modification of the practices listed in the facility's most recent annual certification. If the Director has approved impingement mortality or entrainment mortality compliance alternatives, the statement must specify whether information submitted in the most recent annual certification is still valid and appropriate, and it must provide a justification for allowing any modification of the practices listed in the most recent annual certification. If the Director has approved the impingement mortality maximum intake velocity compliance alternative and the facility cannot document a design intake velocity for the intake equal to or less than 0.5 fps, the statement would include data and information documenting compliance with the maximum allowable intake velocity.

If the information in the previous year's annual certification is still applicable, the statement would simply state as such and, along with any applicable data submission requirements specified in this section, could constitute the annual certification. However, if the organism density has changed significantly or the facility has substantially modified its operation of any unit that affects cooling water withdrawals or operation of cooling water intake structures, it would submit revisions to the information required in the permit application.

Furthermore, existing facilities would be required to prepare and submit an annual report that details compliance with requirements set by the rule and with any additional provisions specified within the permit.

Other Reporting Requirements

Existing facilities that establish a compliance schedule under § 125.94(b) must submit status reports as to the progress of the facility toward meeting the schedule established by the Director. These reports may include updates on biological monitoring, technology testing results, construction schedules, or other appropriate topics and serve as milestones for the facility and the Director to evaluate the progress of the facility in meeting BTA.

Facilities must also report any monitoring, demonstration, and other information required by the permit sufficient to determine compliance with the permit requirements established under § 125.94, as well as any other monitoring requirements specified in the permit.

Record Keeping Requirements

All operators of existing facilities are required to keep records of the information and data submitted to the Director. Records are required to be maintained for a period of 5 years from the date of permit issuance. Each operator is required to maintain records of:

amount that will result from the construction of a new unit. EPA then used a generic assumption as to the size of a new unit to calculate the estimated number of new units that would come online each year. The number of new manufacturing units was assumed to be the same number, but was adjusted slightly downward to account for the smaller proportion of manufacturing facilities (46.8% of the total universe).

- All data used to complete the permit application and show compliance with the requirements;
- Any supplemental information developed under § 125.95; and
- Any compliance monitoring data submitted under § 125.96.

4b(ii). Respondent Activities

As mentioned above, respondents include existing facilities, new units at existing facilities and NPDES permit program Directors. Their information collection activities are described below.

Start-Up Activities

All existing facilities subject to the rule will need to perform start-up activities such as reading the rule, planning for the implementation of the rule, option selection and facility classification analysis. As noted above, all existing facilities are required to submit application materials to the Director as required by the rule.

Permit Application Activities

Activities performed during the permit application process are performed only once during each ICR period. However, these application activities, if applicable, are repeated again during the fifth year of the permit cycle as part of the permit renewal process.

As noted above, all existing facilities, including facilities that already employ closed-cycle cooling, are required to complete and submit information for their permit application: source water physical data § 122.21(r)(2), cooling water intake structure data § 122.21(r)(3), source water baseline biological characterization data § 122.21(r)(4), cooling water system data § 122.21(r)(5), intended method of compliance § 122.21(r)(6), entrainment performance studies § 122.21(r)(7); and operational status § 122.21(r)(8).

All existing facilities that withdraw more than 125 mgd AIF of water for cooling purposes must also submit additional permit application information to fully characterize the extent of entrainment at the facility. The rule adds the permit application requirements at § 122.21(r)(9)-(13) to require the facility to prepare several studies, including an Entrainment Characterization Study. In addition, under the rule, the facility would provide detailed information on the other factors relevant to the Director's site-specific BTA determination. These would include information concerning the technologies available for control of such entrainment, the costs of controls, the non-water quality impacts of such controls, the monetized and non-monetized benefits of such controls, and the presence of any threatened and endangered species.

This ICR explains these activities, in terms of the type of information submission they require, in detail in Section 4(b)(i)(1) above. However, any respondent can engage in preparing basic information. This includes reading and reviewing instructions and regulatory requirements, gathering general information, consulting technical and legal officials, reviewing guidance materials, typing or filling out forms, drafting letters, reviewing applications or other materials, maintaining records, and mailing completed submissions. Each of these requirements is described in more detail in Section 6 of this ICR.

Recurring Compliance Monitoring and Reporting Activities

Monitoring for Impingement Mortality Requirements

Existing facilities subject to the rule may be required to conduct impingement monitoring and submit the results of the monitoring. There are several types of monitoring: biological, flow, and velocity. In general, biological monitoring involves collecting data on aquatic organisms trapped on the outer part of an intake structure or against screening devices during periods of cooling water withdrawal, to determine the taxa and abundance of impinged organisms. Additionally, specific monitoring activities may include:

- Collecting samples to monitor impingement rates for each species over a 24-hour period, no less than once per month when the cooling water intake structure is in operation;
- Enumerating impinged organisms;
- Performing statistical analyses to summarize rates; and
- Maintaining records of impingement monitoring results for at least three years.

Flow monitoring consists of collecting data on the facility's cooling water withdrawals, typically on a daily basis. Similarly, velocity monitoring consists of collecting data on a facility's intake velocity, typically on a continuous basis to ensure that the velocity does not exceed the 0.5 fps threshold.

The specific impingement monitoring provisions for existing facilities subject to § 125.94(b) vary depending on the compliance approach selected by the facility. These specific monitoring provisions include the following under each compliance approach:

Closed-cycle Cooling

Facilities using a fully closed-cycle cooling system must monitor the intake flow (including makeup and blowdown, as applicable) daily to verify that the technology is being properly operated. The facility must also submit a monthly calculation of flow (based on daily flows) verifying that its withdrawals are commensurate with those of a closed-cycle system. Additionally, for a new unit at an existing facility, the facility must submit a monthly calculation of flow (based on daily flows) verifying that its withdrawals for the new unit are commensurate with those of a closed-cycle system.

Velocity – Design Intake Flow (DIF)

Velocity monitoring is not required under this approach if the facility has documented to the satisfaction of the Director that its design through-screen intake velocity cannot exceed 0.5 feet per second.

Velocity – Actual Intake Flow (AIF)

Facilities must monitor the intake velocity daily to demonstrate the intake velocity is consistent with the requirements of § 125.94(c)(3). The facility must submit monthly reports documenting the actual intake velocity, based on the daily measurements of flow or velocity at the facility.

Velocity Cap

Facilities using an existing offshore velocity cap must monitor the intake flow daily to verify that the technology is being properly operated; flows must be commensurate with the design of the

velocity cap to ensure that adequate horizontal flows are being generated to generate a flight response in nearby fish. The facility must submit a monthly calculation of flow (based on daily flows) verifying that its withdrawals are consistent with the expected operating parameters for the velocity cap.

Modified Traveling Screens and Systems of Technologies

If your facility chooses to comply under § 125.94(c)(5) or (6), there are no monitoring requirements for impingement mortality once the impingement technology performance optimization study has been completed and the Director has reviewed and approved of the study and the permit conditions it creates. There may be monitoring requirements associated with the permit conditions developed by the Director. However, any potential monitoring activities are unknown and are not included in this ICR.

Impingement Mortality Performance Standard

Existing facilities complying with this compliance approach would need to perform biological monitoring and any additional monitoring specified by the Director. The facility must follow the monitoring frequencies identified in the permit after the initial permit issuance. After that time, the Director may modify the program based on changes in physical or biological conditions in the vicinity of the cooling water intake structures. The facility must also submit monthly reports documenting intake impingement mortality biological measurements and compliance monitoring data that documents compliance with the requirements of § 125.94(c)(7).

Monitoring for Entrainment Requirements

Entrainment requirements for existing facilities will be established by the Director on a site-specific basis. As such, any potential entrainment monitoring activities are unknown and are not included in this ICR.

Under § 125.96(c), new units at existing facilities will be required to conduct compliance monitoring to demonstrate flow reductions consistent with the requirements of § 125.94(e), or equivalent impingement and entrainment reductions. In general, the facility must conduct entrainment monitoring, which involves the collection of data on eggs, larvae, and other plankton incorporated with cooling water flow (entering and passing through a cooling water intake structure and into a cooling water system), to determine the taxa and abundance of entrained organisms.

Visual or Remote Inspections

All existing facilities must conduct visual inspections or employ remote monitoring devices during the period the cooling water intake structure is in operation. Visual inspections must be conducted at least weekly to ensure that any design and construction technologies required in § 125.94 are maintained and operated to ensure that they will continue to function as designed. Alternatively, the facility must inspect via remote monitoring devices to ensure that the impingement and entrainment technologies are functioning as designed. Specific activities may include:

- Visually inspecting all installed technologies or, alternatively, inspecting via remote monitoring devices to confirm that the impingement and entrainment technologies are functioning as designed; and
- Maintaining records of operational monitoring results for at least three years.

Annual Certification and Report

Additionally, all facilities subject to the rule are required submit an annual certification statement and prepare and submit an annual report that details compliance with requirements set by the rule and with any additional provisions specified within the permit. Reporting and recordkeeping require:

- Draft the certification statement or letter;
- Compiling biological monitoring records for each cooling water intake structure;
- Compiling velocity and head loss monitoring records for each cooling water intake structure;
- Compiling records of visual or remote inspections; and
- Maintaining a copy of the report for a period of five years after its submission.

Director Activities

NPDES program Directors ensure the implementation of the rule. The Director should review materials submitted by the applicant during the initial permit application process and prior to each renewal period thereafter to determine if there have been any changes in facility operations or physical and biological attributes of the source waterbody. Any changes should be evaluated to determine the need for additional or more stringent conditions in the permit.

Section 316(b) requirements are imposed on a facility through an NPDES permit. The Director must determine, based on the information submitted by the facility in its permit application, the appropriate requirements and conditions to include in the permit. Specific activities include:

- Analyzing and reviewing facility data;
- Making determinations concerning facilities such as reviewing, approving, and developing:
 - Permit application materials, including waivers of some materials [§ 125.98(a)];
 - Permit conditions that implement impingement mortality and entrainment requirements, including establishing a timeline for compliance and any interim compliance requirements [§ 125.98(b)];
 - Compliance schedules, as appropriate [§ 125.98(c)];
 - Supplemental technologies, as appropriate [§ 125.98(d)];
 - Determination of whether a facility's impingement technology performance optimization study demonstrates optimized performance [§125.98(e)];
 - Site-specific entrainment requirements, as appropriate [§ 125.98(f)];
 - Documentation indicating that equivalent information to that to be collected under § 122.21(r) has already been collected [§ 125.98(g)];
 - Public noticed of the draft permit [§ 125.98(h)];
 - Inspections of the facility, as appropriate [§ 125.98(i)]; and

- o Results of monitoring required of facilities for measures to protect threatened and endangered species [§ 125.98(k)]
- Facility compliance tracking; and
- Record keeping for all reports, documents, and supporting materials submitted by facilities in fulfillment of their cooling water intake requirements of their NPDES permit.

Once the permit has been issued, the Director would be required to ensure facilities submit their annual certification statement and required monitoring data and maintain all additional required paperwork and information. In addition, the Director may at any time inspect the facility for compliance with any of these requirements.

5. The Information Collected, Agency Activities, Collection, Methodology and Information Management

The following sections describe EPA activities related to analyzing, maintaining, and distributing the information collected.

5a. Agency Activities

EPA is responsible for overseeing the implementation of the rule. Implementation of reporting and monitoring requirements would rely extensively on State governments in those States that have authorization under CWA Section 402(b) to implement the NPDES permit program. In States that do not have NPDES permitting authority, EPA is responsible for administering the program. Under these circumstances, EPA performs the same activities as those outlined for Directors in Section 4.

EPA typically reviews NPDES permits in the early stages of implementation of new regulations. As such, EPA assumed that it would perform a detailed review, make comments, and follow up on comments for the 316(b) portions of State-issued NPDES permits, during the three years covered by this ICR.

5b. Collection Methodology and Information Management

The rule provides minimum requirements regarding the type of information collected. Directors of NPDES programs are primarily responsible for determining which collection method and information management strategy is most appropriate. EPA will maintain some of the compliance data in its ICIS-NPDES database. ICIS-NPDES is a national computerized management information system that provides for entry, updating, and retrieval of NPDES data and tracks permit issuance, permit limits and monitoring data, and other data pertaining to facilities regulated under NPDES. This technology reduces the burden to the permitting authority of gathering, analyzing, and reporting national permit and water quality data.

Permitting authorities are responsible for reviewing permit applications, permits, monitoring reports, and so on to verify the accuracy of the data. Permitting authorities are also responsible for entering that data into ICIS-NPDES. Authorities have differing approaches for entering the data into ICIS-NPDES and for checking data quality. This includes the use of coding forms, direct entry; batch uploads, and so on. Many States have developed State databases that are

tailored to their needs; interfaces are being developed for uploads directly to ICIS-NPDES from State systems. Permit data can be accessed by the public in one of three ways:

- Via the Freedom of Information Act (FOIA) by submitting a request to EPA or the State.
- Via an online query using EPA's Envirofacts Data Warehouse and Applications Web site at <http://www.epa.gov/enviro/index.html>. Accessing data via Envirofacts provides a method to combine PCS/ICIS-NPDES data with other EPA databases and mapping tools.
- Via some State Web sites.

5c. Small Entity Flexibility

The applicability requirements in § 125.91 exclude most existing small entities from the rule. As a result, the rule affects only a small absolute number of facilities owned by small entities, representing a very small percentage of all facilities owned by small entities in the electric power industry. EPA estimates that between 37 and 91 small entities own complying facilities in the electric power industry and six primary manufacturing industries together. In addition, EPA estimates that 5 small entities own complying facilities in other industries.

EPA considers the information collection and reporting requirements to be the minimum necessary to ensure that the Section 316(b) goal of “minimizing adverse environmental impact” is met. Because small entities constitute a very small share of the potentially affected facilities and because only a small percentage of all small entities in the electric power and manufacturing sectors are subject to the rule, providing them greater flexibility such as less frequent data collection and reporting requirements would not have a large effect on the overall burden, but doing so could have an adverse impact on the effectiveness of the rule. Furthermore, because the reporting requirements differ by compliance alternative selected, entities of all sizes have the flexibility to minimize the total compliance costs including the costs and burden of information collection requirements.

For the rule, EPA conducted analyses required by the Regulatory Flexibility Act of 1980 (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). See the preamble in the final rule for a summary of these analyses.

5d. Collection Schedule

Federal regulations require permittees to reapply for permits at least every five years, although the regulations also grant permit writers the authority to impose more frequent reissuance. Most respondents submit applications every five years. When calculating burden, this ICR assumes that all permit applicants subject to this rule follow this schedule.

The owner or operator of a facility applying for reissuance of a permit must submit the information required at § 122.21(r) to the Director no later than 180 days before the current permit expires. Those facilities that were subject to the section 2004 316(b) Phase II rule were already collecting some information required at § 122.21(r). EPA expects that those data will be useful to meet some of the permit application requirements under today's rule.

In some cases, required permit application information might have been collected, but reports might not have been generated or finalized prior to the 2004 Phase II rule's suspension in 2007. Further, facilities not subject to Phase II might not have collected this information, e.g., existing power plants below 50 mgd DIF and existing manufacturers, or might not have collected information to identify permit operating conditions. In those cases, facilities would have to initiate new data collection efforts including the two years of biological monitoring. EPA expects associated studies and reports will take several additional months to complete. For this reason, EPA has established a provision for application submittal for a permit expiring prior to 45 months after the effective date of the rule, allowing the Director flexibility to waive application requirements based on a showing by the owner or operator that it could not develop the information by the time required for submission of the permit application.⁷ The Director would then establish a schedule for submission of the waived permit application requirements. EPA notes that the Director has the discretion to require additional studies, monitoring, or an on-site inspection as part of the permit process.

New units at existing facilities must submit the information required at § 122.21(r) to the Director no later than 180 days before the planned commencement of cooling water withdrawals for the operation of the new unit. Because these units are being constructed at a facility that is already operating, the facility will have already submitted many of the application materials. The addition of a new unit would require an update of or supplement to application materials that have already been submitted. New units take significant time and resources to plan, design, and construct, therefore the rule does not have a provision to waive application requirements based on a showing by the owner or operator that it could not develop the information by the time required for submission of the permit application. For subsequent permit renewals, the new unit would be included in the renewal application for the entire facility and would no longer require a separate permit application of its own.

EPA is aware that some intake structures withdraw from a manmade lake or reservoir that is stocked and managed by a State or Federal natural resources agency. In some cases, the biological characterization of the source water is heavily influenced by the actions of the natural resources agency. Further, the results of biological monitoring and studies may be made irrelevant by such actions. Today's rule gives the Director discretion to waive some or all of the permit application requirements of § 122.21(r).

In subsequent permit terms, the facility will re-submit the § 122.21(r) application studies including the two years of biological monitoring. In this manner, the biological characterization over time is routinely evaluated, i.e., every 5 years under a standard permit cycle. To reduce the burden of such monitoring and data collection, the rule provides that the owner or operator of a facility may submit a request to the Director to reduce the information required. The request for reduced information requirements must be submitted to the Director at least one year before the

⁷ For this ICR, EPA has assumed that all facilities will begin implementing impingement mortality requirements at their next permit renewal. This assumption results in 20% of facilities (one-fifth of the universe per year, given a five year NPDES permit term) will begin to collect information in a given year. This assumption is slightly at odds with the regulation (which links implementation of impingement mortality requirements for some facilities to the first permit term that includes entrainment requirements), but EPA is unable to develop a schedule for such a set of tasks. As a result, the ICR assumes administrative costs will be borne by facilities earlier than they will likely be realized.

expiration of the facility's NPDES permit. In most cases, EPA anticipates the facility would make any such request prior to conducting their two years of biological monitoring. The Director may approve such a request if conditions at the facility and in the waterbody remain substantially unchanged since the previous application. EPA expects the Director would assess the relevant previously submitted information and determine if it remains representative of current source water, intake structure, cooling water system, and operating conditions. Accordingly, the Director may accept or reject any part of the request.

EPA anticipates that 1,068 existing facilities will fall within the scope of the rule during the three years covered by this ICR. For a detailed presentation of the number of facilities assumed to comply with the information collection requirements during the three year ICR period, see Exhibits A.1 and A.2 in Appendix A.

6. Estimating Respondent Burden and Cost of Collection

The following sections present the rationale and assumptions made and results of EPA's estimation of burden and costs for the implementation of the rule. Specific data items and respondent activities were detailed in Section 4b. This ICR covers the first three years after promulgation of the rule. Additional information collection requirements will occur after this initial three-year period as (1) existing facilities will continue to submit required application materials and (2) new units at existing facilities commence operations and are issued permits; this burden will be counted in a subsequent information collection request. The breakdown of cost and burden by labor category is provided in Section 6(b). The cost and burden estimates here are the same estimates as were included in the "Economic Analysis for the Final 316(b) Existing Facilities Rule." See sections 3.1.1 and 3.4 for the discussions of administrative costs for firms, and state and federal governments, respectively.

6a. Estimating Respondent Burden

This section describes the burden estimates for facilities and Directors, as well as the methods used and assumptions made to derive them.

Facility Burdens

Information collection would require regulated facilities to devote time (i.e., as measured in staff hours) and resources (e.g., copies of documents and report mailings) to produce the necessary information. EPA expects that facility employees, including managers, engineers, engineering technicians, statisticians, economists, biologists, biological technicians, draftsmen, and clerical staff, will devote time toward gathering, preparing, reviewing and submitting the various documents. To develop representative profiles of each employee's relative contribution, EPA assumed burden estimates that reflect the staffing and expertise typically found in manufacturing facilities and power generating plants. In doing this, EPA considered the time and qualifications necessary to complete a variety of tasks: reviewing instructions, planning responses, researching data sources, gathering and analyzing data, typing or writing the information requested, reviewing results, conferring with permitting authorities and expert consultants, and sending documents.

For each activity burden assumption, EPA selected time estimates to reflect the expected effort necessary to carry out these activities under normal conditions and reasonable labor efficiency rates. EPA assumed that the majority of the actual work performed by facility staff, such as researching, collecting, and analyzing data, as well as writing the documents, will be carried out by junior technical staff. Burdens associated with managerial and senior engineering staff include time for actions such as occasional or seasonal visits to supervise sampling efforts, as well as periodic review of lab results and documentation. EPA assumed that the facilities will employ a drafter to perform computer aided drafting (CAD) operations. For contracted employees, EPA assumed that the majority of the work would be carried out by the biologists and the biological technicians.

Table 2 provides a summary of the hourly burden estimates for facilities performing initial activities associated with the rule. For a more detailed presentation of hourly burdens for facilities, see Exhibit A.1 in Appendix A.

The activities listed in the first column of Table 2 correspond to the facility respondent activities outlined earlier in Sections 4b(i) and (ii). All facilities will be subject to the start-up and permit application activities listed in Table 2. However, the permit application activities may vary for some facilities depending on the compliance approach taken. For the other listed activities such as monitoring, only a subset of facilities is expected to perform them. The set of activities estimated for each facility is based on EPA's estimation of compliance costs, as described in the preamble and Technical Development Document. As part of this process, EPA assigned a projected compliance approach for each model facility and these projections have been incorporated into this ICR. For a detailed presentation of the number of facilities performing each activity, see Exhibits A.5 and A.6 in Appendix A.

Table 2. Average per Facility Burden for each NPDES Permit Application Activity

Activities	Burden (hrs)
Start-up Activities	33
Permit Application Activities for power plants with DIF \geq 50 MG w/ AIF<125 MGD	365
Permit Application Activities for power plants with DIF \geq 50 MGD w/ AIF>125 MGD	759
Permit Application Activities for power plants with DIF> 2 MGD and \leq 50 MGD and manufacturers > 2 MGD w/ AIF<125 MGD	254
Permit Application Activities for power plants with DIF> 2 MGD and \leq 50 MGD and manufacturers > 2 MGD w/ AIF>125 MGD	872
Permit Application Activities for New Generating Units	260
Permit Application Activities for New Manufacturing Units	260
Biological Compliance Monitoring - All Existing Facilities (power plants and manufacturing)	0
Recurring Reporting and Recordkeeping - Existing Facilities (power plants and manufacturing)	4
Biological Compliance Monitoring - New Generating Units	90
Recurring Reporting and Recordkeeping - New Generating Units	20
Biological Compliance Monitoring - New Manufacturing Units	90
Recurring Reporting and Recordkeeping - New Manufacturing Units	20

Start-Up Activities

The start-up burdens account for reading the published regulations, and any guidance materials associated with the rule, determining the required staff and resources necessary to successfully complete the requirements, identifying the facility's classification, and selecting a compliance option. In year 1 following rule promulgation, EPA assumes that all facilities will begin start-up activities. These start-up activities are assumed to be mostly performed by facility management and junior technical staff.

Permit Application Activities

Permit application activities refer to the development, submittal and recordkeeping of the required elements of the application for reissuance of the NPDES permit.

As part of the permit application process, all existing facilities would gather source water physical data, cooling water intake structure data, cooling water system data, source water baseline biological characterization data, intended method of compliance, and operational status data. EPA anticipates that much of the data required to characterize the waterbody and the cooling water intake structure has already been gathered by some facilities (i.e., those that were subject to the 2004 Phase II rule), and that much of the actual facility burden is from deriving the requested information from this data.

To derive the source water physical data, EPA assumes that junior technical staff would work with a Computer-Aided Drafting (CAD) operator to develop a description of the physical configuration of the source waterbody where the CWIS is located, including areal dimensions, depths, and salinity and temperature regimes. The CAD operator would produce scaled drawings showing the physical configuration of the source waterbody and prepare locational maps of the waterbody. The junior technical staff would use this information and available data to produce a report characterizing and documenting the hydrological and geomorphological features of the source waterbody. Depending on the extent of existing information it may be necessary for some facilities to conduct physical studies to determine the intake's area of influence within the waterbody.

Cooling water intake structure data would be used to develop a report on the operation of the intake structure. EPA assumes that a CAD operator would assist junior technical staff in preparing a narrative description of the configuration of the CWIS and its location within the waterbody and in the water column, including measurements of the latitude and longitude of the CWIS. In addition, junior technical staff would develop a narrative that describes the operation of the CWIS, including design flows, daily hours of operation, number of days of the year in operation, and seasonal changes, if applicable. Management would review and revise this data.

As part of the permit application process, facilities would collect source water baseline biological characterization data to evaluate the condition of the biological community prior to operation of the new facility and prior to each permit renewal application. The level of effort needed for the study may vary considerably from one facility to another, depending on the availability of existing background information and the characteristics of the waterbody where the CWIS is or will be located. For the purpose of developing the ICR cost and burden estimates, it is assumed that facilities will collect two years of data to develop a baseline characterization of the contributing waterbody's biological community.

Junior technical staff would also develop a narrative characterizing the facility's cooling water system, which includes a flow distribution and water balance diagram for the facility depicting all sources of water to the facility, recirculating flows, and discharges. Management would review and revise this characterization. EPA also anticipates that the junior technical staff would perform engineering calculations for the source waterbody and CWIS documents. Management would review and revise these calculations.

The submittal of information on the facility's intended method of compliance for impingement mortality would be prepared by junior technical staff and reviewed by management. For facilities choosing to comply with either § 125.94(c)(5) or (6), additional technical staff would contribute to developing the impingement technology performance optimization study.

Junior technical staff would also prepare a narrative that includes the following operational status information: (1) each individual unit's operating status including age of the unit, capacity utilization for the previous 5 years and any major upgrades completed in the past 15 years; (2) a description of completed, approved, or scheduled uprates and NRC (Nuclear Regulatory Commission) relicensing status for nuclear facilities; (3) a description of plans or schedules for decommissioning or replacement of units; and (4) a description of current and future production schedules for manufacturing facilities. Management would review and revise these calculations.

In addition, existing facilities with more than 125 mgd actual intake flow or existing facilities with new units and a cumulative actual intake flow above 125 mgd would be required as part of the permit application process to submit additional information to characterize entrainment and assess the costs and benefits of installing various potential technological and operational controls [(§ 122.21(r)(9)-(12)]. In the ICR, the burden for peer review activities (under § 122.21(r)(13)) for studies required under § 122.21(r)(10-12) is included in the estimates of burden for those studies, as opposed to a separate line item.

As noted above, the set of activities estimated for each facility is based on EPA's estimation of compliance costs, as described in the preamble and Technical Development Document. As part of this process, EPA assigned a projected compliance approach for each model facility and these projections have been incorporated into the hourly burdens for facilities, see Exhibit A.1 in Appendix A.

Recurring Facility Activities

The recurring activities for most facilities are biological monitoring, flow monitoring, velocity monitoring, conducting visual or remote inspections and reporting and recordkeeping of this information. As noted in section 4(b)(ii) above, the monitoring provisions for existing facilities subject to § 125.94(b) or new units at existing facilities varies depending on the compliance approach selected by the facility. Biological monitoring is assumed to be performed at one location on a monthly basis for impingement. Flow must be monitored daily. Velocity must be monitored daily or at the frequency specified in the NPDES permit. Furthermore, facilities must conduct visual inspections or employ remote monitoring devices. The facility must conduct inspections at least weekly or inspect via remote monitoring devices to ensure that impingement technologies are functioning as designed. Regular visual inspections or monitoring with remote

devices is part of the normal O&M and good housekeeping activities for any facility and EPA does not anticipate additional burden resulting from them. The monitoring results are analyzed and summarized in monthly and annual reports pursuant to § 125.97. EPA assumes that clerical and junior technical staff would maintain the monitoring data and reports for the facility record keeping requirements. For a more detailed presentation of hourly burdens for facilities, see Exhibit A.2 in Appendix A.

Annual Facility Activities

All facilities would be required to submit an annual certification statement which indicates that its technology is being maintained and operated as set forth in its original certification or a justification to allow modification of the practices listed in its initial certification. Along with the certification statement, all facilities are required to submit an annual report which includes detailed monitoring information and other information as detailed in their NPDES permit. For a more detailed presentation of hourly burdens for facilities, see Exhibit A.2 in Appendix A.

Director's Burden

The rule will require Directors to devote time and resources to review and respond to the NPDES permit applications; proposal, study and sampling plans; and monitoring and status reports submitted to them. EPA assumed that all Directors would also undergo start-up activities in preparation for administering the provisions of the rule. As part of these start-up activities, Directors are expected to train junior technical staff on how to review materials submitted by facilities, and then use these materials to determine the specific conditions of each facility's NPDES permit with regard to its CWIS. In addition, EPA assumes that senior and junior technical staff would spend time to study and understand the rule and in planning activities.

Director's Permit Issuance Activities

EPA expects that State senior technical, junior technical and clerical staff will devote time toward gathering, preparing, and submitting the various documents. EPA assumed burden estimates that reflect the staffing and expertise used by States for the NPDES permit administration process. In doing this, EPA considered the time and qualifications necessary to complete various tasks such as reviewing submitted documents and supporting materials, verifying data sources, planning responses, determining specific permit requirements, writing the actual permit, conferring with facilities and the interested public, and entering the permit information into the PCS/ICIS database.

Monitoring Conditions

In determining the applicable monitoring requirements, the Director would be required to consider the facility's monitoring plan and modify the monitoring program based on changes to the physical or biological conditions in the vicinity of the cooling water intake structure. The requirement for modifying the monitoring program may be made during the term of the permit or when the permit is reissued. EPA assumes that junior technical staff would review the facility's

monitoring plan and make recommendations for modifying the monitoring program. Senior technical staff would review and implement the recommendations.

Record Keeping and Reporting

EPA assumed that clerical and junior technical staff will review the monitoring data and status report from the facilities regarding record keeping. Senior technical personnel will oversee their work.

Annual Director Activities

All existing facilities are required to submit an annual report and certification statement to the Director. EPA assumes that Directors would use these reports to track facility compliance, to determine compliance with § 125.94 and to comply with § 125.98(k).

Table 3 provides a summary of the hourly burden estimates for state Directors performing various activities associated with the rule during the first three years of this ICR. For a more detailed presentation of State Director hourly burdens, see Exhibit A.3 (state) in Appendix A.

Table 3. Average State Director Burden for Activities

Activities	Burden (hrs)
Director Start-up Activities	100
Director Permit Application Activities for power plants with DIF \geq 50 MG w/ AIF $<$ 125 MGD	0
Director Permit Application Activities for power plants with DIF \geq 50 MGD w/ AIF $>$ 125 MGD	0
Director Permit Application Activities for power plants with DIF $>$ 2 MGD and \leq 50 MGD and manufacturers $>$ 2 MGD w/ AIF $<$ 125 MGD	0
Director Permit Application Activities for manufacturers with DIF $>$ 2 MGD w/ AIF $>$ 125 MGD	0
Director Permit Application Activities for New Generating Units	11
Director Permit Application Activities for New Manufacturing Units	11
Director Annual Activities	3

Some of the activities above occur after the 3-year period covered by this ICR.

6b. Estimating Respondent Costs

This section describes cost estimates for facilities and Directors, as well as the methods used to derive them.

6b(i). Estimating Labor Costs

The costs to the respondent facilities associated with the ICR activities can be estimated by multiplying the time spent in each labor category by an appropriately loaded hourly wage rate. All base wage rates used for facility labor categories were derived from the Bureau of Labor Statistics (BLS) *Occupational Outlook Handbook 2012–2013*. These reported labor rates were based on data from the year 2010 and are adjusted for inflation. Inflation factor was derived from the BLS Employment Cost Index and was used to adjust the *Occupational Outlook Handbook* labor rates to reflect labor rates for May of 2011.

A compensatory loading factor of 49 percent was used to account for any paid leave, supplemental pay, insurance, retirement and savings, and required and nonrequired benefits received by employees (*Employer Costs for Employee Compensation, Table 6. Employer costs per hour worked for employee compensation and costs as a percent of total compensation: Private industry workers, by major industry group, December 2012*). EPA assumed an additional loading factor of 15 percent to account for general overhead costs directly attributable to facility employees performing work in support of the permit process. Expenses for contracted employees typically include higher overhead costs, as well as a fee to ensure profit for the contracting company. EPA assumes that the overhead for the contracted employees will be 64 percent, and the fee will be 8 percent.

To represent the base labor rate for facility management, EPA used the average national salary for an engineering manager of \$119,260 per year. This figure was divided by 2,080 hours to derive the hourly managerial wage rate of approximately \$57.34 per hour. After adjusting this rate for inflation, compensation, and overhead, the rate is approximately \$96 per hour. The median annual salary of \$50,110 for a mechanical engineering technician was used to represent the base labor rate for junior technical staff. After determining the hourly wage rate and adjusting for inflation and other factors, this labor rate was approximately \$40 per hour. The median annual salary for a drafter performing CAD work was reported to be \$47,880, and, after adjusting and loading the rate, it is approximately \$38 per hour. The reported average annual salary for clerical workers was \$29,990, and the fully adjusted and loaded hourly rate is approximately \$24 per hour. For economist, the mean hourly rate reported was \$43 for a fully adjusted and loaded hourly rate of approximately \$72 per hour.

To represent the base labor rate for a contracted manager of monitoring work done on-site, EPA used the average national salary for a natural sciences manager of \$116,020 per year with a fully loaded rate of \$98 per hour. The median annual salary for a statistician was \$72,830 per year with an adjusted hourly rate of approximately \$59 per hour. Biologists and biological technicians had an average hourly pay of \$45.39 and \$30.84 and a fully loaded rate of \$46 and \$31, respectively.

Director's Labor Costs

For Director costs, all the base labor rates and compensation factors were derived from published employment cost trends for State and local government workers for the third quarter of 2009 (*BLS Employment Cost Trends, September 2009*). These labor rates were adjusted to reflect labor rates for May of 2011 (*BLS Employment Cost Index*). EPA chose the BLS labor category of white-collar professional specialist to represent the senior administrative and technical staff that will oversee and manage the NPDES permit program. The base hourly rate for this category was approximately \$29 per hour, and, after adjusting for compensation and inflation, it is approximately \$64 per hour.

Similarly, EPA chose the BLS labor category of white-collar professional technical to represent the junior technical staff that EPA expects to perform the majority of the actual NPDES permitting work. The reported base pay for this category was approximately \$18 per hour, which becomes approximately \$38 per hour after being adjusted for compensation, overhead, and

inflation. The hourly wage for State government clerical workers was \$13 per hour before adjustment and approximately \$30 afterward.

6b(ii). Estimating Capital and Operation and Maintenance Costs

A facility incurs capital/start-up costs when it purchases equipment or builds structures that are needed for compliance with the rule’s reporting and record keeping requirements and that the facility would not use otherwise. A facility incurs operation and maintenance (O&M) costs when it uses services, materials, or supplies that are needed to comply with the rule’s reporting and record keeping requirements and that the facility would not use otherwise. Any costs for the operation and upkeep of capital equipment are considered O&M costs. Another type of O&M cost is for the purchase of contracted services, such as laboratory analyses. The purchase of supplies such as filing cabinets and services such as photocopying or boat rental are also considered O&M costs and are referred to as other direct costs (ODCs).

In general, the labor costs and O&M costs reported in this analysis are assumed to represent typical average national cost estimates that are likely to be incurred by existing facilities and by permitting authorities. EPA attempted to take into account various factors such as decreases in labor efficiency that occur during extreme climate conditions, equipment down time, and the occasional sample that might need to be replaced because it was lost or spoiled during transport. Table 4 provides a summary of facility-level average labor costs, capital costs, and O&M costs over the 3-year ICR period. For a more detailed presentation of all compliance costs for facilities, see Exhibits A.1 and A.2 in Appendix A.

Table 4. Average per Facility Burden and Costs for each NPDES Permit Renewal Activity

Activities	Burden (hrs)	Labor Cost (2011\$)	Capital (2011\$)	O&M (2011\$)
Start-up Activities	33	\$2,424	\$0	\$100
Permit Application Activities for power plants with DIF≥50 MG w/ AIF<125 MGD	365	\$16,596	\$0	\$2,399
Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	759	\$33,535	\$0	\$12,985
Permit Application Activities for power plants with DIF> 2 MGD and ≤ 50 MGD and manufacturers > 2 MGD w/ AIF<125 MGD	254	\$12,093	\$0	\$1,373
Permit Application Activities for power plants with DIF> 2 MGD and ≤ 50 MGD and manufacturers > 2 MGD w/ AIF>125 MGD	872	\$38,508	\$0	\$14,865
Permit Application Activities for New Generating Units	260	\$14,244	\$0	\$500
Permit Application Activities for New Manufacturing Units	260	\$14,244	\$0	\$500
Compliance Monitoring - All Existing Facilities (power plants and manufacturing)	0	\$0	\$0	\$0
Recurring Reporting and Recordkeeping - Existing Facilities (power plants and	4	\$240	\$0	\$2,240

manufacturing)				
Compliance Monitoring - New Generating Units	90	\$4,080	\$0	\$5,080
Recurring Reporting and Recordkeeping - New Generating Units	20	\$1,456	\$0	\$3,456
Compliance Monitoring - New Manufacturing Units	90	\$4,080	\$0	\$5,080
Recurring Reporting and Recordkeeping - New Manufacturing Units	20	\$1,456	\$0	\$3,456

Director's O&M Costs

EPA does not anticipate any O&M costs other than ODCs for state Directors as a result of the rule. Table 5 provides estimates of average state Director Labor costs and ODCs. For a more detailed explanation of State Director costs, see Exhibit A.3 in Appendix A.

Table 5. Average State Director Burden and Costs for Activities

Activities	Burden (hrs)	Labor Cost (2011\$)	O&M (2011\$)
Director Start-up Activities	100	\$4,840	\$200
Director Permit Application Activities for power plants with DIF \geq 50 MG w/ AIF $<$ 125 MGD	0	\$0	\$500
Director Permit Application Activities for power plants with DIF \geq 50 MGD w/ AIF $>$ 125 MGD	0	\$0	\$500
Director Permit Application Activities for power plants with DIF $>$ 2 MGD and \leq 50 MGD and manufacturers $>$ 2 MGD w/ AIF $<$ 125 MGD	0	\$0	\$500
Director Permit Application Activities for manufacturers with DIF $>$ 2 MGD w/ AIF $>$ 125 MGD	0	\$0	\$500
Director Permit Application Activities for New Generating Units	11	\$457	\$500
Director Permit Application Activities for New Manufacturing Units	11	\$457	\$500
Director Annual Activities	3	\$104	\$500

Some of the activities above occur after the 3-year period covered by this ICR.

6c. Estimating Agency Burden and Costs

As mentioned previously, 46 States and the Virgin Islands are authorized to administer the NPDES permitting program. For in-scope facilities applying for reissued permits in the 10 unauthorized States and Territories, EPA will incur costs and burdens similar to those incurred by States with permitting authority.

6d. Estimating the Respondent Universe and Total Burden and Costs

During the 3 years covered by this ICR (which correspond to years 1–3 after rule promulgation), there are an estimated 1,068 facilities along with 47 States that the rule could affect. The rule would require each respondent to comply with one or more provisions. In turn, each provision has numerous activities associated with it. Exhibits A.5 and A.6 in Appendix A provide an estimate of the number of respondents and responses expected for each provision of the rule

during each year of the ICR approval period. The annual estimates are based on the compliance schedule used to estimate the cost of the final rule. In addition, Exhibits A.7 to A.10 provide a summary of the respondent burdens and costs for each year of the ICR period. These estimates were calculated by multiplying facility and state Director level burden and cost estimates in Exhibits A.1-A.3 by the number of respondents performing each activity in Exhibit A.5 (see Appendix A).

6e. Bottom Line Burden Hours and Costs Tables

This section provides a description of bottom line data collection and record keeping burden and cost estimates for implementation of the rule.

6e(i). Respondent Tally

The bottom line burden hours and costs for facilities and Directors are the total annual hours and costs collectively incurred for all activities during the ICR period. Table 6 provides a summary of the average annual number of respondents, burden hours, and costs. A more detailed summary can be found in Exhibit A.11 in Appendix A.

Table 6. Summary of Average Annual Respondents, Burden, and Costs for Facilities and State Directors for the ICR Period

	Average Annual Respondents	Average Annual Burden (hours)	Average Annual Labor Costs (2011\$)	Average Annual Capital and O&M Costs (2011\$)	Total Annual Costs (2011\$)
Facilities	1068	627,666	\$28,900,240	\$8,004,274	\$36,904,514
State Directors	47	6,930	\$299,247	\$521,633	\$820,880
Totals	1115	634,596	\$29,199,487	\$8,525,907	\$37,725,394

6e(ii). Agency Tally

The bottom line burden hours and costs for the Federal agency are the total annual hours and costs collectively incurred for all activities during the ICR period. Table 7 provides a summary of the average annual agency burden hours and costs. A more detailed summary can be found in Exhibit A.11 in Appendix A.

Table 7. Summary of Average Annual Agency Burden and Costs for the ICR Period

	Average Annual Burden (hours)	Average Annual Labor Costs (2011\$)	Average Annual Capital and O&M Costs (2011\$)	Total Annual Costs (2011\$)
Agency Totals	178	\$7,645	\$14,567	\$22,212

6f. Reasons for Change in Burden

The current burden approved by OMB for the existing ICR is 1,023,521. That is 388,925 (38%) more hours than are being requested in this draft ICR. This decrease is due to changes in program requirements. The currently approved ICR is for electric generators with a DIF of at least 50 mgd and that were subject to the 2004 Phase II rule. Many of these facilities have already met most of the new data collection requirements of the revised rule. Newly affected facilities have significantly fewer comprehensive requirements for data collection than was required under the Phase II rule, such as less frequent biological data collection. More specifically, the proposed rule and the Phase II rule both would have required all facilities to conduct biological monitoring to demonstrate compliance with the required reductions in impingement. Under the revised rule, the roughly 40% of facilities using one of EPA's pre-approved technologies (pre-approved technologies have well documented performance and well-understood operating parameters that consistently achieve the reductions required by the revised rule), there are no biological monitoring requirements. EPA further expects an additional 59% of facilities will select a technology under one of the streamlined compliance alternatives; these facilities would have a two year technology performance optimization study in lieu of biological compliance monitoring in perpetuity. Thus under the revised rule, less than 1% of affected facilities would need to conduct routine biological monitoring to demonstrate compliance. Other flexibilities of the final rule further reduce burden such as: reduced application requirements for facilities with closed-cycle; facilities that withdraw cooling water from a lake with a fishery managed by the State; and permit application renewals where no changes have occurred in the waterbody or facility operations since the previous 5 year permit cycle. Further, while the overall universe of affected facilities has increased, more facilities in the affected universe already meet the requirements of the revised rule. EPA notes that the reduced burden of information collection and record keeping activities will continue well beyond the first three years of implementation covered by this ICR.

6g. Burden Statement

The annual average reporting and record keeping burden for the collection of information by facilities responding to the rule is estimated to be 588 hours per respondent (i.e., an annual average of 627,666 hours of burden divided among an anticipated annual average of 1,068 facilities). The state Director reporting and record keeping burden for the review, oversight, and administration of the rule is estimated to average 147 hours per respondent (i.e., an annual average of 6,930 hours of burden divided among an anticipated 47 States per year).

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and use 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 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 number for EPA's regulations are listed at 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on EPA'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, the Agency has established a public docket for this ICR under Docket ID No. EPA-HQ-OW-2008-0667, which is available for public viewing at the Water Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. 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 through the Federal Docket Management System (FDMS) at <http://www.regulations.gov/>. Use FDMS to submit or view public comments, to access the index listing of the contents of the public docket, and to access documents in the public docket that are available electronically. Once in the system, key in the docket ID number identified above. You can also send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Please include the EPA Docket ID No. EPA-HQ-OW-2008-0667 and OMB control number 2040-0257 in any correspondence.