

**SUPPORTING STATEMENT**

**NATIONAL STUDY OF NUTRIENT REMOVAL AND SECONDARY  
TECHNOLOGIES: POTW SCREENER QUESTIONNAIRE  
FOR THE  
U.S. ENVIRONMENTAL PROTECTION AGENCY**

**July 11, 2018**

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## **PART A OF THE SUPPORTING STATEMENT**

*U.S. Environmental Protection Agency  
National Study of Nutrient Removal and Secondary Technologies:  
POTW Screener Questionnaire  
EPA ICR No. 2553.01  
OMB Control No. 2050-NEW  
Office: EPA Office of Water  
Contact: Paul Shriner*

### **1. CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY AND LEGAL REQUIREMENTS THAT NECESSITATE THE COLLECTION**

Over the last 50 years, the amount of nitrogen and phosphorus pollution entering the nation's waters has escalated dramatically. The excess levels of nutrients have degraded drinking water quality and environmental water quality. Nutrients have the potential to become one of the costliest and most challenging environmental problems we face. Despite this concern, not enough is known about nutrient discharges. The United States Environmental Protection Agency (EPA) is collaborating with states, industry trade associations, and other stakeholders to make greater progress in understanding the nature of certain nutrient discharges and in potentially using a non-regulatory approach to accelerate the reduction of nutrient loadings discharged into the nation's waters. Specifically, EPA's Office of Water is conducting a National Study of Nutrient Removal and Secondary Technologies to collect and share data on nutrient removals and related treatment plant performance by different types of water resource recovery facilities (WRRFs) nationwide, primarily consisting of the publicly owned treatment works (POTWs)<sup>1</sup>. The study seeks to update EPA's baseline data on nutrient removal, identify current nutrient removal performance, and identify operational and maintenance practices to improve nutrient removal using existing treatment technologies. In addition, EPA intends to make all of the information collected in this study available to the public on EPA's website so that POTWs, states, Federal agencies, and other stakeholders may also benefit from it. EPA is hoping that the availability of these data will encourage improved nutrient removal performance with less expense and make available current POTW nutrient removal and nutrient loading baselines.

EPA regulates POTW wastewater discharges through the Clean Water Act (CWA), National Pollutant Discharge Elimination System (NPDES) program and regulates POTW treatment sludge, hazardous waste, and air emissions through other EPA statutes (e.g., Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Clean Air Act (CAA)). A POTW is defined under 40 CFR section 403.3(q) as "a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant." To simplify and

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<sup>1</sup> For purposes of this survey, the terms wastewater treatment facility, POTW, and WRRF are used interchangeably.

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provide clarity throughout this supporting statement, the population of interest includes POTWs and tribally owned facilities, but does not include federally owned or privately owned facilities, and does not include dedicated flow control entities such as Combined Sewer Overflows (CSOs) and Sanitary Sewer Overflows (SSOs).

EPA, through this Information Collection Request (ICR) package, requests that the Office of Management and Budget (OMB) review and approve the ICR for a screener data collection effort. Through this screener, EPA will obtain those data essential to characterize the universe of POTWs operating in the U.S., including updated facility identification and basic characteristics. This screener is necessary to identify the frame of POTWs operating around the country, because there are no nationwide performance data, and because enhanced nutrient removal details have been limited to case studies. To develop the frame for the screener, EPA has been working collaboratively with states and industry to update and supplement existing information on the universe of POTWs in the U.S. along with some basic characteristics of those POTWs.

In the future, EPA will likely seek to collect more detailed information from some of the POTWs identified by this screener on specific types of secondary treatment processes, but such collections would be submitted to OMB in a separate and subsequent ICR. While specifics of such follow-up surveys have not yet been determined, they will likely be based on plant size, treatment technology, geography, and treatment capacity.

## **2. HOW, BY WHOM, AND FOR WHAT PURPOSE THE INFORMATION IS TO BE USED**

### **2(a) What Information Will Be Collected, Reported, or Recorded?**

EPA is seeking to create a frame of all POTWs in the U.S. as described and defined in Section 1 of this supporting statement. EPA has based the collection on a list of POTWs created using information from each NPDES-authorized state, or EPA Regional office if the state does not have NPDES program authorization. This information has been used to develop the population of facilities that will receive the request to complete the voluntary questionnaire. EPA requested the data from states under the NPDES Program ICR (OMB Control No. 2040-0004, EPA ICR No. 0229.22). Obtaining the list directly from the responsible agency helps to ensure EPA has the most complete list of POTWs possible. Currently EPA's Integrated Compliance Information System (ICIS) may not contain information on small facilities (see Section 4 for details). EPA is also aware that some states maintain such information in an electronic database that is not compatible with ICIS and that information thus may be missing from ICIS. Furthermore, states often collect and maintain data on large facilities (or "major" facilities), but for smaller plants, the data are not collected or may be missing. EPA will continue to work directly with states to identify the current population of POTWs in each state.

In addition, EPA will continue to collaborate with the National Association of Clean Water Agencies (NACWA), the Association of Clean Water Administrators (ACWA), the Water Environment Federation (WEF), and the National Rural Water Association (NRWA) to keep their members informed of this survey. EPA will use the compiled POTW population list to administer a voluntary questionnaire and work with relevant stakeholders such as the

organizations above to encourage responses from their members. The questionnaire is designed to collect updated identification and characterization data necessary to allow for future data collection efforts.

The screener questionnaire is made up of 28 questions (Appendix A). The data items requested by the questionnaire and the purpose for requesting the information are shown below:

**Table 2-1. POTW Study Screener Questions and Their Purpose**

<b>Question Number</b>	<b>Question Description</b>	<b>Purpose of Question</b>
<b>Section A</b>	<b>Eligibility Confirmation</b>	<b>Section A contains questions to confirm whether the facility is a POTW and should complete the remaining screener sections.<sup>2</sup></b>
Section A Q1	Eligibility confirmation to determine if facility is a treatment works of municipal sewage.	EPA will use this information to correctly identify if the facility is in scope. If the facility is not treating municipal sewage, they do not have to complete the remainder of the screener.
Section A Q2	Eligibility confirmation to determine if facility is publicly owned.	EPA will use this information to correctly identify if the facility is in scope, e.g. not a private or federal treatment works, and not solely a collection system. If the facility is not a publicly owned treatment works, they do not have to complete the remainder of the screener.
Section A Q3	Requests the facility's National Pollutant Discharge Elimination System (NPDES) ID or state-issued wastewater discharge permit number.	EPA will use this information to confirm facility identification information and to address any duplicate information in the mailing list and database.
Section A Q4	Eligibility confirmation to determine if the treatment works is physically capable of directly discharging effluent to a surface water and name of the surface water and the discharge or disposal method (e.g., direct discharge to surface water, discharge to another POTW).	EPA will use this information to correctly identify if the facility is in scope and obtain discharge information. If the facility is not capable of directly discharging to surface water, they do not have to complete the remainder of the screener.
<b>Section B</b>	<b>POTW Identification</b>	<b>Section B confirms the POTW identification and contact information.</b>
Section B Q5	Requests facility's name as it appears on their discharge permit.	EPA will use this information to identify the POTW and correct any errors on the mailing list.
Section B Q6	Requests facility's mailing address and physical location.	EPA will use this information to correct any errors on the mailing list.
Section B Q7	Requests establishment's contact for any follow-up questions.	EPA will use this information to contact the facility with any follow-up questions or issues.
<b>Section C</b>	<b>POTW Operations and Treatment Characteristics</b>	<b>Section C collects information about the POTW's characteristics and operations</b>
Section C Q8	Requests the maximum population served by the treatment plant (ranges presented for selection).	EPA will use this information for the industry profile and future data collection based on plant size and treatment capacity.

<sup>2</sup> - EPA is using a registration process that only allows POTW with a NPDES permit ID to proceed. Section A serves to confirm the POTW is eligible to complete the screener.

**Table 2-1. POTW Study Screener Questions and Their Purpose**

<b>Question Number</b>	<b>Question Description</b>	<b>Purpose of Question</b>
Section C Q9	Asks whether the population varies seasonally by more than 50 percent.	EPA will use this information for the industry profile and future data collection based on plant size and treatment capacity.
Section C Q10	Asks whether the POTW is a package plant. Package plants are pre-manufactured treatment works used in small communities or on individual properties.	EPA will use this for the industry profile and future data collection based on plant size and type.
Section C Q11	Asks whether the treatment works discharged continuously or controlled/intermittently.	EPA will use this information for the industry profile and future data collection based on discharge practice.
Section C Q12	Asks whether the treatment works' daily flow increased by 30 percent or more after a typical rainfall event.	EPA will use this information for the industry profile and future data collection based on flow information.
Section C Q13	Asks whether the treatment works' design capacity flow is less than 1 million gallons per day (MGD) and requests the design capacity flow and maximum capacity or peak capacity flow.	EPA will use this information for the industry profile and future data collection based on plant size and flow data. This question is also used to redirect those POTWs with small flows to a reduced set of questions.
Section C Q14	Requests actual operational flows in calendar year 2017.	EPA will use this information for the industry profile and future data collection based on plant size and existing flow data.
Section C Q15	Asks which type of collection system(s) feed into the treatment plant.	EPA will use this information for the industry profile and future data collection based on collection system type.
Section C Q16	Requests the percentage of wastewater source types treated at the facility.	EPA will use this information for the industry profile and future data collection based on wastewater source types.
Section C Q17	Requests the types of industrial sources treated at the facility.	EPA will use this information for the industry profile and may use this information to help identify treatment works that receive wastewaters with high nutrient content.
Section C Q18	Requests the type of treatment technologies included in the treatment works.	EPA will use this information for the industry profile and for future data collection based on treatment types. Small POTWs will answer a shorter question to reduce burden.
Section C Q19	Requests process control operations types and parameters monitored.	EPA will use this information for the industry profile and to help identify facilities that are optimizing control operations for nutrient removal.
Section C Q20	Requests the seasonal operational temperatures of the treatment works.	EPA will use this information for the industry profile and for future data collection.
Section C Q21	Asks whether the treatment works has or is planning capital upgrades or operational changes for nutrient removal or energy efficiency.	EPA will use this information for the industry profile and for future data collection.



**Table 2-1. POTW Study Screener Questions and Their Purpose**

<b>Question Number</b>	<b>Question Description</b>	<b>Purpose of Question</b>
Section C Q22	Asks whether the facility was designed or has optimized operations to achieve nutrient removal, specific effluent nitrogen or phosphorus quality standards, or resource recovery.	EPA will use this information to assess whether the system has nutrient control and to help select facilities for future data collection.
Section C Q23	Requests ammonia monitoring locations.	EPA will use this information to assess whether and where facilities collect ammonia-specific nutrient data that could be collected to support EPA's study and to help select facilities for future data collection.
Section C Q24	Requests ammonia concentrations at each monitoring location in ranges.	EPA will use this information to assess ammonia-specific nutrient data that could be collected to support EPA's study and to help select facilities for future data collection.
Section C Q25	Requests monitoring location for nutrients other than ammonia.	EPA will use this information to assess whether and where facilities collect nutrient data other than ammonia that could be collected to support EPA's study and to help select facilities for future data collection.
Section C Q26	Requests concentrations of other nutrients at each monitoring location in ranges.	EPA will use this information to assess whether facilities may have existing nutrient data that could be collected to support EPA's study and to help and to help select facilities for future data collection.
Section C Q27	Requests concentrations of cBOD <sub>5</sub> (carbonaceous biochemical oxygen demand), COD (chemical oxygen demand), and TSS (total suspended solids).	EPA will use this information to assess treatment system performance and to help select facilities for future data collection.
Section C Q28	Final comments.	Allows respondents to enter any clarifying information.

**2(b) From Whom Will the Information Be Collected?**

The screener will seek to collect information from an estimated 18,600 POTWs located in the U.S. The respondents affected by this ICR are classified under the North American Industry Classification System identification number 221320 – Sewage Treatment Facilities. As indicated above, those states with authorized NPDES programs that have not yet fully implemented the NPDES Electronic Reporting Rule have been contacted to obtain a mailing list of all POTWs covered by a NPDES permit (or state equivalent).

**2(c) What Will the Information Be Used For?**

The study seeks to update EPA's baseline data on nutrient removal and nutrient loading from POTWS, identify current nutrient removal performance, and identify operational and maintenance practices to improve nutrient removal using existing treatment technologies. EPA will use the screener data to develop an updated profile of POTWs in the U.S. from which

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additional data collection or studies may be based. In addition, EPA intends to make all of the information collected in this study available to the public on EPA's website so that POTWs, states, Federal agencies, and other stakeholders may also benefit from it. EPA is hoping that the availability of these data will encourage improved nutrient removal performance with less expense and make available current POTW nutrient removal and loadings baselines.

As described in Section 2(a), EPA has collected a list of POTWs and their mailing addresses and facility contact information from each NPDES-authorized state to determine the frame for the POTW questionnaire. This information has been obtained from the EPA Regional office where the state does not have NPDES program authorization. EPA may update this list prior to fielding the screener survey. This information may be similar to some information that is collected under the NPDES Program (Renewal) ICR (EPA ICR No. 0229.22), particularly as each state will likely be in various stages of implementing the NPDES Electronic Reporting Rule issued in September 2015. In most cases states are still several years away from fully implementing the NPDES Electronic Reporting rule.

#### **2(d) How Will the Information Be Collected? Does the Respondent have Multiple Options for Providing the Information? What Are They?**

EPA will conduct a voluntary survey of POTWs. EPA will mail an announcement about the survey questionnaire to each POTW identified in EPA's mailing list. EPA will also work with states and industry trade groups to promote the survey questionnaire. POTWs will be directed to a website with instructions on how to register for the survey questionnaire and will then receive a link to complete the questionnaire. The registration page is used to ensure only POTWs proceed to the questionnaire and to reduce the possibility of invalid survey responses. If a POTW cannot access the questionnaire online, the announcement will provide a means for the facility to request a hardcopy questionnaire to complete and return. EPA anticipates fielding the survey in late 2018. Responses will be requested within 30 days.

Upon receipt of completed questionnaires, EPA and its contractors will review the responses for completeness. Responses will also be reviewed for consistency and reasonableness. Follow-up calls will be conducted as needed to clarify inconsistencies found in the responses. As this is a voluntary survey and a one-time collection, there is no requirement or obligation for EPA to conduct follow-up due to non-responses. Rather EPA seeks a reasonable representation of the POTW population that includes a range of geographical zones and sizes (as indicated by plant flows). Such follow-up, if necessary due to non-response, would focus on outreach with select states and trade associations as identified in Section 2(a) to encourage additional responses. The database created using the questionnaire responses will be used by EPA to profile the POTW population and to support future collection efforts. EPA intends to make the database publicly available.

The Agency has conducted, is conducting, or will conduct the following activities to administer the POTW Study screener questionnaire:

- Develop the screener;
- Develop the population by requesting POTW lists and mailing address and contact information for authorized states or Regions;

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- Develop the ICR;
  - Conduct stakeholder meetings and public webinars that provide the draft screener for review by trade associations, industry representatives, public interest groups, state regulating agencies, EPA workgroup, OMB, and other stakeholders;
  - Revise the screener questions based on comments from trade associations, industry representatives, public interest groups, state regulating agencies, EPA workgroup members, OMB, and other stakeholders;
  - Develop a mailing list database and mailing labels;
  - Develop a tracking system for the questionnaire cover letter mail-out and non-online questionnaire return activities;
  - Develop the online screener and backend database;
  - Distribute the screener cover letter and instructions;
  - Develop and maintain help lines for respondents who require assistance in completing their screener;
  - Receive and review responses;
  - Summarize and analyze responses; and
  - Conduct technical analyses.

The Agency will transfer any data not directly input into the online questionnaire into the master database for future use.

**2(e) How Frequently Will the Information Be Collected?**

The information covered by this ICR is a one-time information collection.

**2(f) Will the Information Be Shared With Any Other Organizations Inside or Outside EPA or the Government?**

EPA will share the information collected through this ICR within EPA, and with other Government agencies, the industry, trade associations, and the public.

**2(g) If This Is an Ongoing Collection, How Have the Collection Requirements Changed Over Time?**

This ICR request is not an ongoing collection.

**3. TO WHAT EXTENT DOES THE COLLECTION OF INFORMATION INVOLVE THE USE OF AUTOMATED, ELECTRONIC, MECHANICAL, OR OTHER TECHNOLOGY COLLECTION TECHNIQUES OR OTHER FORMS OF INFORMATION TECHNOLOGY**

EPA developed the questionnaire as a web-based survey that facilities can fill out and submit online. The electronic questionnaire will be developed to meet the 1998 Government

Paperwork Elimination Act (GPEA). Given that POTWs with a NPDES permit generally submit their Discharge Monitoring Report (DMR) data electronically, EPA anticipates that most respondents will be familiar and comfortable with electronic submission forms. Additionally, the electronic questionnaire will allow for automatic population of a database with responses—reducing the potential for errors introduced through key-entry of data. EPA will provide a mechanism for POTWs to respond with a mailed response if the contact cannot access the internet. Finally, EPA has partnered with trade associations such as NRWA to provide training and a demonstration of the electronic survey, thereby allowing the trade associations to assist their members with the survey where requested.

EPA designed the questionnaire to include burden-reducing features. For example, the registration process identifies respondents that do not qualify as the population of interest and notifies them immediately that they do not need to respond to the screener. The smallest POTWs are identified early in the screener, and once identified as such, will proceed to a shorter version of the screener with fewer questions and less-detailed responses. The questionnaire is also designed with drop-down choices to simplify responses, minimizing the number of text responses.

#### **4. EFFORTS TO IDENTIFY DUPLICATION AND WHY SIMILAR INFORMATION ALREADY AVAILABLE CANNOT BE USED OR MODIFIED FOR USE FOR THE PURPOSES DESCRIBED IN ITEM 2**

EPA identified several existing data sources that may contain data useful for identifying the population of POTWs throughout the U.S., as well as information useful for developing an industry profile and future sample frames for more detailed data collections. Table 4-2 lists sources of existing data that EPA has collected and reviewed for the study.

**Table 4-2. Existing Data Sources**

<b>Data Source Name</b>	<b>Date of Data Collection</b>	<b>Population Included</b>	<b>Types of Data Available</b>
ICIS-NPDES <sup>a</sup>	As of March 2018	POTWs reporting Discharge Monitoring Reports for external outfalls.	Design flow, actual flow, and effluent concentration data for specific pollutants with permit requirements.
FRS	June 2017	Used to supplement addresses if they were not available through ICIS-NPDES.	FRS identification number, latitude, longitude, and facility address.
CWNS	2004	Assumed to include all operating POTWs at the time of the questionnaire.	Flow data (actual, design, and future flows identified by municipal, industrial, infiltration, and wet weather peak contributions), ownership, service population, treatment units.
CWNS	2008	Subset of POTWs reported, only those meeting requirements of 2008 CWNS. <sup>b</sup>	Flow data (actual, design, and future flows identified by municipal, industrial, infiltration, and wet weather peak contributions), ownership, service population, treatment units.
CWNS	2012	Subset of POTWs reported, only those meeting	Flow data (actual, design, and future flows identified by municipal, industrial, infiltration,

**Table 4-2. Existing Data Sources**

<b>Data Source Name</b>	<b>Date of Data Collection</b>	<b>Population Included</b>	<b>Types of Data Available</b>
		requirements of 2012 CWNS. <sup>b</sup>	and wet weather peak contributions), ownership, service population, treatment units.
State Permit Data	2015	POTWs in states with permits describing lagoon systems. Also NPDES permitted POTWs treating sanitary/municipal sewage.	Various (e.g., design flow, municipal flow).
EPA Provided Data (301(h) Secondary Waivers)	1994	Subset of POTWs, only those discharging to oceans under a 301(h) waiver.	Ownership information.
State Lists	2016 - 2018	Multiple states	Through EPA outreach efforts, states may provide EPA updated lists of POTWs in their state, the NPDES permit number, and the mailing address.

Acronyms: CWNS – Clean Watershed Needs Survey; ICIS – Integrated Compliance Information System; NPDES – National Pollutant Discharge Elimination System; POTW - Publicly Owned Treatment Works.

a – ICIS-NPDES does not currently contain all general permit information. The use of this database for general permits is expanding as a result of the Electronic Reporting Rule.

b – EPA has identified differences in the population of facilities included in the CWNS data for 2008 and 2012 as compared to data from 2004, as well as varying levels of specificity in the types of unit operations reported.

EPA identified the ICIS-NPDES database as the most comprehensive listing of facilities currently available. However, EPA found gaps in these data including the absence of POTWs covered by general permits, POTWs covered by permits issued to municipalities, POTWs from states using an electronic database not compatible with ICIS, and very small POTWs for which no data has been entered into ICIS. In many cases, the existing data entry is incomplete. For example, the POTW may collect nutrient effluent data, even though the NPDES permit does not require the POTW to do so; such data is typically not included in the ICIS database because there is not a requirement to do so. Similarly, influent and in-plant data are not reported in ICIS. Most of the other data sources in Table 4-1, such as CWNS, derived facility information from ICIS, and therefore reflect a subset of those POTWs identified in ICIS. In all other cases the data source is explicitly identified as a subset of POTWs. EPA used information from ICIS-NPDES and the state-submitted lists to develop a draft mailing list of POTWs in the U.S., which EPA assumes will be identical to the population of POTWs in the U.S. Additional evaluation indicates that there are potential duplicates, missing or invalid address information, and inconsistencies between the various data sources. EPA may improve the draft population and mailing list by collecting population information directly from the authorized permitting authority (state or Region), as indicated in Sections 2(a) and 2(c) of this supporting statement. EPA acknowledges that if there are states for which this information is not received, the population of POTWs may not result in a national frame; in this case, the population would only be a reliable frame for those participating states.

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Additionally, while technical information such as POTW treatment technologies is available from the CWNS databases, the most recent of these datasets represent only a small subset of the population of interest. The 2004 CWNS dataset represents a more expansive universe of POTWs; however, that dataset represents information that is potentially out of date with current treatment in-place, and the format of the information does not easily lend itself to the purpose of this study since the data were originally collected for a different purpose and audience.

While information collected through the screener may duplicate some existing information (such as certain data elements already found in ICIS), EPA needs to either confirm the information or update the information that is missing or inaccurate. For example, of the 15,551 facilities identified in ICIS as POTWs for the reporting year 2016, the total facility design flow was missing from 4,666 (or 30 percent) of the facilities. This ICR will allow EPA to develop an industry profile that is both accurate and current for use in further data collection.

## **5. COLLECTION OF INFORMATION IMPACTS TO SMALL BUSINESSES OR OTHER SMALL ENTITIES AND METHODS TO MINIMIZE THE BURDEN**

EPA has taken steps to minimize respondent burden while obtaining sufficient and accurate information. Where possible, the survey provides a limited set of potential responses for respondents to choose from. The questions are phrased with commonly used terminology. Questions requesting similar types of information are arranged together to facilitate review of pertinent records and completion of the screener. EPA revised the screener in response to public comments on this information collection request to minimize respondent burden while ensuring the practical utility of the data as described in Section 8. Specifically, for small businesses, EPA modified the screener to identify small POTWs and direct them to an abbreviated version of the questionnaire consisting of only 17 questions rather than 28. EPA will provide help lines and post a Frequently Asked Questions (FAQs) document to help answer questions respondents might have when registering for or completing the questionnaire.

## **6. CONSEQUENCE TO FEDERAL PROGRAM OR POLICY ACTIVITIES IF THE COLLECTION IS NOT CONDUCTED OR IS CONDUCTED LESS FREQUENTLY AND ANY TECHNICAL OR LEGAL OBSTACLES TO REDUCING BURDEN**

This screener questionnaire is to be voluntary and administered one time only. If this screener questionnaire is not conducted the population of POTWs in the country will not be sufficiently identified and described, and it will not be possible to create a frame, develop a national profile, or conduct future assessments of the national performance of POTWs in achieving nutrient removal.

## **7. SPECIAL CIRCUMSTANCES**

There are no special circumstances. The collection of information is conducted in a manner consistent with the guidelines in 5 CFR 1320.6.

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## **8. PUBLICATION OF THE FEDERAL REGISTER NOTICE AND PUBLIC RESPONSE**

### **8(a) Federal Register Notice Publication**

EPA published a notice in the Federal Register on September 19, 2016, announcing the Agency's intent to submit a request for a new ICR and to collect comments on a draft initial questionnaire and the draft mailing list of POTWs in the U.S. The notice included a description of the entities to be affected by the proposed questionnaire, a brief explanation of the need for the questionnaire, identification of the authority under which the questionnaire will be issued, and an estimate of burden to be incurred by questionnaire respondents. The Agency requested comments and suggestions regarding the questionnaire and draft mailing list and the reduction of data collection burden.

Pursuant to section 3506(c)(2)(A) of the Paperwork Reduction Act, EPA solicited comments and information to enable it to:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility.
2. Evaluate the accuracy of the Agency's estimate of burden of the proposed collection of information, including the validity of the methodology and assumptions used.
3. Enhance the quality, unity, and clarity of the information to be collected.
4. Minimize the burden of the collection of information on those who are to respond.

EPA received 60 comments from 46 entities in response to the Federal Register Notice. Three additional entities emailed comments to EPA following the close of the public comment period. The comments received and EPA's responses are summarized below:

- Several comments questioned the need for the study and the use of 308 authority and also expressed concerns about the included Certification Statement. EPA has revised the National Study to make the screener questionnaire voluntary, and a Certification Statement is no longer included. Both of these revisions reduce the burden of this ICR.
- A few comments suggested additional types or groups of POTWs to consider for receipt of an abbreviated screener questionnaire, or to be excluded from the study entirely. In response, EPA has designed the screener questionnaire to identify small POTWs and direct them to an abbreviated screener questionnaire to reduce burden on this population. For example, in Section C of the screener questionnaire, small facilities would only identify whether they monitor for the specified nutrients; respondents are not asked for any measurements or existing monitoring data.

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- Several comments suggested questions to be added to the screener questionnaire. In response, EPA has added questions to collect information on chemical oxygen demand (COD), carbonaceous biochemical oxygen demand (cBOD), and total suspended solids (TSS) influent concentrations and seasonal variation in flow data.
  - Several commenters suggested revisions to important aspects of the screener questionnaire instructions. In response, EPA has modified wording from using “best engineering estimates” to “best professional judgement”, removed confusing diagrams, and revised overall instructions for clarity.
  - Several comments suggested additions to the glossary or revisions to definitions. EPA has revised the Acronyms list as well as the terms and definitions included in the Glossary based on some of these comments as well as overall adjustments to the screener questionnaire content.
  - For questions in Section A: Eligibility Confirmation, comments noted the additional options presented in the follow up question to Question 1 were confusing. In response, EPA removed this follow up question. Comments also suggested revised wording for Questions 2 and 3 and EPA has since made these revisions. Further, EPA is using a registration link to avoid ineligible respondents from proceeding to the questionnaire.
  - In Section B: POTW Identification, comments suggested multiple possible revisions to collecting facility identification numbers (e.g., FRS ID number, NPDES ID number). EPA has revised the login and registration process for the electronic version of the screener questionnaire to request this information prior to this point. Also, respondents are no longer asked to provide their POTW’s Facility Registry Service (FRS) ID number.
  - Multiple comments were submitted on Section C: POTW Operations and Treatment Characteristics. In response, EPA has revised this section of the screener questionnaire. A synopsis of the major changes follows:
    - Respondents are now asked to specify if their POTW is considered a package plant.
    - Respondents are now asked whether they continuously discharge or operate controlled discharge and are given more flexibility in the types flow measurements permitted. Respondents are no longer asked to supply specific information on infiltration and inflow.
    - Respondents are now asked for seasonal operational temperatures instead of seasonal design temperatures.
    - Respondents are no longer required to provide their specific number of outfalls or the types and amounts of wastewater discharged through each outfall.



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On October 20, 2016, EPA mailed a letter to all facilities included on the mailing list included in the first Federal Register Notice announcing the study and the public comment period. Between November 2016 and January 2017, EPA received 38 completed copies of the screener questionnaire, even though EPA was not at that time requesting facilities to complete the questionnaire. EPA also received several hundred phone calls, which requested a shorter and more simple survey for the smaller facilities. Based on a review of these responses, EPA modified screener questionnaire content for clarity.

### **8(b) Consultations**

The Engineering and Analysis Division (EAD) of EPA's Office of Water has conducted initial consultations with individuals in the POTW industry and its trade associations and consultants to solicit their input on the need and use of a survey effort. From July 18, 2016 through August 2, 2016, EAD discussed the general study design including but not limited to representatives of the National Association of Clean Water Agencies (NACWA), Water Environment Federation (WEF), Water Environment Research Foundation (WERF), Association of Clean Water Administrators (ACWA), the National Rural Water Association (NRWA), and the Environmental Council of the States (ECOS).

EPA published a Federal Register Notice on September 19, 2016 announcing the planned data collection. Since the first Federal Register Notice, EPA has continued meeting with the stakeholders listed above. EPA participated in the following meetings:

- March 29, 2017 and April 13, 2017 conference calls with representatives from NACWA.
- March 30, 2017 conference call with representatives from ACWA.
- August 22, 2017 Annual Meeting with ACWA.
- June 26, 2017 and again on June 5, 2018, for annual in-service training with NRWA.

The first three discussions focused on specific revisions to questions found in Section C of the screener questionnaire to reduce respondent burden and improve clarity. Participants also expressed ideas for opportunities to provide technical support to respondents and helped gauge possible impacts of the results from this study.

EPA also conducted two site visits to POTWs in Lovettsville, Virginia and Poolesville, Maryland. Industry representatives encouraged EPA to include small POTWs in the National Study, but also requested that the survey be kept simple for such respondents. The screener questionnaire has a reduced number of questions for small POTWs.

## **9. PAYMENT OR GIFT TO RESPONDENTS**

No payments or gifts are provided to respondents.

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## **10. ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS AND THE BASIS FOR THE ASSURANCE IN STATUE, REGULATION, OR AGENCY POLICY**

EPA does not anticipate that any of the information collected in the screener questionnaire will be claimed as Confidential Business Information (CBI) because:

- The information being requested is unlikely to cause substantial harm to most POTW's competitive position because the primary population of interest consists of publicly owned facilities;
- The same type of information has already been reported by a small subset of POTWs in other venues such as ICIS and CWNS;
- Information more detailed than that requested in the collection has already been provided in publicly available case studies;
- Effluent data cannot be claimed as CBI;
- It is unlikely that POTWs will have taken measures to protect the confidentiality of the basic information solicited in this questionnaire; and
- The information is reasonably obtainable without the business's consent by use of legitimate means.

## **11. QUESTIONS OF A SENSITIVE NATURE**

No sensitive questions pertaining to private or personal information, such as sexual behavior or religious beliefs, will be asked in the screener, or as part of any contacts to state or small municipality associations.

## **12. ESTIMATES OF RESPONDENT BURDEN FOR THE INFORMATION COLLECTION**

Each respondent will receive a cover letter providing a URL to register for the screener questionnaire as well as instructions to follow if the respondent cannot access the questionnaire online. In addition, EPA has coordinated with WEF, NACWA, ACWA, and NRWA to obtain their support of this information collection. Thus, the weblink for the screener registration will be provided through the trade association newsletters including WEF and NACWA, from the state organizations working in collaboration with EPA including ACWA and NRWA, conferences, and webpages. Some states have committed to send out a letter to each POTW, indicating the state's support and encouraging participation. The screener questionnaire will include the screener purpose, general instructions, and glossary. It will also make clear that the collection is voluntary. The Introduction section provides the purpose and use of the questionnaire, e-mail/helpline information, and information on how to submit or return the completed questionnaire. The General Instructions section will give the respondent guidance on completing the responses. The Glossary provides respondents with all pertinent definitions and acronyms to understand and complete the questionnaire sections.

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The mailing list assembled from ICIS and state sources has identified 18,600 facilities, and the outreach identified above may elicit additional respondents. Thus, EPA estimates the target population to consist of 16,000-20,000 facilities based on its experience and understanding of the industry. The respondents would review the instructions to understand the questionnaire. Other respondent activities will include consulting records and reviewing plant information regarding population served, flow rates, and influent and effluent nutrient concentrations (as available for the calendar year 2017). It is expected that the respondent will have general knowledge of the treatment plant technologies and operations in place, discharge status, and types of wastewater accepted. They will also have to compile and review information and complete the questionnaire. The respondents will be requested to submit the completed questionnaire to EPA online or through the mail. The respondents are encouraged to retain a copy of the completed questionnaire for up to two years in the event that EPA has to contact the facility for clarification of any response. There will be no need for the respondents to maintain any new records because this is a one-time information collection effort, and the screener questionnaire does not request any new data be collected.

### **12(a) Estimate of Respondent Hour Burden**

For the purpose of estimating the burden, EPA estimates the target population to consist of 18,600 facilities based on the most current mailing list. The burden to respondents includes the time necessary to read through all instructions and questions, gather data, transfer data to the questionnaire, and review/check the responses. The burden also includes time to answer a small number of follow-up questions from EPA to clarify information submitted on the survey. The questionnaire is expected to be completed by the treatment plant operator and reviewed by an operations manager. The burden estimates reflect the assumption that the treatment plant operator will devote their time to reading instructions, gathering information and completing the survey form; the operations manager will devote their time to reading instructions, and reviewing survey responses. EPA is assuming that 80 percent of POTWs will respond to the screener – 5 percent will complete only Section A of the questionnaire (regarding eligibility) and 75 percent will complete all screener sections. For purposes of estimating the burden, EPA did not distinguish between the lower burden for small POTWs using the shorter version of the questionnaire.

EPA estimates the total burden for the screener to be approximately 49,755 hours. For the purpose of estimating the burden of completing this screener, EPA assigned burden estimates for the various anticipated activities. Table 12 -3 presents a summary of the average hourly and total burden by labor category associated with the screener for the 75 percent of respondents who are estimated to complete all sections of the screener and for the 5 percent of respondents who are estimated to complete only Section A of the screener related to eligibility. Table 12 -4 presents a summary of the total burden by labor category associated with the screener.

**Table 12-3. Estimated Respondent Burden by Activity and Respondent Category**

Activity	Respondent Category and Burden (Hours)		
	Plant Operator	Plant Manager	Total Burden per Activity
<b>Respondents Completing the Full Screener Questionnaire</b>			
Review instructions	0.25	0	0.25
Gather data	1.00	0.00	1.00
Complete the screener	1.75	0.00	1.75
Review	0.00	0.50	0.50
<b>Total</b>	<b>3.00</b>	<b>0.50</b>	<b>3.50</b>
<b>Respondents Completing Only Section A of the Screener Questionnaire</b>			
Review instructions	0.25	0.00	0.25
Complete Section A	0.25	0.00	0.25
Review	0.00	0.50	0.50
<b>Total</b>	<b>0.50</b>	<b>0.50</b>	<b>1.00</b>

**Table 12-4. Total Estimated Respondent Burden Hours for the Screener Questionnaire**

Activity	Estimated Number of Respondents	Plant Operator Hours	Plant Manager Hours	Estimated Total Hours of Respondent Burden
Complete Part A only	930	465	465	930
Complete full screener	13,950	41,850	6,975	48,825
<b>Total Burden</b>	<b>14,800</b>	<b>42,315</b>	<b>7,440</b>	<b>49,755</b>

**12(b) Estimate of Respondent Labor Costs**

EPA obtained mean labor rates for the POTW industry and Civil Engineers from the May 2016, U.S. Department of Labor, Bureau of Labor Statistics website. presents the labor data for 2016 (the latest year for which data are available) for the labor categories used for the burden estimates.

**Table 12-5. 2015 Labor Rate Data**

Job Category	WWT Plant Operator <sup>1</sup>	Operations Manager <sup>2</sup>	Civil Engineer <sup>3</sup>
Mean Hourly Earnings (\$/hour)	29.32	56.54	59.02

<sup>1</sup> Wastewater treatment plant operator unloaded mean hourly wage of \$22.55/hour times 1.3 loading = \$29.32/hour. EPA assumed a 30 percent increase for overhead and benefits.

<sup>2</sup> Operations manager unloaded labor rate of \$43.49/hour times 1.3 loading = \$56.54/hour.

<sup>3</sup> Civil engineer unloaded labor rate of \$45.40/hour times 1.3 loading = \$59.02/hour; EPA assumed that any state or small municipality association contacts would have a background in civil engineering.

Source: May 2016 National Occupational Employment and Wage Estimates for NAICS code 22130 Water, Sewage, and Other Systems for occupation codes 51-8031 (water and wastewater treatment plant and systems operators), 11-9199 (managers, all other), and 17-2051 (civil engineers). [https://www.bls.gov/oes/current/naics4\\_221300.htm](https://www.bls.gov/oes/current/naics4_221300.htm).

The direct labor cost to respondents to complete the questionnaire equals the time required to read through and understand all of the instructions, gather data, transfer it to the questionnaire, and review/check the responses. EPA anticipates minimal non-labor costs as discussed in item 13.

EPA calculated the estimated respondent burden for completion of the screener questionnaire using the estimated total response time per activity shown in Table 12-4 and the labor rates shown in to calculate a total cost of \$39,921 for Part A only and \$1,621,178 for the full screener as shown in Error: Reference source not found.

Activity	Plant Operator Total Labor Costs	Plant Manager Total Labor Costs	Total Labor Burden (Dollars)
Complete Part A only	\$13,631	\$26,290	\$39,921
Complete full screener	\$1,226,833	\$394,346	\$1,621,178
<b>Total</b>	<b>\$1,240,464</b>	<b>\$420,635</b>	<b>\$1,661,100</b>

### **13. TOTAL ANNUAL COST BURDEN TO RESPONDENTS OR RECORDKEEPERS RESULTING FROM THE COLLECTION OF INFORMATION**

#### **13(a) Estimating Capital/Start-up Operating and Maintenance Costs**

EPA estimates there will be minimal other direct costs associated with responding to the screener. All of the information requested in the screener should be available from existing plant records and/or monitoring. Plants are not required to collect and analyze additional samples to respond to the screener.

Other costs for completing the questionnaire include printing/duplication, shipping for those respondents that are unable to respond to the online screener, and phone costs for calling the helpline if needed. EPA has assumed that 1 percent of the respondents will respond with a

mailed response as opposed to the online submittal. Most respondents will complete an online screener questionnaire, which will reduce burden and ensure efficient transfer of data. EPA assumes the respondents will incur a printing rate of \$0.10 per page for a paper copy for use as a working copy or a hardcopy file. EPA also assumes that any POTWs submitting a paper screener will return the completed questionnaire via Federal Express or a comparable delivery carrier that requires a signature to acknowledge receipt. EPA assumes that 10 percent of respondents will contact the helpline via phone for 30 minutes or less.

Table 13 -6 presents the estimated Other Direct Costs for respondents related to the screener questionnaire.

**Table 13-6. Total Other Direct Costs for the Screener Questionnaire**

Number of Respondents	Total Printer/Photocopying Cost <sup>1</sup>	Total Shipping Cost <sup>2</sup>	Total Telephone Cost <sup>3</sup>	Total
14,880	\$29,760	\$744	\$2,232	\$32,736

<sup>1</sup> Assumes printing of 20 pages; \$0.10/page print cost.

<sup>2</sup> Assumes 1 percent (or 149 respondents) of POTWs will send in a paper screener questionnaire via Federal Express (or another shipper with tracking). Assumes \$5.00 shipping fee/package.

<sup>3</sup> Assumes 10 percent of respondents will contact the helpline via phone with a question, that any telephone time will be less than 30 minutes and assumes \$0.05/minute.

### **13(b) Annualizing Capital Costs**

EPA estimates that there will be no capital costs associated with responding to the screener or participating in EPA/contractor contacts.

## **14. ANNUALIZED COST TO THE FEDERAL GOVERNMENT**

Table 14 -7 presents an estimate of the burden and labor costs that EPA will incur to administer the screener. The table identifies the collection administration tasks to be performed by EPA employees and contractors, with the associated hours required for each grouping of related tasks. EPA determined Agency labor costs by multiplying Agency burden figures by an average hourly Agency labor rate (\$42.28/hour) for technical and managerial support using the Salary Table 2016-GS from the U.S. Office of Personal Management. This table can be found at the Web site [https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2016/GS\\_h.pdf](https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2016/GS_h.pdf). The government employee labor rates are \$35.38 per hour for technical (GS-13, Step1) and \$49.18 per hour for managerial (GS-15, Step 1). EPA determined contractor labor costs by multiplying contractor burden figures by an average contract labor rate of \$95 per hour. This rate is consistent with current Agency contracts.

For EPA and contractor O&M costs, EPA assumed mailing a cover letter announcing the screener questionnaire and long-distance phone charges for follow-up calls to respondents as follows:

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For mailing costs, EPA assumed a letter announcing the screener questionnaire would be mailed to up to 18,600 POTWs by U.S. mail. EPA assumes an additional Federal Express letter would be sent to 149 POTWs unable to complete the screener questionnaire online (assuming that 1 percent of the respondents would need to respond with a paper survey). The U.S. postage rate is \$0.50 and the per letter Federal Express rate is \$3.65/package (2-day standard delivery; includes tracking) for a total of \$9,944.

For long-distance phone charges for EPA's contractor related to follow-up calls to respondents to clarify responses and to answer helpline questions, EPA assumed contacts would be made to 20% of the 14,880 respondents and used an average call length of 30 minutes and \$0.05/minute rate for long-distance phone charges of \$4,464.

Table 14 -8 and Table 14 -9 summarize the total costs that the industry and the Agency will incur as a result of the ICR.

**Table 14-7. Estimated Agency Burden and Labor Costs**

Activities	Burden (hours)			Labor Cost		
	Agency	Contractor	Total Hours	Agency (\$42.28/hr)	Contractor (\$95/hr)	Total Cost
Design sampling approach	500	2,000	2,500	\$21,140	\$190,000	\$211,140
Develop final mailing list database						
Develop a system to track mailing/e-mailing and receipt activities						
Mail questionnaire files						
Develop and maintain helpline	120	300	420	\$5,074	\$28,500	\$33,574
Maintain response tracking system	500	2,000	2,500	\$21,140	\$190,000	\$211,140
Review responses and assess potential for bias due to missing data						
Engineering follow-up to address non-response as necessary and to clarify responses to questionnaires						
Develop database for housing all responses	40	500	540	\$1,691	\$47,500	\$49,191
Upload and verify data						
<b>Total</b>	<b>1,160</b>	<b>4,800</b>	<b>5,960</b>	<b>\$49,045</b>	<b>\$456,000</b>	<b>\$505,045</b>



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**Table 14-8. Total Estimated Respondent Burden and Cost Summary**

<b>Number of Respondents</b>	<b>Total Burden (Hours)</b>	<b>Total Labor Cost</b>	<b>Total O&amp;M Cost</b>	<b>Total Cost</b>
14,880	49,755	\$1,661,100	\$32,736	\$1,693,836

**Table 14-9. Total Estimated Agency Burden and Cost Summary**

<b>Total Burden (Hours)</b>	<b>Total Labor Cost</b>	<b>Total O&amp;M Cost</b>	<b>Total Cost</b>
5,960	\$505,045	\$14,308	\$519,353

EPA estimates that the total burden to the industry for responding to the screener, and contacts will be approximately 49,755 hours, or \$1,694,000 (including labor and O&M costs). EPA estimates that there will be no start-up or capital costs associated with completing the screener.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems to collect, validate, and verify information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel 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 in 40 CFR part 9 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID No. EPA-HQ-OW-2016-0404, which is available for public viewing at the Water Docket in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. An electronic version of the public docket is available through the Federal Data Management System (FDMS) at <http://www.regulations.gov>. Use FDMS to view and submit public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. Once in the system, select "Advanced Search" then key in the Docket ID number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17<sup>th</sup> Street, NW, Washington, DC. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID No. (EPA-HQ-OW-2016-0404) in any correspondence.

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## **15. REASON FOR ANY PROGRAM CHANGES OR ADJUSTMENTS IN BURDEN ESTIMATES FROM THE PREVIOUS APPROVED ICR**

Since this is a one-time information collection, there are no changes to the information collection since the last OMB approval.

## **16. COLLECTION OF INFORMATION WHOSE RESULTS WILL BE PUBLISHED**

### **16(a) Technical Analyses Supported by the Questionnaire**

EPA will analyze the identification and characterization data gathered by the questionnaire to clearly describe the population of POTWs in the U.S. Due to the large number of POTWs, it is possible that more detailed data collection efforts will need to be done in the future for subsets of the POTWs identified by this questionnaire. Specific analyses using the questionnaire data are described below.

#### **Identification of the Population of Interest of POTWs in the U.S.**

EPA will use the data provided by the screener and the information provided by states to supplement and/or confirm ICIS data entries to describe the POTWs operating in the U.S., including their names, locations, and facility identification numbers (NPDES ID). Information collected on the ownership type of the treatment plant will distinguish those plants that are part of the population of interest (i.e. POTWs are the population of interest). Information collected on the discharge status (whether the plant discharges directly to a surface water) will also support EPA determinations of plants that are part of the population of interest (i.e. those with an NPDES permit or state equivalent).

#### **Profile of POTWs in the U.S.**

EPA will use the data provided by the screener and phone calls to develop a profile of POTWs in the U.S. The profile will characterize facilities by:

- Location (Street, City, State, Zip code);
- Size (population served and flow);
- Influent wastewater types (residential, commercial, industrial, other);
- Collection system type (separate and/or combined sewer collection systems);
- Level of treatment (primary, secondary, tertiary/advanced);
- Technology in place (including an indication of whether the plant system is designed or optimized to remove nutrients); and
- Whether influent and/or effluent nutrient concentrations are measured by the facility. Note: no new or additional measurement values will be necessary for a facility to collect under this ICR, rather this ICR will request only values that have already been collected/measured by the respondent.

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### 16(b) Collection Schedule

The specific dates for distribution, response receipt, and data collection activities for the screener have not yet been established but will include the activities in Table 16 -10.

**Table 16-10. Collection Schedule**

Activity	Estimate of Schedule
EPA to send screener cover letter to recipients	October 2018
POTWs complete screener	1 month following receipt
EPA conducts analysis of need for screener follow-up	3 months
EPA analyzes screener responses and creates database	6 weeks

### 16(c) Publication of Results

EPA will publish the results of the study through its website:  
<https://www.epa.gov/eg/national-study-nutrient-control-and-water-treatment-technologies>.

### 17. DISPLAY OF THE EXPIRATION DATE FOR OMB APPROVAL OF THE INFORMATION COLLECTION

The Agency plans to display the expiration date for OMB approval of the information collection on all instruments.

### 18. CERTIFICATION FOR REDUCTION ACT SUBMISSIONS

The Agency is able to comply with all provisions of the Certification for Paperwork Reduction Act Submissions.

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## **PART B OF THE SUPPORTING STATEMENT**

### **1. QUESTIONNAIRE RATIONALE**

EPA has chosen to conduct a survey of all wastewater treatment and/or water resource recovery facilities. The intended population of interest includes wastewater treatment plants (WTPs), sewage treatment plants, water resource recovery facilities (WRRFs), and publicly owned treatment works (POTWs). Each of these terms is used here to refer to the same general type of facility. Throughout this supporting statement, wherever the text refers to POTW, the other terms are similarly implied. EPA has chosen to conduct a voluntary survey based on feedback from the intended recipients and the overall goals of the study. Technical voluntary surveys often have a low response rate. However, this voluntary questionnaire is expected to provide a sufficient number of responses to profile the industry because (1) POTWs have already expressed interest in how other POTWs are operated and what other POTWs have achieved; (2) EPA is collaborating with industry trade groups to promote the completion of the screener questionnaire, and (3) EPA will be working with states to advertise the survey and encourage participation.

There may be response bias towards the largest facilities, and a non-response bias of the smallest facilities. There may also be bias in select geographical zones. To the extent this questionnaire is useful to create a frame for future data collection efforts, the resulting data from this survey is unlikely to capture all “small” facilities. ICIS will provide a more complete national database of all NPDES permittees as EPA and states continue to implement the electronic NPDES reporting rule. Therefore, EPA could use the ICIS required data elements for POTWs including size (flow) and location to validate the extent of non-response bias in size or geographical zones.

The primary objective of this questionnaire is to collect basic information from facilities, with an emphasis on characteristics, processes, and technologies that address nutrient removal. The questionnaire will serve to fill in the information gaps present in current databases. Questions will be designed to characterize these facilities in terms of size, discharge status, wastewater sources, and treatment technology in place.

#### **1(a) Population of Interest**

EPA intends to use this questionnaire to build a working database that will inform further and more detailed analyses in the future. EPA estimates the target population to consist of 18,600 facilities. The population of interest are those treatment facilities that meet the following criteria:

- A POTW is defined under 40 CFR section 403.3(q) as “a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant.”
  - o CWA Section 502(3): The term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam,

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American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

o CWA Section 502(4): The term "municipality" means a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 1288 of this title.

- Discharge from the treatment works is authorized under an individual or general NPDES permit (meaning the intention is to capture POTWs with regulated discharges). A facility that does not discharge to waters of the U.S. would not be included in the population.
- Federally and privately owned plants are **not** included in the population.
- Facilities that function solely as dedicated flow control entities such as Combined Sewer Overflows (CSOs) and Sanitary Sewer Overflows (SSOs) are **not** included in the population. A treatment works with one or more of these flow control functions would be considered as in the population.

More simply stated, the population of interest are all POTW facilities located in the United States that discharge to receiving waters. This includes tribally owned facilities, but does not include federally owned or privately owned facilities, and does not include dedicated flow control entities (i.e. CSOs and SSOs).

### **1(b) Response rate/Non-response**

This questionnaire will be a voluntary data collection. The cover letter and instructions for the questionnaire will explain the reasons for the questionnaire. EPA will continue to work with POTWs, states, and the major industry associations in an effort to build cooperation and promote a high response rate. It is difficult to estimate the response-rate. Voluntary surveys of a technical nature often have a low response rate. However, this voluntary questionnaire is expected to provide a sufficient number of responses to profile the industry because POTWs are interested in and will benefit from the information collection, and EPA will be working with states and industry trade groups to promote the completion of the screener questionnaire. EPA has received phone calls and comments to its webinars demonstrating support of the study by POTWs. For these reasons, EPA anticipates a 50 to 80 percent response rate, and to provide conservative estimates of the burden of this data collection, has used the 80 percent response rate as an upper bound.

To minimize item non-response, EPA solicited comments on a draft questionnaire and worked closely with industry experts to refine questions so that they are easy to understand with clearly defined and familiar terms, are formatted in a logical sequence, and request data that are readily available within the industry. In this manner, EPA expects to minimize inaccurate or incomplete responses to questions that can occur due to misunderstanding, misinterpretation, and/or the unintentional skipping of questions by respondents.

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## **2. COLLECTION OF INFORMATION**

### **2(a) Stratification/Sample Selection**

No stratification or sampling scheme has been designed nor determined to be necessary at this point. The main data sources include:

- Integrated Compliance Information System-National Pollutant Discharge Elimination System (ICIS-NPDES) database as of June 2017.
- Mailing lists obtained from individual states.

Part A, Table 4-2 lists the available data sources in table format with greater detail.

## **3. ESTIMATION PROCEDURE**

No estimation of parameters is needed.

## **4. ACCURACY/PRECISION**

No estimation of parameters is needed. Accuracy and precision concerns are not an issue at this point in the study.

## **5. SPECIALIZED SAMPLING PROCEDURES**

No special sampling procedures are planned for this questionnaire.

## **6. DATA COLLECTION**

This will be a single incident data collection; no periodic data collection is planned at this stage. Under this ICR, EPA intends to conduct a POTW screener questionnaire, and contact state and small municipality associations. The collection methods for each of these efforts are detailed below.

### **Screener Questionnaire**

EPA will collect information from the screener questionnaire online. The collection method will include mailing of a cover letter and instructions to each POTW. The questionnaire instructions will explain where and how to access the online questionnaire. The responses will be stored in an electronic database. For those respondents without internet access, the cover letter will inform the respondent on how to request a paper survey that can then be completed and mailed to EPA's contractor for input into the questionnaire database. EPA may follow-up with facility contacts if information provided by a respondent is unclear or appears incomplete.

### **Contacts to States and Municipality Associations**

EPA or its contractor may conduct up to 100 phone or email contacts with various state and/or municipality associations to collect information that will support the development of the POTW universe and profile. EPA or its contractor may follow-up with phone contacts to states

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or small municipality associations to clarify or confirm any previous statements or information provided.

### **Contacts to States to Develop POTW List**

EPA has created the list of POTWs and their mailing address and facility contact information from data provided by each NPDES-authorized state or EPA Regional office (if the state does not have NPDES program authorization) to determine the population to receive the POTW questionnaire. This information will continue to be compiled and collected under both the NPDES Program (Renewal) ICR (EPA ICR No. 0229.22) and updated for this ICR.

## **7. RESPONSE RATE/NON-RESPONSE/DATA UTILITY**

### **7(a) Response Rate**

This questionnaire is a voluntary survey. The cover letter will explain the reasons for the questionnaire and encourage the recipient to respond. EPA will work with state and trade associations to foster cooperation and promote high response rates. EPA has no basis on which to estimate a response rate, but due to the partnerships and industry involvement in developing this study, EPA projects a 50 to 80 percent response rate.

### **7(b) Non-response**

To minimize item non-response, EPA's subject matter experts have worked closely with industry to develop questions that are easy to understand with clearly defined and familiar terms, are formatted in a logical sequence, and request data that are readily available within the industry. EPA has conducted multiple webinars to demonstrate the survey and has received 38 draft questionnaires and several phone calls from public entities that self-selected to test the survey. In this manner, EPA expects to minimize inaccurate or incomplete responses to questions that can occur due to misunderstanding, misinterpretation, and/or the unintentional skipping of questions by respondents. EPA anticipates there is potential for non-response due to outdated or incorrect mailing addresses, minimal staff at small facilities, and lack of awareness of the overall project goals and potential benefits to POTWs. To help reduce the number of POTWs that choose not to complete the questionnaire, EPA is encouraging state certification boards to offer CEUs for operators completing the survey. Not all states have such certification bodies; however, EPA has initiated developing such an incentive with the assistance of NRWA and WEF. After EPA has received responses, EPA will assess the non-response rate and determine whether there is any potential for bias into the subsequent data collection efforts and analysis.

### **7(c) Burden Reduction**

EPA designed the questionnaire to include burden-reducing features. It contains initial screening questions that direct respondents that do not qualify as a POTW to indicate their status and then submit their response without the need to respond to the remaining questions. Those facilities that do not have a NPDES permit or do not discharge would be directed to skip the subsequent questions. The questionnaire also groups similar topic questions together and offers

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drop-down menu selection to simplify responses, thus minimizing the number of text responses requiring input.

The questionnaire consists of 28 questions and should not require a burden of more than 3.3 hours for each respondent to complete, verify, and submit (on average). EPA will implement the survey online which will facilitate access and completion. For those respondents without internet access, the cover letter and instruction packet will inform the respondent on how to request a paper survey that can then be completed and mailed to EPA's contractor for input into the questionnaire database. EPA therefore concludes that completing the questionnaire does not represent an overly burdensome task.

#### **7(d) Data Utility**

The data collected in this questionnaire will serve to update current information, fill in missing data, and profile the universe of POTWs with sufficient information to support future review and data collection.

### **8. TESTS OF PROCEDURES**

EPA does not intend to pre-test the questionnaire. For more than 30 years, EPA's Engineering and Analysis Division (EAD) has conducted surveys of numerous industrial sectors to collect information to support regulation development activities in the effluent guidelines program. While EPA develops different questionnaires for each industry, there are common elements for all industries. The questionnaires collect the same basic data such as information about processes, treatment, and financial status. Thus, when EPA develops a questionnaire for a particular industry, it generally tailors the questions for specific terms and processes used by that industry. In past years, EPA has relied predominantly on active participation by trade groups and their members in reviewing the questionnaires. In EPA's experience, such collaboration generally tends to better reflect the industry at large than pre-tests. As discussed in Part A of this supporting statement, EPA has already engaged several trade associations and industry experts regarding this data collection. EPA expects to continue to discuss and refine this questionnaire with industry experts. For this reason, EPA considers additional review through the pre-test process to be unnecessary for this industry.

### **9. CONTACT INFORMATION**

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