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**Information Collection Request for  
Contaminant Occurrence Data  
in Support of EPA's Second Six-Year Review of  
National Primary Drinking Water Regulations**

August 2006

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## ACRONYMS

AMWA	Association of Metropolitan Water Agencies
AWWA	American Water Works Association
ASDWA	Association of State Drinking Water Administrators
CDX	Central Data Exchange
CFR	Code of Federal Regulations
CMR	Chemical Monitoring Reform
CWS	Community Water System
DQO	Data Quality Objective
EPA	Environmental Protection Agency
FR	Federal Register
FTE	Full Time Equivalent
FTP	File Transfer Protocol
ICR	Information Collection Request
MCL	Maximum Contaminant Level
mg/L	Milligrams per Liter
NAICS	North American Industry Classification System
NCOD	National Contaminant Occurrence Database
NPDWR	National Primary Drinking Water Regulation
NTNCWS	Non-transient Non-community Water System
O&M	Operation and Maintenance
OMB	Office of Management and Budget
PRA	Paperwork Reduction Act
PWS	Public Water System
PWSID	Public Water System Identification Number
PWSS	Public Water System Supervision
QA/QC	Quality Assurance/Quality Control
RFA	Regulatory Flexibility Act
SBA	Small Business Administration
SBREFA	Small Business Regulatory Enforcement Fairness Act
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
TCR	Total Coliform Rule

# 1 IDENTIFICATION OF THE INFORMATION COLLECTION

## 1(a) Title and Number of the Information Collection

Title: Information Collection Request for Contaminant Occurrence Data in Support of EPA's Second Six-Year Review of National Primary Drinking Water Regulations

OMB Control Number: 2040-NEW

EPA Tracking Number: 2231.01

## 1(b) Short Characterization

The Safe Drinking Water Act (SDWA), as amended in 1996, requires that the U.S. EPA review existing National Primary Drinking Water Regulations (NPDWRs) no less often than every six years. This cyclical evaluation is referred to as the "Six-Year Review of National Primary Drinking Water Regulations" or, simply, the "Six-Year Review." Through the Six-Year Review process, EPA reviews and assesses risks to human health posed by regulated drinking water contaminants. For the first Six-Year Review cycle (1996–2002), EPA reviewed 68 chemical NPDWRs and the Total Coliform Rule (TCR), which were promulgated prior to the 1996 Amendments. The occurrence assessments conducted for the first Six-Year Review were based on compliance monitoring data from 1993 to 1997, which were provided by States. EPA published the results of this review in the July 18, 2003, edition of the Federal Register (68 FR 42907–42929).

EPA is issuing this Information Collection Request (ICR) as a one-time request for States to submit historical regulated monitoring data on a voluntary basis to EPA during the 2007 and 2008 timeframe. To comply with the 1995 Amendments to the Paperwork Reduction Act (PRA), this ICR estimates the potential cost to States for data submission across the 3-year ICR period of 2007-2009.

EPA's Office of Water is requesting that States<sup>1</sup> submit compliance monitoring data for community water systems (CWSs) and non-transient non-community water systems (NTNCWSs). EPA is requesting contaminant occurrence data from 1998 to 2005 for all regulated chemical and radiological contaminants, as well as data from the TCR. EPA anticipates that the compliance monitoring records from this information collection (including all results for analytical detections and non-detections) will provide the data needed to conduct statistical estimates of national occurrence for each regulated contaminant. These national occurrence estimates will be used to support EPA's review of existing regulations, and the Agency's decision on whether any revisions are needed. In addition, the 1996 SDWA section 1445(g) requires the Agency to maintain a national drinking water contaminant occurrence

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<sup>1</sup> Throughout this document, the terms "State" or "States" are used to refer to the 56 States and territories.

database (i.e., the National Contaminant Occurrence Data (NCOD)) using occurrence data for both regulated and unregulated contaminants in public water systems (PWSs). This data collection will provide new occurrence data on regulated contaminants to maintain the NCOD.

States can submit data using a designated, secure file transfer protocol (FTP) site. After receiving the data, EPA will conduct the necessary data review, editing, and quality assurance/quality control (QA/QC) across all State data sets to allow uniform assessments across all the data sets, and allow subsequent data management and analysis to provide an overview of occurrence estimates at the national level. States will be provided with the edited data and/or the log of the edits that were applied to the data prior to posting and storage of data in the NCOD. Following final QA/QC of data, it will be made available to the public through NCOD.

Although these data submissions are not required of the State agencies, EPA is required to conduct this ICR analysis because more than nine non-Federal entities will be asked to respond to these data requests. Because this is a data request, not a regulation, this ICR will remain separate from the Public Water System Supervision (PWSS) Program ICR, which includes burden and cost estimates for many other administrative activities and information collection requirements of SDWA.

The total annual burden and costs to the 56 potential State respondents associated with this ICR is estimated to be 681 hours and \$30,608 per year over the 3-year ICR period of 2007-2009, or 12.2 hours and \$547 per year per State. All respondent costs are for labor activities associated with the time it takes to read and understand the request for compliance monitoring data, compile and submit existing data in an electronic format, and respond to questions regarding these data. This represents the "cost burden" as reported in the official Office of Management and Budget (OMB) inventory. Note that these costs are for labor; there are no capital costs associated with the activities covered by this ICR. Estimated burden and labor cost varies across States, depending on their current data storage system (i.e., SDWIS/State vs. proprietary data systems) and expected participation levels. No burden to PWSs is associated with this data collection.

Over the ICR years of 2007-2009, EPA is expected to incur an average annual cost of \$231,916 for labor associated with this program, including: extracting or downloading State data; initial data screenings and conversion to uniform structures; communicating and coordinating with States; and data management and analysis.

## 2 NEED FOR AND USE OF THE COLLECTION

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

Through the Six-Year Review process, the Agency reviews and assesses risks to human health posed by regulated drinking water contaminants. Section 1412(b)(9) of SDWA states: "The Administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation promulgated under this title. Any revision of a national primary drinking water regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons." Occurrence data provide information critical to these assessments. Without an understanding of where and at what levels these contaminants are occurring in public drinking water, EPA cannot assess the risk to public health. With this occurrence data, national statistical estimates for occurrence of each regulated contaminant can be conducted.

Section 1445(g)(1) requires EPA to "assemble and maintain a national drinking water contaminant occurrence database, using information on the occurrence of both regulated and unregulated contaminants in public water systems. . ." Section 1445(g)(6) requires that for regulated contaminants, the database (*i.e.*, NCOD) include "information on the detection of the contaminant at a quantifiable level in public water systems." This includes levels which are less than or equal to the maximum contaminant level (MCL) for a specific contaminant. Prior to the establishment of NCOD, only data related to MCL violations was being stored on a national level.

In addition to fulfilling SDWA requirements, there are several reasons for requesting this occurrence data: to date, a national database of the complete records of compliance monitoring for drinking water contaminants does not exist; these records are the best occurrence data available to support the national occurrence assessments necessary for the Six-Year Review 2; this set of data will enable the most direct temporal occurrence comparisons to the compliance monitoring data records collected for Six-Year Review 1 (*i.e.*, complete data records from 1993 to 1997 from the 16 States comprising the 16-State National Cross-Section).<sup>2</sup>

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

This ICR supports the collection of compliance monitoring (contaminant occurrence) data from States for all regulated chemical contaminants and radionuclides, as well as data from the TCR. A list of these contaminants is provided as Exhibit 4-1. These occurrence data will be used to derive detailed statistical estimates of national occurrence of these regulated contaminants. EPA's specific goal in evaluating contaminant occurrence is to estimate the national number of PWSs at which the individual regulated contaminants occur at levels of

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<sup>2</sup> Compliance monitoring data from the 16 states were compiled through two separate submissions of State data. Eight States submitted data for occurrence assessments conducted for the Chemical Monitoring Reform EPA project work conducted in 1997 and 1998. Additional compliance monitoring data were submitted by 8 other States in 2000 and 2001 for EPA's Six-Year Review 1. Collectively these two groups of data comprise the 16-State National Cross-Section data set used for occurrence analyses in the Six-Year Review 1.

health concern, and to evaluate the number of people exposed to these levels. This, in conjunction with other contaminant-specific analyses conducted as part of the Six-Year Review (e.g., health assessment), will provide EPA with information to determine whether or not there is a need to revise a regulation to maintain or provide for greater protection of human health.

The primary user of the information collected under this ICR will be EPA's Office of Water. Other users of this information may include the following:

- Primacy agencies, which include State regulators, Indian Tribes, and, in some instances, EPA Regional Administrators
- PWS managers
- Staff from other EPA programs
- Federal Emergency Management Administration
- Centers for Disease Control and Prevention
- Military bases
- Rural Development Administration/Farmers Home Administration
- Department of Interior
- Department of Housing and Urban Development
- U.S. Army Corps of Engineers
- White House task forces
- American Water Works Association (AWWA)
- Association of Metropolitan Water Agencies (AMWA)
- National Rural Water Association
- National Association of Water Companies
- Association of State Drinking Water Administrators (ASDWA)
- Natural Resources Defense Council
- Consumers Federation of America
- Small Business Administration
- Other environmental and industry groups
- News organizations
- Private industries
- Individuals.



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

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

EPA has made an effort to ensure that data collection activities associated with this ICR are not duplicated. EPA has consulted with ASDWA as part of its efforts to ensure non-duplication of this information collection.

Ten of the States that provided occurrence data for Chemical Monitoring Reform (CMR) or Six-Year Review 1 also included chemical monitoring data for one or more years during 1998 through 2000. EPA will specify that States can omit any previously submitted data sets if they prefer. If it is easier for States to submit their data sets as a whole, rather than filtering the data set for transfer to EPA, States have the option to re-submit data, and EPA will filter duplicate data prior to analysis. In addition, SDWIS contains some inventory-related data elements that EPA is requesting be submitted with each sample result. As discussed in Section 4(b), EPA will give States the option of reporting all requested data elements or having the Agency access inventory data from SDWIS based on the Federal public water system identification (PWSID) number.

Though these monitoring data have already been collected by States to comply with existing regulations, and/or to investigate State and local contamination concerns, this information has not been collected and analyzed at the national level. This data request only targets the transmittal of *existing* electronic data from States to EPA. Thus, the final compilation and analysis of this information is not unnecessarily duplicative of information otherwise available to the Agency.

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

Following public notice of the proposed data collection rule on June 5, 2006 (71 FR 32340), EPA received one public comment during the comment period related to this ICR. The Association of State Drinking Water Administrators (ASDWA) submitted comments addressing concerns that States may have related to the data collection. In summary, the comments from the organization, and EPA responses are as follows:

- The commenter does not support mandatory reporting of occurrence data (beyond the current Lead and Copper Rule requirements) due to limited State resources. The commenter believes that data collection through a properly developed and implemented voluntary ICR is appropriate. EPA plans to conduct this data collection as a voluntary effort. Any possible future changes regarding the collection of drinking water contaminant occurrence data will be handled through a separate public comment process.

- The commenter recommends that EPA make every effort to minimize the effort it takes States to share these data with the Agency, including developing extraction scripts that allow states using SDWIS/State to easily download the occurrence data. In addition, the commenter recommends that EPA accept data in each State's existing format with EPA then undertaking whatever data conversion, edit checks, and transfer tasks that may be necessary to transfer and use the data. EPA agrees with the commenter and plans to allow States to submit the data to EPA in whatever electronic format is most suitable for each State. EPA plans to make every effort possible to minimize burden on the States, including use of extraction scripts for SDWIS/State data, if States agree with this method of data transfer.
- Finally, the commenter believes that EPA should not attribute the data to any particular system in an enforcement context, and that use of the occurrence data for purposes other than those for which the data were intended would be inappropriate, and would tend to discourage participation. EPA agrees with the commenter and plans to use the data for occurrence assessment only.

No changes to the data collection format, or to the cost and burden estimates were suggested or necessitated by these comments.

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

EPA first consulted with stakeholders regarding the Six-Year Review process during its development of a protocol during 1999 and 2000. A summary of the deliberative process and initial approach to occurrence analysis can be found in the docket for EPA's final announcement of the Six-Year Review process on July 18, 2003, entitled: "National Primary Drinking Water Regulations; Announcement of Completion of EPA's Review of Existing Drinking Water Standards" (68 FR 42908).

In 2003, ASDWA conducted a survey of States about their abilities and interest in submitting occurrence data. ASDWA received responses from 32 States. This information helped EPA to gauge which States would be more likely to participate in this data collection. In preparing for Six-Year Review 2, EPA consulted with ASDWA regarding the collection and analysis of States' drinking water data. Specifically, EPA worked closely with ASDWA on the initial design and planning of the data request.

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

EPA is required by SDWA to conduct a Six-Year Review of existing NPDWRs. The information requested under this ICR is being collected on a one-time basis for this Six-Year Review to meet the SDWA statutory requirements.

**3(e) General Guidelines**

This ICR was prepared in accordance with the October 2001 version of the ICR Handbook developed by EPA's Office of Environmental Information, Office of Information Collection, Collection Strategies Division. The ICR Handbook provides the most current instructions for ICR preparation to ensure compliance with the 1995 PRA Amendments and OMB's implementing guidelines.

This data collection is a request, not a requirement, and EPA is taking an approach that minimizes burden to the respondents. In addition, this collection does not violate any of the OMB guidelines for information collection activities.

**3(f) Confidentiality**

This information collection does not require respondents to disclose confidential information.

**3(g) Sensitive Questions**

No questions of a sensitive nature are included in any of the information collection requirements outlined in this ICR.

## **4 RESPONDENTS AND THE INFORMATION**

### **4(a) Respondents and NAICS/SIC Codes**

Data associated with this ICR are collected and maintained by State drinking water agencies. The North American Industry Classification System (NAICS) code for State agencies that include drinking water programs are classified as 92411 (Administration of Air and Water Resources and Solid Waste Management Programs) or 92312 (Administration of Public Health Programs). There will be no burden included for water systems, because systems will not be asked to collect, submit, or review new data, and will not be affected by the States' efforts for the data submission.

### **4(b) Information Requested**

This ICR covers reporting activities that will take place in response to a specific EPA data call-in to State drinking water programs. Though this is not a requirement, the ICR is necessary to estimate reporting burden and costs to the States. This ICR summarizes the data items and respondent activities associated with the reporting effort. All data being called-in are historic (already exist); no States or PWSs will be required to collect any new data. Further, no recordkeeping burden will be imposed on the States as a result of this request (i.e., States are already required to maintain these records as part of NPDWRs).

#### **4(b)(i) Data Items**

EPA is requesting that States voluntarily submit compliance monitoring data for samples collected by CWSs and NTNCWSs during January 1998 through December 2005 for the contaminants listed in Exhibit 4-1. This request only includes existing data that the States have already stored in electronic format. The requested data include analytical detections and non-detections for routine compliance monitoring samples (including repeat and confirmation samples), as well as any special study sampling results that States choose to submit.

Note that although this data collection is not a requirement, certain parameters are essential for the Agency to uphold high standards of data quality and analytical integrity. EPA has identified 17 data elements (see Exhibit 4-2) that the Agency will request that States provide with their sample results. In general, these data elements are based on those used for the Unregulated Contaminant Monitoring Regulation and the first Six-Year Review. Although some of the inventory-related data elements listed in Exhibit 4-2 are available from SDWIS/FED, compliance monitoring data stored and maintained by States typically includes most, if not all, of those data elements. EPA expects that it would be a greater burden for States to remove specific, otherwise available data elements from their compliance monitoring records than to simply submit complete compliance monitoring data sets "as is." However, for States that elect to submit a subset of data, EPA has identified essential data elements (marked in the table with an asterisk) that the Agency needs to most effectively evaluate the occurrence data. If States elect to submit their data with only these data elements, EPA will use the PWSID number to acquire

additional system inventory data from SDWIS/FED (adjusted using information from the 1999 Drinking Water Infrastructure Needs Survey).

<b>Exhibit 4-: Regulated Contaminant Occurrence Data to Be Requested</b>		
<b><i>Chemical Contaminants (Phase I, II, IIB, and V Rules; Arsenic Rule; Lead and Copper Rule)</i></b>		
Acrylamide	1,1-Dichloroethylene	Methoxychlor
Alachlor	cis-1,2-Dichloroethylene	Monochlorobenzene (Chlorobenzene)
Antimony	trans-1,2-Dichloroethylene	Nitrate (as N)
Arsenic	Dichloromethane (Methylene chloride)	Nitrite (as N)
Asbestos	1,2-Dichloropropane	Oxamyl (Vydate)
Atrazine	Di(2-ethylhexyl)adipate (DEHA)	Pentachlorophenol
Barium	Di(2-ethylhexyl) phthalate (DEHP)	Picloram
Benzene	Dinoseb	Polychlorinated biphenyls (PCBs)
Benzo[a]pyrene	Diquat	Selenium
Beryllium	Endothall	Simazine
Cadmium	Endrin	Styrene
Carbofuran	Epichlorohydrin	2,3,7,8-TCDD (Dioxin )
Carbon tetrachloride	Ethylbenzene	Tetrachloroethylene
Chlordane	Ethylene dibromide (EDB)	Thallium
Chromium (total)	Fluoride	Toluene
Copper	Glyphosate	Toxaphene
Cyanide	Heptachlor	2,4,5-TP (Silvex)
2,4-D	Heptachlor epoxide	1,2,4-Trichlorobenzene
Dalapon	Hexachlorobenzene	1,1,1-Trichloroethane
1,2-Dibromo-3-chloropropane (DBCP)	Hexachlorocyclopentadiene	1,1,2-Trichloroethane
1,2-Dichlorobenzene ( <i>o</i> -Dichlorobenzene)	Lead	Trichloroethylene
1,4-Dichlorobenzene ( <i>p</i> -Dichlorobenzene)	Lindane	Vinyl chloride
1,2-Dichloroethane (Ethylene dichloride)	Mercury (inorganic)	Xylenes (total)
<b><i>Radiological Contaminants</i></b>		
Combined Radium-226/228; and Radium-226 & Radium-228 ( <i>if available</i> )	Gross beta	Tritium
	Iodine-131	Uranium
Gross alpha	Strontium-90	
<b><i>Microbiological Contaminants</i></b>		
Total coliforms	Fecal coliforms	<i>Escherichia coli</i> ( <i>E. coli</i> )

<b>Exhibit 4-: Requested Data Elements</b>	
<i>The 9 data elements in bold and marked with an asterisk (*) are needed to most effectively analyze the occurrence data, although ideally, all 17 data elements would be submitted with occurrence data.</i>	
Data Element	Description
<b>Inventory Data</b>	
<b>* Public Water System Identification Number (PWSID)</b>	The code used to identify each PWS. The code begins with the standard 2-character postal State abbreviation or Region code; the remaining 7 numbers are unique to each PWS in the State.
System Name	Name of the PWS.
Federal Public Water System Type Code	A code to identify whether a system is a: <ul style="list-style-type: none"> <li>• Community Water System;</li> <li>• Non-transient Non-community Water System; or</li> <li>• Transient Non-community Water System.</li> </ul>
Population Served	Highest average daily number of people served by a PWS, when in operation.
Source Water Type	Type of water at the source. Source water type can be: <ul style="list-style-type: none"> <li>• Ground water; or</li> <li>• Surface water; or</li> <li>• Ground water under the direct influence of surface water (GWUDI) <b>(see note below)</b></li> </ul> <b>Note:</b> Some States may not distinguish GWUDI from surface water sources. In those States, a GWUDI source should be reported as a surface water source type.
<b>Sample-Specific Information</b>	
<b>* Sampling Point Identification Code</b>	A sampling point identifier established by the State, unique within each applicable facility, for each applicable sampling location (e.g., entry point to the distribution system). This information enables occurrence assessments that address intra-system variability.
Sample Identification Number	Identifier assigned by State or the laboratory that uniquely identifies a sample.
<b>* Sample Collection Date</b>	Date the sample is collected, including month, day and year.
<b>* Sample Purpose</b>	Indicates why the sample is being collected (e.g., compliance/routine, confirmation, duplicate, repeat, special, special duplicate, etc.).
<b>* Sample Analysis Type Code</b>	Code for type of water sample collected. <ul style="list-style-type: none"> <li>• Raw (Untreated) water sample</li> <li>• Finished (Treated) water sample</li> </ul> <i>For lead and copper only:</i> <ul style="list-style-type: none"> <li>• Source</li> <li>• Tap</li> </ul> <i>For TCR Repeats only; indicator of sampling location relative to sample point where positive sample was originally collected:</i> <ul style="list-style-type: none"> <li>• Upstream</li> <li>• Downstream</li> <li>• Original</li> </ul>

<b>Exhibit 4-: Requested Data Elements</b>	
<i>The 9 data elements in bold and marked with an asterisk (*) are needed to most effectively analyze the occurrence data, although ideally, all 17 data elements would be submitted with occurrence data.</i>	
<b>Data Element</b>	<b>Description</b>
* <b>Contaminant</b>	Contaminant name, 4-digit SDWIS contaminant identification number, or Chemical Abstracts Service (CAS) Registry Number for which the sample is being analyzed.
* <b>Sample Analytical Result - Sign</b>	The sign indicates whether the sample analytical result was: <ul style="list-style-type: none"> <li>• (&lt;) "less than" means the contaminant was not detected or was detected at a level "less than" the minimum reporting level (MRL).</li> <li>• (=) "equal to" means the contaminant was detected at a level "equal to" the value reported in "Sample Analytical Result - Value."</li> </ul> <i>(Not required for TCR data)</i>
* <b>Sample Analytical Result - Value</b>	Actual numeric (decimal) value of the analysis for the chemical results, or the MRL if the analytical result is less than the contaminant's MRL. <i>For the TCR, results will indicate presence/absence.</i>
* <b>Sample Analytical Result - Unit of Measure</b>	Unit of measurement for the analytical results reported (usually expressed in either µg/L or mg/L for chemicals; or pCi/l or mrem/yr for radionuclides). <i>(Not required for TCR data)</i>
Sample Analytical Method Number	EPA identification number of the analytical method used to analyze the sample for a given contaminant.
Minimum Reporting Level (MRL) - Value	MRL refers to the lowest concentration of an analyte that may be reported. <i>(Not required for TCR data)</i>
MRL - Unit of Measure	Unit of measure to express the concentration value of a contaminant's MRL. <i>(Not required for TCR data)</i>

#### **4(b)(ii) Respondent Activities**

Potential respondents to this information collection are assumed to include the drinking water agencies for the 56 State and territories listed in exhibit A-1 in Appendix A. Activities needed to respond to the information collection include reading and understanding EPA's request, compiling and submitting the requested drinking water contaminant data in electronic format, and communication and coordination with EPA. No record keeping requirements are associated with this information collection request. Each of these respondent activities is described in more detail below.

##### **Reading/Understanding EPA's Request**

EPA will send a letter to 56 States that explains the purpose of the data collection, the specific information EPA is requesting, and the procedure for submitting these data.

##### **Compiling and Submitting Monitoring Data**

EPA is asking States to compile and submit data that have already been collected from water systems, and which already exist in electronic format. EPA is not expecting States or water systems to collect new data in response to this reporting request or to enter hard copy data into an electronic format. All data will be submitted using security protocol to a designated FTP site.

To facilitate the consistency and quality of data across States, EPA will ask States to: provide a brief description of the basic format and structure of each data set, and definitions of all data elements, column/row headings, codes, acronyms, etc., used in each data set; submit the data in a horizontal format, with each analytical result occupying a discrete row accompanied by the system inventory and sample-specific data items (*i.e.*, those listed in Exhibit 4-2 in section 4(b)(i)); and submit the data in a SAS-compatible file format, such as Dbase (.dbf), Access tables (.mdb), comma or tab delimited files (.csv or .txt), or Excel (.xls). It is expected that the data from States using SDWIS/State will more closely match the needed data formats and elements, and thus are assumed to have less burden for submissions than non-SDWIS States. However, all States will have the option of submitting data "as is", thus, the assumption of higher burden for non-SDWIS States is a conservative (highest possible cost) assumption. If States submit only the minimum data element information, EPA will extract the additional inventory information from SDWIS/FED (adjusted by the most recent Needs Survey, if necessary), based on the PWSID number. (States will be notified of these details in communications from EPA.)

EPA also assumes that some States will choose not to submit data at this time; such States are assumed to incur no burden related to this data request beyond the initial reading of the request.

### **Follow-up with EPA**

Based on its experience with occurrence information provided by States for the CMR and Six-Year Review 1, EPA expects that it may need to contact some States' data management staff to address questions regarding the data quality such as possibly incorrect units of measurement, outlier values, incorrect, missing, or undefined data elements, or other possible data problems. This follow-up may not be needed for those States that provide their data in the requested format with an explanation of their codes, headers, etc. It is assumed that these communications and confirmations will be handled primarily through telephone and e-mail.



## **5 INFORMATION COLLECTED—AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT**

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

EPA Headquarters will conduct the following activities associated with the collection of regulated monitoring data:

- Data extraction or download data;
- Initial data screening/conversion to uniform structures;
- Communication and coordination with States; and
- Manage and analyze the data, including
  - Quality assurance/quality control and review/edit data;
  - Data analysis and report of findings; and
  - Record keeping.

Each of these activities is discussed in more detail below.

#### **Data Extraction or Download**

EPA's data extraction/downloading activities will depend to some degree on the type of data system used in each State, and on the level of State participation. EPA assumes that data from States that use SDWIS/State will most closely reflect the data elements and format being requested. Data from States using other databases are more likely to differ from the requested format. In cases where States do not provide all of the requested data, EPA will, where possible, extract the needed additional inventory information from SDWIS/FED (adjusted using information from the 1999 Drinking Water Infrastructure Needs Survey, or other more recent supplemental information, as appropriate). EPA assumed that it will take longer to extract or download all needed information for non-SDWIS States. All States, regardless of type of data system, will submit their data using security protocol to a designated FTP site.

#### **Initial Data Screening/Conversion to Uniform Structures**

Each data set will be reviewed to determine if it contains the appropriate contaminants, basic data elements, and definitions of any special (State-specific) codes needed to conduct a consistent analysis for this study. The data set structure will be assessed and converted, if needed, into a horizontal structure, with each analytical result occupying a discrete row accompanied by the system inventory and sample-specific data items. Data formatting work will be done using Microsoft® Excel with the aid of specialized programs written in Visual Basic®.

## **Communication and Coordination with States**

Based on the Agency's experience with data submitted in response to CMR and Six-Year Review 1, EPA will need to communicate and coordinate with States to assist with successful data submission, to resolve data editing and QA/QC issues, and to address any other data set questions that EPA or State may have.

## **Data Management and Analysis**

Data management and analysis includes: quality assurance/quality control and data review/editing; data analysis and report of findings; and record keeping. These activities take place after the initial State data sets have been made uniform, and the data sets have been combined to be analyzed on a per contaminant basis (versus a per State basis).

*Quality Assurance/Quality Control and Review/Editing of Data:* An important objective regarding the data to be called-in and subsequently used for the Six-Year Review 2 contaminant occurrence analyses is development of a consistent and repeatable data management approach. Consistent data editing, and QA/QC assessments (e.g., identification of obvious incorrect units, outliers, duplicate entries, etc.) across all State data received will allow the individual State data sets to be aggregated, and jointly evaluated, to provide an overview of national occurrence patterns for individual contaminants.

Uniform, detailed QA/QC assessments will be conducted on the State compliance monitoring data sets. The only data requested and used will be from State drinking water programs (*i.e.*, official compliance monitoring data from the regulated drinking water program). All compliance monitoring samples are collected by trained PWS staff and analytical results are generated by laboratories that are certified for drinking water programs. Therefore, some assumptions are made regarding the general quality of the raw compliance monitoring data received from the States. Data problems will certainly exist, but efforts will be taken to reduce the problems and increase the dependability and quality of the State occurrence data used in these analyses.

The number of systems with compliance monitoring data in each State will be checked against total system inventory numbers from SDWIS/Fed that have been adjusted using information from the 1999 Drinking Water Infrastructure Needs Survey, or other more recent supplemental information, as appropriate. The number of analytical records per system (per contaminant) will also be evaluated to assess completeness of the submitted analytical records. Contaminant-specific analytical values are also assessed as part of the QA/QC review. For example, the assessment of the range of all analytical values for a specific contaminant supports identification of possible analytical unit errors or the presence of outliers. Identified errors that do not have straight-forward solutions will be addressed through consultations with State data management staff to ensure consistent and appropriate interpretations. Once data quality issues are resolved, each data set will be converted into a consistent format. As part of the data QA/QC procedures, all edits or changes made to the raw monitoring data will be documented.

*Data Analysis and Report of Findings:* For the first Six-Year Review, EPA developed, peer reviewed, and used a data management and two-staged analytical approach to assess data representativeness and to analyze the compliance monitoring data from 16 States. This approach will also be used for the second Six-Year Review. Data will be assessed and compiled into a cross-section of State data sets indicative of national occurrence. The national cross-section data will be analyzed using a two-staged analytical approach. The "Stage 1" analysis provides simple, non-parametric estimates of the percent of PWSs (and the total population served by those PWSs) with at least one analytical result exceeding specific threshold values. The "Stage 2" analysis uses more rigorous probabilistic modeling to estimate the number of systems (and the corresponding affected populations) with estimated mean contaminant concentrations above the levels of regulatory interest. A national contaminant occurrence report will then be prepared that describes the data management, national cross-section development, and the resulting national extrapolation of occurrence findings from the national cross-section of the States' compliance monitoring data sets.

*Record Keeping:* EPA will store and track: the original (pre-QA/QC) data sets that it receives from States; final data sets used for the Six-Year Review 2 analyses; and logs of all data QA/QC and editing conducted on the original data sets. After final review, formatting, and analysis of the data collected through this ICR, the data will be made available to the public through the NCOD, as was done with the data collected and analyzed for the Six-Year Review 1.

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

Through the Six-Year Review process, the Agency reviews and assesses risks to human health posed by existing drinking water contaminants. Occurrence data provide information critical to these assessments. The collection of the occurrence data, and the quantity, coverage, representativeness, and management of the data collected pursuant to this ICR is an important component of the planned Six-Year Review 2 process.

EPA considered developing a nationally representative probabilistic survey in lieu of requesting data from all States. EPA assessed numerous survey designs that were intended to meet different data quality objectives (DQOs) and found no single design that would allow the Agency to acquire a nationally representative aggregation of compliance monitoring data for all 79 regulated contaminants in an efficient or reasonable manner<sup>3</sup>. The potential problems associated with survey design are explained in more detail as follows:

- The significant within- and between-system variance differences likely present when considering all the regulated contaminants would result in a wide range of confidence intervals and precision terms based on the surveyed systems' data. Conversely, to design a single survey so that the individual contaminant with the most variable occurrence data still meets minimum DQOs would require a survey that included tens of thousands of systems.

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<sup>3</sup> The 79 regulated contaminants include: 69 chemical; 7 radiological; and 3 microbiological contaminants. Radium-226 and -228 are counted as one contaminant (*i.e.*, as combined radium). A list of these contaminants is provided in Exhibit 4-1 in section 4(b)(i).

- A survey would require data requests either directly from thousands of individual systems (requesting submission of 6 years of historic compliance monitoring data); or from States (to extract the system-level data for each of the systems selected in the survey). Further, the Agency would expect an increased non-response rate if data were requested directly from systems.
- Based on the Agency's experience working with the 16 States that submitted complete compliance monitoring data sets for CMR or Six-Year Review 1, EPA anticipates that the burden on the States may be smaller when simply requesting all data records, as compared to requesting dozens or hundreds of specific records for select individual PWSs.
- Monitoring schedules can vary across contaminants and across systems, and can be quarterly, annual, triennial, or every 9 years. Actual contaminant-specific sampling frequencies are unknown, and therefore, are difficult to address in any survey design. (Different sampling frequencies are attributed to waiver programs and historical results showing contaminant occurrence (or lack of occurrence).)

An alternative to a single survey for all regulated contaminants would be multiple surveys for groups of related contaminants. However, the Agency anticipates that the burden for EPA, the States, and/or systems may be significant for designing, implementing, and managing multiple surveys.

The information described in the previous sections will be collected by EPA and made available to the public upon request, as required by the Freedom of Information Act (40 CFR, Chapter 1, Part 2). The data, after a complete and thorough QA/QC review, will be available to the public through EPA's NCOD.

For the previous Six-Year Review 1, EPA received data sets through electronic FTP, e-mail, and mailed/shipped diskettes or other information storage formats. For Six-Year Review 2, all States are being asked to submit their data through a secure FTP site. FTP is being specified for several reasons: this information collection is potentially significantly larger in scale than the previous collections, during which no more than 8 States' data were received at a time; the FTP site to be used offers a high level of data security; and EPA anticipates that most, if not all, States will have computer/internet resources which will allow them to submit data sets electronically.

Regarding data set file formats, EPA will request that non-SDWIS/State users submit their data sets in one of the following SAS-compatible file formats: Dbase (.dbf); Access tables (.mdb); comma or tab delimited files (such as .csv or .txt), or; Excel (.xls). In addition, EPA will request that the data set structure is horizontal, with each analytical result occupying a discrete row accompanied by the system inventory and sample-specific data items listed above in 4(b)(i). EPA will also request that non-SDWIS/State users provide: a brief description of the basic format and structure of each data set; and definitions of all data elements, column/row headings, codes, acronyms, etc., used in each data set. EPA anticipates that this information will reduce the amount of time needed for questions and clarification later. States have the option of

submitting the requested data "as is," by simply copying the compliance monitoring records in whatever structure or condition they are currently stored in, and submitting that copy of the electronic data to EPA. If States only submit the minimum data element information, EPA will extract the additional inventory information from SDWIS/FED, based on the PWSID number.

Other communications and confirmations (regarding data set follow-up questions with State data management staff, etc.) will be primarily handled through telephone and e-mail.

### 5(c) Small Entity Flexibility

Since only State drinking water agencies will be asked to submit existing electronic data to EPA, no small entities, and specifically no small PWSs, will incur burden as a result of this data request.

In developing this ICR, EPA considered the requirements of the Small Business Regulatory Enforcement Fairness Act (SBREFA) to minimize the burden of information collections on small entities. Small entities include "small businesses," "small organizations," and "small government jurisdictions." No State drinking water agency qualifies as a small entity, as defined under the Regulatory Flexibility Act (RFA), and summarized below.<sup>4</sup>

- A **small business** is any business that is independently owned and operated and not dominant in its field as defined by the Small Business Administration (SBA) regulations under Section 3 of the Small Business Act.
- A **small organization** is any non-profit enterprise that is independently owned and operated and not dominant in its field.
- A **small governmental jurisdiction** is the government of a city, county, town, township, village, school district or special district that has a population of fewer than 50,000. This definition may also include Indian tribes.

The major requirement under SBREFA is a regulatory flexibility analysis of all rules that have a "significant economic impact on a substantial number of small entities." Since this data request is not part of a rule, and does not affect any small entities as defined above, this ICR is not subject to SBREFA.

### 5(d) Collection Schedule

EPA is issuing this ICR as a one-time data request from the States for regulated monitoring data for 1998 - 2005. States will be responding to this request during 2007. Most of the data clean-up by EPA and follow-up with States will occur during 2007. Data analysis is expected to continue through 2009, when EPA plans to make its final Six-Year 2 determinations.

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<sup>4</sup> These definitions were taken from section 601 of the RFA.

## 6 ESTIMATING THE BURDEN AND COST OF THE COLLECTION

This section describes the estimated average annual burden and costs for the information collection activities in support of Six-Year Review 2. For this data submission, PWSs have no burden and costs; this is discussed further in Section 6(a). The burden and cost estimates for State drinking water primacy agencies are discussed in detail in Section 6(b). The Agency's burden and cost estimates are outlined in Section 6(c).

To estimate the costs, EPA made assumptions about the burden associated with activities that would likely be needed to fulfill the request. To the extent possible, assumptions were based on similar activities for past data collections. EPA emphasizes that the per-respondent estimates represent the average burden and cost over the 3-year period covered by this ICR (2007-2009). Some respondents may incur higher costs and some will fall below the average. Summary burden and cost estimates for States and EPA are provided in Exhibits 6-1 and 6-2. Detailed estimation tables for States and EPA are provided in Appendices A and B, respectively.

Estimates of State and EPA burden are influenced by State data management capabilities and likelihood to submit the requested data. EPA's assessments of individual State data capabilities and likeliness to participate are based on Agency experience conducting data verifications in State program offices, the ASDWA 2003 survey, as well as other direct knowledge of data capabilities and resources. To estimate burden, the Agency organized States into 3 categories of expected burden level, as follows:

**Submit occurrence data using proprietary software - 21 States<sup>5</sup>.** These States are expected to spend the most time reading and considering the request for data, as they may need to identify which of their data elements correspond to those requested. For similar reasons, compilation and submission of their occurrence data, and follow up with EPA is expected to be the highest. EPA expects that Agency burden, which is estimated primarily on a per State basis, will be higher for these States.

**Submit occurrence data using SDWIS/State software - 19 States.** Those with SDWIS/State are expected to spend less time than States with proprietary software. Reading and considering the request for data is expected to be less time consuming, as the SDWIS/State data elements will correspond closely to those requested. Compilation and submission of their occurrence data, and follow up with EPA is also expected to be easier for these States. EPA expects that Agency burden, which is estimated primarily on a per State basis, will be lower for these States.

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<sup>5</sup> There are approximately 30 States that currently use SDWIS/State for managing only their TCR data. For the majority of the regulated contaminant data being requested (76 of 79 contaminants), there are approximately 19 States using SDWIS/State for data storage and management, and 21 using a proprietary data system. For estimation purposes, EPA makes the conservative assumption that State burdens will vary with their primary data system (i.e., the 21 States using primarily a proprietary data system are assumed to incur more burden than if they were primarily using SDWIS/State). However, because TCR data are typically maintained in a separate database module from chemical data, additional burden has been allotted for extracting and downloading these data.

**Will not submit data - 16 States.** States that do not have the requested data stored electronically or those that are considered generally not likely to submit data are expected only to spend a minimal amount of time considering the request. No further burden is assumed. EPA will incur no burden for these States.

### **6(a) Estimating Respondent Burden**

The average annual respondent burden (in labor hours) for States is shown in Exhibit 6-1. Appendix A provides detail of the estimated respondent burden for States to complete the activities described in section 4(b)(ii). There is no burden for public water systems. Over the ICR years of 2007-2009, EPA estimates a total average annual respondent burden of 681 hours for activities associated with this reporting effort; or an average of 12.2 hours per State (681 hours divided by 56 States). This estimate includes costs for reading and understanding EPA's request, compiling and submitting the data to EPA, and any needed follow-up with the Agency to address questions regarding the data.

#### **Reading/Understanding EPA's Request**

The Agency assumes that all States will read EPA's request letter. A one-time burden for States that will submit with proprietary software is estimated at 7 hours; States with SDWIS/State are estimated to spend 4 hours; and States that will not submit data are estimated to spend 1 hour.

#### **Compiling and Submitting Monitoring Data**

State burden for this reporting activity is likely to vary widely depending on the level of effort each State chooses to invest. All States will follow a security protocol when submitting data through a designated FTP site. Burden for States that will submit with proprietary software is estimated at 44 hours. States with SDWIS State are estimated to spend 24 hours.

#### **Follow-up with EPA**

EPA expects that those States that use SDWIS/State or provide their data in the requested format with an explanation of their codes, headers, etc. will need to spend little follow-up time with EPA. States submitting data with proprietary database software, and particularly those that send their data "as is", are expected to need more time on follow-up clarifications with EPA. States with their own database system are estimated to spend 13 hours of follow-up time with EPA. States with SDWIS/State are estimated to only require 8 hours of follow-up.

### **6(b) Estimating Respondent Costs**

Exhibit 6-1 shows the annual average costs for States over the ICR period of 2007-2009. Appendix A provides detailed cost and burden estimations for the information collection

activities covered by this ICR. Average annual labor costs for all States for this ICR period are estimated to be \$30,608. Respondents will not incur capital or operations and maintenance (O&M) costs associated with this ICR. EPA estimates each State will incur an annual average labor cost of \$547 for this data collection effort.

State labor costs are based on information provided in the “2001 ASDWA Drinking Water Program Resource Needs Self Assessment.” In 2000, the United States General Accounting Office used a previous version of this model to estimate nationwide drinking water program needs for Congress. The tool was later updated and improved based on comments from 27 States. To make the model easier to use, ASDWA established suggested salary and benefit ranges (i.e., default values), resource needs for the various NPDWRs, and other key variables. Labor costs per hour are based on the default annual rates for 2007 that are provided in the model.

<b>Exhibit 6-: Average Annual State Burden and Costs (for ICR period of 2007-2009)</b>				
<b>Number of States</b>	<b>Burden Hours</b>		<b>Labor Costs</b>	
	<b>All States</b>	<b>Per State</b>	<b>All States</b>	<b>Per State</b>
<b>56</b>	<b>681</b>	<b>12.2</b>	<b>\$30,608</b>	<b>\$547</b>

### **6(c) Estimating Agency Burden and Costs**

EPA's drinking water program in Headquarters will incur burden and costs for the coordination and implementation of this data collection effort. Cost and burden estimates for EPA's activities associated with this request are detailed in Exhibit 6-2 and Appendix B.

#### **6(c)(i) Agency Burden**

For the 3-year ICR period (2007-2009), EPA estimates that the average annual burden to the Agency will be 2,979 hours. This estimate includes burden incurred by EPA or its contractors for the activities outlined in Section 5(a) above. EPA burden is estimated based on similar activities conducted during the Six-Year 1 occurrence data analysis.

#### **Extract or Download Data**

EPA is estimating its data extraction and downloading burden based on the types of data systems that States use to submit data. To coordinate and download files to its database, including special consideration for security protocols, EPA estimates that it will need:



- 11 hours per State for those 19 States that use SDWIS/State, and
- 17 hours per State for the 21 States that use databases other than SDWIS/State.

### **Initial Data Screening/Conversion to Uniform Structures**

EPA's data screening and conversion is also estimated on a per State basis. Based on its experience during Six-Year 1, EPA assumes that burden to review the data and to convert it into a consistent format will be influenced primarily by whether the data are stored in SDWIS/State or another proprietary database. EPA estimates that it will need:

- 36 hours per State for those 19 States that use SDWIS/State; and
- 71 hours per State for the 21 States that use databases other than SDWIS/State.

### **Communication and Coordination with States**

EPA assumes that the need to communicate and coordinate with States to ensure successful data submission and interpretation will require less burden for those State with SDWIS/State than for those with a proprietary database. EPA estimates that it will need:

- 6 hours per State for those 19 States that use SDWIS/State; and
- 11 hours per State for the 21 States that use databases other than SDWIS/State.

### **Data Management and Analysis**

Data management and analysis activities include: quality assurance/quality control and review/editing of data; data analysis and report of findings; and record keeping. Although some of these tasks take place after State data sets have been combined for analysis on a per contaminant basis (versus a per State basis), EPA has estimated a "per State" burden with the assumptions that 40 States will participate, and that 45 contaminants will be fully analyzed. Based on prior similar activities, EPA estimates 100 contractor and 30 EPA hours for each of 45 contaminants that will be analyzed for occurrence. To present this on a per State basis (as all other activities are shown), this 5,850 hours (130 hours x 45 contaminants) is divided by 40 States (i.e., the number of States expected to participate), which equals 146.3 hours per State. However, because burden for the occurrence analyses will not vary greatly with the addition or subtraction of State data sets, burden would not be reduced or increased by the full 146.3 hours with each addition or subtraction of a State. This is because the analyses are conducted on a per contaminant basis, and the amount of data analyzed in each does not greatly factor into the amount of time needed to run the analyses, and write up the outcome. In addition, burden for this activity is not influenced by whether data came from SDWIS/State or another database, because data at this step in the process has already been cleaned and converted to uniform structures.

### 6(c)(ii) Agency Cost

For the ICR period of 2007-2009, EPA's 2,979 annual burden hours are associated with annual labor costs of \$231,916 to collect and analyze the occurrence data, and evaluate and report on the occurrence findings. Direct EPA per hour labor costs were derived using the Office of Personnel Management January 2006 GS Pay Schedule for government employees in the D.C. area. EPA used the GS-13 Step 5 salary of \$87,664 per year, and by adding the standard government overhead factor of 1.6 (as well as a 3% inflation factor to account for 2007 salaries), the average hourly rate is estimated to be \$69.46 per hour. Contracted labor costs are based on historical hourly costs pertaining to the management and analysis of occurrence data, which were approximately \$79.57 per hour.

<b>Exhibit 6-: Annual EPA Burden and Costs (for ICR period of 2007-2009)</b>				
<b>Activity</b>	<b>EPA Burden Per State</b>		<b>Annual EPA<sup>1</sup></b>	
	<i>(19 SDWIS States)</i>	<i>(21 Non-SDWIS States)</i>	<i>Burden</i>	<i>Cost</i>
<b>Extract/download data</b>	11.0	17.0	189	\$14,742
<b>Initial data screening/conversion to uniform structures</b>	36.0	71.0	725	\$57,552
<b>Communicate, coordinate with States</b>	6.0	11.0	115	\$9,015
<b>Data Mgt and Analysis: QA/QC; review/edit data; analyze/report findings; record keeping</b>	146.3	146.3	1,950	\$150,607
<b>Total</b>	<b>199</b>	<b>246</b>	<b>2,979</b>	<b>\$231,916</b>

<sup>1</sup> Burden is calculated by: per State burden, times number of States, all divided by the 3 ICR years. Cost is calculated by burden times hourly labor rates (EPA or Contractor, as appropriate). See Appendix B, Exhibit B-1, for details on EPA burden and cost estimations.

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

The only respondents for this ICR are States. This ICR estimates the number of State potential respondents at 56. The total burden and costs for these respondents are summarized in Section 6(b) and Exhibit 6-1. Agency burden and costs are detailed in Section 6(c) and in Exhibit 6-2.

### 6(e) Bottom Line Burden Hours and Cost Tables

The bottom line burden hours and costs for this ICR are shown in Exhibit 6-3. This includes the burden and costs to the 56 States who are affected by this ICR, as well as the burden and cost to EPA for this collection and analysis.

<b>Exhibit 6-: Bottom Line Burden and Costs (for ICR period of 2007-2009)</b>		
	<b>Total</b>	<b>Average Per Year over 2007-2009</b>
<b>Number of Respondents</b>	56 States	n/a
<b>Total Responses</b>	56	18.7
<b>Number of Responses per State</b>	1	0.3
<b>Total State Burden Hours</b>	2,044	681
<b>Hours per Response</b> (Total hours from above/Total responses from above)	36.5	12.2
<b>State O&amp;M Costs</b>	\$0	\$0
<b>Total State Costs</b> (Labor plus O&M costs)	\$91,825	\$30,608
<b>National Total of Hours</b> (States plus Agency)	10,980	3,660
<b>National Total of Costs</b> (States plus Agency)	\$787,573	\$262,524

### 6(f) Reasons for Change in Burden

Since this is an ICR for a one-time data collection effort in support of this Six-Year Review process, this ICR does not modify an existing ICR.

### 6(g) Burden Statement

The reporting burden for data collections included in this ICR is detailed above. The total annual respondent burden (for years 2007-2009) imposed by these collections is estimated to be 681 hours, or 12.2 hours per respondent per year. Because this is a one-time data request for this Six-Year Review, there is only one response per respondent, and all burdens and costs related to this response are included in these estimates. The Agency expects that most, if not all, respondent activities will take place during 2007 and 2008. Estimates include time for submitting data to EPA and addresses questions raised by the Agency regarding the submitted information.

Burden means the total time, effort, or financial resources expended by people to generate, maintain, retain, disclose, or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology, and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a request for information collection unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OW-2005-0019, which is available for online viewing at [www.regulations.gov](http://www.regulations.gov), or in person viewing at the Water Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Water Docket is (202) 566-2426. An electronic version of the public docket is available at [www.regulations.gov](http://www.regulations.gov). This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the Docket ID Number EPA-HQ-OW-2005-0019 in any correspondence.

## **APPENDICES**

## Appendix A: Detailed Burden and Cost for States

Exhibit A-1: Estimated State Burden for Occurrence Data Submission								
State	Likely to Submit Data?	Average Burden Per State				Labor Costs		
		Reading EPA Request	Compiling, Submitting Data	Follow-up with EPA	Total Burden	State Program Size	Cost per Hour	Labor Cost per State
	(a)	(b)	(c)	(d)	(e)= (b)+(c)+(d)	(f)	(g)	(h)=(e)*(g)
Alabama	Likely/Non-SS	7	44	13	64	s	\$39.38	\$2,520
Alaska	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
American Samoa	Unlikely	1	0	0	1	vs	\$40.02	\$40
Arizona	Unlikely	1	0	0	1	m	\$42.42	\$42
Arkansas	Unlikely	1	0	0	1	m	\$42.42	\$42
California	Likely/Non-SS	7	44	13	64	vl	\$69.30	\$4,435
Colorado	Unlikely	1	0	0	1	m	\$42.42	\$42
Connecticut	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Delaware	Unlikely	1	0	0	1	vs	\$40.02	\$40
District of Columbia	Unlikely	1	0	0	1	s	\$39.38	\$39
Florida	Likely/Non-SS	7	44	13	64	l	\$49.02	\$3,137
Georgia	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Guam	Unlikely	1	0	0	1	vs	\$40.02	\$40
Hawaii	Unlikely	1	0	0	1	vs	\$40.02	\$40
Idaho	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Illinois	Likely/SS	4	24	8	36	l	\$49.02	\$1,765
Indiana	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Iowa	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Kansas	Likely/Non-SS	7	44	13	64	m	\$42.42	\$2,715
Kentucky (i)	Likely/Non-SS	7	44	13	64	s	\$39.38	\$2,520
Louisiana	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Maine	Likely/SS	4	24	8	36	s	\$39.38	\$1,418
Maryland	Unlikely	1	0	0	1	m	\$42.42	\$42
Massachusetts	Likely/Non-SS	7	44	13	64	m	\$42.42	\$2,715
Michigan (i)	Likely/Non-SS	7	44	13	64	l	\$49.02	\$3,137
Minnesota	Likely/Non-SS	7	44	13	64	m	\$42.42	\$2,715
Mississippi	Unlikely	1	0	0	1	m	\$42.42	\$42
Missouri	Likely/SS	4	24	8	36	m	\$42.42	\$1,527

<b>Exhibit A-1: Estimated State Burden for Occurrence Data Submission</b>								
<i>State</i>	<i>Likely to Submit Data?</i>	<b>Average Burden Per State</b>				<b>Labor Costs</b>		
		<i>Reading EPA Request</i>	<i>Compiling, Submitting Data</i>	<i>Follow-up with EPA</i>	<i>Total Burden</i>	<i>State Program Size</i>	<i>Cost per Hour</i>	<i>Labor Cost per State</i>
	(a)	(b)	(c)	(d)	(e)= (b)+(c)+(d)	(f)	(g)	(h)=(e)*(g)
Montana	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Nebraska	Likely/SS	4	24	8	36	s	\$39.38	\$1,418
Nevada	Likely/SS	4	24	8	36	s	\$39.38	\$1,418
New Hampshire	Unlikely	1	0	0	1	m	\$42.42	\$42
New Jersey (i)	Likely/Non-SS	7	44	13	64	m	\$42.42	\$2,715
New Mexico	Likely/Non-SS	7	44	13	64	s	\$39.38	\$2,520
New York	Likely/SS	4	24	8	36	l	\$49.02	\$1,765
North Carolina (i)	Likely/Non-SS	7	44	13	64	l	\$49.02	\$3,137
North Dakota	Likely/SS	4	24	8	36	vs	\$40.02	\$1,441
Northern Mariana Islands	Unlikely	1	0	0	1	vs	\$40.02	\$40
Ohio	Likely/Non-SS	7	44	13	64	l	\$49.02	\$3,137
Oklahoma	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Oregon	Likely/SS	4	24	8	36	m	\$42.42	\$1,527
Pennsylvania	Likely/Non-SS	7	44	13	64	l	\$49.02	\$3,137
Puerto Rico	Unlikely	1	0	0	1	s	\$39.38	\$39
Rhode Island (i)	Likely/Non-SS	7	44	13	64	vs	\$40.02	\$2,561
South Carolina	Likely/Non-SS	7	44	13	64	m	\$42.42	\$2,715
South Dakota	Likely/Non-SS	7	44	13	64	s	\$39.38	\$2,520
Tennessee (i)	Likely/Non-SS	7	44	13	64	m	\$42.42	\$2,715
Texas	Likely/Non-SS	7	44	13	64	vl	\$69.30	\$4,435
Utah	Unlikely	1	0	0	1	s	\$39.38	\$39
Vermont (i)	Likely/Non-SS	7	44	13	64	s	\$39.38	\$2,520
Virginia (i)	Likely/Non-SS	7	44	13	64	l	\$49.02	\$3,137
Virgin Islands	Unlikely	1	0	0	1	vs	\$40.02	\$40
Washington	Unlikely	1	0	0	1	l	\$49.02	\$49
West Virginia	Likely/SS	4	24	8	36	s	\$39.38	\$1,418
Wisconsin	Likely/Non-SS	7	44	13	64	l	\$49.02	\$3,137

<b>Exhibit A-1: Estimated State Burden for Occurrence Data Submission</b>								
State	Likely to Submit Data?	Average Burden Per State				Labor Costs		
		Reading EPA Request	Compiling, Submitting Data	Follow-up with EPA	Total Burden	State Program Size	Cost per Hour	Labor Cost per State
	(a)	(b)	(c)	(d)	(e)= (b)+(c)+(d)	(f)	(g)	(h)=(e)*(g)
Wyoming	Likely/SS	4	24	8	36	vs	\$40.02	\$1,441
<b>TOTAL</b>		<b>239</b>	<b>1,380</b>	<b>425</b>	<b>2,044</b>			<b>\$91,825</b>
		<b>Annual Ave. 2007-2009</b>				<b>681.3</b>		<b>\$30,608</b>
		<b>Annual Ave. Per State 2007-2009</b>				<b>12.2</b>		<b>\$547</b>

(a) States divided into three major groups: likely to provide data (indicated by "Likely/SS" (19 States) or "Likely/Non-SS" (21 States)); and those that are unlikely to provide data (indicated by "Unlikely" (16 States)). Likely/SS (SDWIS/State) means State stores all or most of data using SDWIS/State. Likely/Non-SS means State provided data to EPA for the first Six-Year Review and had a strong record of electronic reporting, but does not use SDWIS/State (or only used it for LCR data). All others assigned "Unlikely". Total of 56 potential participating States.

(b-e) Average burdens based on estimated level of involvement and likely knowledge of the data. EPA assumes highest burden for States that are likely to submit data but that do not have SDWIS/State; States with SDWIS/State are assigned a mid-level amount of burden for these activities, as these States are likely to "on average" have more knowledge of the needed data. EPA expects that States that are unlikely to participate may spend a small amount of time considering the request, and none beyond that.

(f-h) Average hourly State labor costs are from the "2001 ASDWA Drinking Water Program Resource Needs Self Assessment". To make the cost assessment model easier to use, ASDWA established suggested salary and benefit ranges (i.e., default values) for different sized State programs (very small, small, medium, large, very large; as indicated by initials). See Exhibit A-2, which illustrates the basic model assumptions that were used here to estimate hourly labor costs.

(i) These are States that use SDWIS/State for TCR only (no chemical data stored/managed within SDWIS/State as of March 2006). For estimation purposes, EPA makes the conservative assumption that State burdens will vary with their primary data system (i.e., the 21 States using primarily a proprietary data system are assumed to incur more burden than if they were primarily using SDWIS/State). However, because TCR data are typically maintained in a separate database module from chemical data, additional burden has been allotted for extracting and downloading these data.



<b>Exhibit A-2: 2007 Salaries and Overhead Costs from ASDWA State Resource Model</b>				
<b>State Size (a)</b>	<b>Professional Staff</b>	<b>Support Staff</b>	<b>Hourly Ave. ~ 80% Prof and 20% Support</b>	<b>Hourly Rate (adjusted for overhead at 23%)</b>
	<i>(adjusted for fringe benefits at 22% of base salary)</i>			
Very Small (applies to 9 States, including VI, GU, AS, NM)	\$62,720	\$41,960	\$32.54	\$40.02
Small (applies to 12 States, including DC and PR)	\$62,917	\$36,470	\$32.02	\$39.38
Medium (applies to 23 total)	\$67,274	\$41,297	\$34.49	\$42.42
Large (applies to 10 total)	\$75,950	\$54,897	\$39.86	\$49.02
Very Large (applies to 2 total)	\$111,800	\$59,908	\$56.35	\$69.30

(a) State labor costs are from the "2001 ASDWA Drinking Water Program Resource Needs Self Assessment". In 2000, the United States General Accounting Office used a previous version of this model to estimate nationwide drinking water program needs for Congress. The tool was later updated and improved based on comments from 27 States. To make the model easier to use, ASDWA established suggested salary and benefit ranges (i.e., default values), resource needs for the various NPDWRs, and other key variables. These hourly estimates are based on the default annual rates for 2007 that are provided in the model. The model assumes 1,800 work hours per full-time equivalent employee. Hourly rate labor costs are adjusted to account for fringe benefits (i.e., holidays, sick days, vacation, pension, health, dental, and life insurance); and overhead (i.e., office space, furniture, utilities, copiers, fax machines, postage, basic computing needs, etc.).

**Appendix B: Detailed Burden and Cost for EPA**

<b>Exhibit B-1: Estimated Burden and Labor Costs to EPA for Occurrence Data Collection and Analysis</b>											
<b>Activity</b>	<b>SDWIS and Non-SDWIS States</b>		<b>Contractor Burden</b>					<b>Contractor Labor Cost</b>			
	<i>Est. # of SDWIS States to Respond</i>	<i>Est. # of Non-SDWIS States to Respond</i>	<i>Est. Contractor Hours per SDWIS State</i>	<i>Est. Contractor Hours per Non-SDWIS State</i>	<i>Est. Total Contractor Hours for SDWIS States</i>	<i>Est. Total Contractor Hours for Non-SDWIS States</i>	<i>Est. Total Contractor Hours for All States</i>	<i>Cost per Hour for Contractural Labor</i>	<i>Est. Total Contractor Labor Cost for SDWIS States</i>	<i>Est. Total Contractor Labor Cost for Non-SDWIS States</i>	<i>Est. Total Contractor Labor Cost for All States</i>
	(a)	(b)	(c)	(d)	(e)=(a)*(c)	(f)=(b)*(d)	(g)=(e)+(f)	(h)	(i)=(e)*(h)	(j)=(f)*(h)	(k)=(i)+(j)
<i>Data Extraction or Download (r)</i>	19	21	9	15	171	315	486	\$79.57	\$13,606	\$25,064	\$38,670
<i>Initial data screening/conversion to uniform structures</i>	19	21	35	70	665	1,470	2,135	\$79.57	\$52,912	\$116,964	\$169,877
<i>Communication and coordination with the States</i>	19	21	5	10	95	210	305	\$79.57	\$7,559	\$16,709	\$24,268
<b>Data Management and Analysis:</b> <i>QA/QC; review/edit data; analyze/report findings; record keeping</i>	19	21	112.5	112.5	2,138	2,363	4,500	\$79.57	\$170,076	\$187,978	\$358,054
<b>TOTAL</b>	<b>19</b>	<b>21</b>	<b>161.5</b>	<b>207.5</b>	<b>3,069</b>	<b>4,358</b>	<b>7,426</b>	<b>\$79.57</b>	<b>\$244,153</b>	<b>\$346,715</b>	<b>\$590,868</b>

<b>Exhibit B-1: Estimated Burden and Labor Costs to EPA for Occurrence Data Collection and Analysis (continued)</b>													
<b>Activity</b>	<b>EPA Burden</b>					<b>EPA Labor Cost</b>				<b>EPA and Contractor Totals</b>			
	<i>Est. EPA Hours per SDWIS State</i>	<i>Est. EPA Hours for Non-SDWIS States</i>	<i>Est. Total EPA Hours for SDWIS States</i>	<i>Est. Total EPA Hours for Non-SDWIS States</i>	<i>Est. Total EPA Hours for All States</i>	<i>Cost per Hour for EPA Staff</i>	<i>Est. Total EPA Labor Cost for SDWIS States</i>	<i>Est. Total EPA Labor Cost for Non-SDWIS States</i>	<i>Est. Total EPA Labor Cost for All States</i>	<i>Est. Total EPA and Contractor Burden Per SDWIS State</i>	<i>Est. Total EPA and Contractor Burden Per Non-SDWIS State</i>	<i>Est. Total EPA and Contractor Burden for All States</i>	<i>Est. Total EPA and Contractor Labor Cost for All States</i>
	(l)	(m)	(n)=(a) *(l)	(o)=(b) *(m)	(p)=(n) +(o)	(q)	(r)=(n)*(q)	(s)=(o)*(q)	(t)=(r)+(s)	(u)=(c) +(l)	(v)=(d) +(m)	(u)=(g) +(p)	(v)=(k)+(t)
<i>Data Extraction or Download (r)</i>	2	2	38	42	80	\$69.46	\$2,639	\$2,917	\$5,557	11.0	17.0	566	\$44,226
<i>Initial data screening/conversion to uniform structures</i>	1	1	19	21	40	\$69.46	\$1,320	\$1,459	\$2,778	36.0	71.0	2,175	\$172,655
<i>Communication and coordination with the States</i>	1	1	19	21	40	\$69.46	\$1,320	\$1,459	\$2,778	6.0	11.0	345	\$27,046
<i>Data Management and Analysis: QA/QC; review/edit data; analyze/report findings; record keeping</i>	33.8	33.8	641	709	1,350	\$69.46	\$44,539	\$49,228	\$93,767	146.3	146.3	5,850	\$451,821
<b>TOTAL</b>	<b>37.8</b>	<b>37.8</b>	<b>717</b>	<b>793</b>	<b>1,510</b>	<b>\$69.46</b>	<b>\$49,818</b>	<b>\$55,062</b>	<b>\$104,880</b>	<b>199</b>	<b>245</b>	<b>8,936</b>	<b>\$695,748</b>
<b>Annual Ave. 2007-2009</b>												<b>2,979</b>	<b>\$231,916</b>

(c, d, l, m, u, v) Estimates for Data Management and Analysis assume: 100 contractor hours for each of 45 contaminants for which occurrence will be analyzed. To show this on a per State basis, as all other activities are shown, this 4,500 hours (100 hours x 45 contaminants) is divided by 40 States (i.e., the maximum number

of States expected to participate), which equals 112.5 hours per State. Similarly, 30 EPA hours for each of the 45 contaminants is shown as 33.8 hours per State. Thus, total estimated burden per State for this activity is 146.3. However, burden for the occurrence analyses will not vary greatly with the addition or subtraction of State data sets; and burden would not be reduced or increased by the full 146.3 hours with each addition or subtraction of a State. The other 3 listed aspects of EPA burden (data download, screening, and communication) will vary directly on a per State basis. Because these 3 other burden items are collectively smaller (at 49/State for SDWIS/States, and 93/State for Non-SDWIS/State) than the data analysis burden, the "per State" burden will increase as the number of participating States decreases.

(h) Contractor costs are based on historical hourly costs pertaining to the management and analysis of occurrence data, which were approximately \$79.57 per hour.

(q) EPA internal labor costs are estimated using the federal government general schedule (GS) pay scale; assuming a labor level of GS 13, step 5, and taken from the Maryland/District of Columbia rate schedule during the first quarter of 2006 (see the U.S. Office of Personnel Management website: [www.opm.gov](http://www.opm.gov)). With these assumptions, labor and contractor rates were based on a 2,080 hour work year, with a \$87,664 annual salary during 2006 (most current available) plus a 3% inflation factor for 2007 salaries, and 60 percent overhead, or \$69.46 per hour.

(r) There are approximately 30 States that currently use SDWIS/State for managing only their TCR data. For the majority of the regulated contaminant data being requested (76 of 79 contaminants), there are approximately 19 States using SDWIS/State for data storage and management, and 21 using a proprietary data system. For estimation purposes, EPA makes the conservative assumption that State burdens will vary with their primary data system (i.e., the 21 States using primarily a proprietary data system are assumed to incur more burden than if they were primarily using SDWIS/State). However, because TCR data are typically maintained in a separate database module from chemical data, additional burden has been allotted for extracting and downloading these data.