



Information Collection Request for the Revised Total Coliform Rule

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TABLE OF CONTENTS

LIST OF FIGURES.....	iv
ACRONYMS.....	v
1 IDENTIFICATION OF THE INFORMATION COLLECTION.....	1
1(a) Title and Number of the Information Collection.....	1
1(b) Short Characterization.....	1
2 NEED FOR AND USE OF THE COLLECTION.....	1
2(a) Need/Authority for the Collection.....	1
2(b) Use/Users of the Data.....	1
3 NON-DUPLICATION, CONSULTATIONS, AND OTHER COLLECTION	
CRITERIA.....	3
3(a) Non-duplication.....	3
3(b) Public Notice Required Prior to ICR Submission to OMB.....	3
3(c) Consultations.....	4
3(d) Effects of Less Frequent Collection.....	4
3(e) General Guidelines.....	5
3(f) Confidentiality.....	5
3(g) Sensitive Questions.....	5
4 RESPONDENTS AND INFORMATION REQUESTED.....	6
4(a) Respondents/NAICS Codes.....	6
4(b) Information Requested.....	6
4(b)(i) Data Items.....	6
4(b)(ii) Respondent Activities.....	9
5 INFORMATION COLLECTED -- AGENCY ACTIVITIES, COLLECTION	
METHODOLOGY, AND INFORMATION MANAGEMENT.....	13
5(a) EPA Activities.....	13
5(b) Collection Methodology and Management.....	13
5(c) Small Entity Flexibility.....	14
5(c)(i) Small Business Advocacy Review Panel Recommendations.....	14
5(d) Collection Schedule.....	15
6 ESTIMATING BURDEN AND COST OF COLLECTION.....	16
6(a) Estimating Respondent Burden and Cost.....	16
6(a)(i) Burden and Cost to PWSs.....	16
6(a)(i)(a) Start-Up Activities.....	16
6(a)(i)(b) Annual Activities.....	17
6(a)(ii) Burden and Cost to States.....	17
6(a)(ii)(a) Start-Up Activities.....	17

6(a)(ii)(b) Annual Activities.....18
6(b) Time Frame for Cost and Burden Estimates.....18
6(c) Estimating EPA Burden and Cost.....18
6(d) Respondent Universe.....19
6(e) Bottom Line Burden Hours and Costs.....19
 6(e)(i) Bottom Line Burden and Cost Estimates for Respondents.....20
 6(e)(ii) Bottom Line Estimate for EPA.....21
6(f) Reasons for Change in Burden.....21
6(g) Burden Statement.....21

APPENDIX

Appendix A. Revised Total Coliform Rule Spreadsheets

LIST OF FIGURES

Figure 4-1: Implementation Schedule.....	10
Figure 6.1: Average Annual Net Change Burden and Costs for the RTCR ICR.....	14
Figure 6.2: Bottom Line Average Annual Net Change Burden and Costs for the 3-Year ICR Period.....	17

1ACRONYMS

AIP	Agreement in Principle
BLS	Bureau of Labor Statistics
CFR	Code of Federal Regulations
CWS	Community Water System
EA	Economic Analysis
ECI	Employee Cost Index
EPA	Environmental Protection Agency
FOIA	Freedom of Information Act
FR	Federal Register
HHS	Secretary of the US Department of Health and Human Services
ICR	Information Collection Request
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
NAICS	North American Industry Classification System
NCWS	Noncommunity Water System
NDWAC	National Drinking Water Advisory Council
NPDWR	National Primary Drinking Water Regulation
O&M	Operation and Maintenance
OGWDW	Office of Ground Water and Drinking Water
OMB	Office of Management and Budget
PN	Public Notification
PRA	Paperwork Reduction Act
PWS	Public Water System
PWSS	Public Water System Supervision
RCRA	Resource Conservation and Recovery Act
RTCR	Revised Total Coliform Rule
SBARP	Small Business Advocacy Review Panel
SBREFA	Small Business Regulatory Enforcement Fairness Act
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
SIC	Standard Industrial Classification
TCR	Total Coliform Rule
TCRDSAC	Total Coliform Rule/Distribution System Advisory Committee

1 IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title and Number of the Information Collection

Title: Information Collection Request for the Revised Total Coliform Rule

OMB Control Number: 2040-~~AD94~~NEW

EPA ICR Number: 2466.01

Note: This Information Collection Request (ICR) covers only the first three years after rule promulgation. The description of reporting and recordkeeping burden required for the full rule implementation, which exceeds the 3-year period for this ICR, is provided for informational purposes only. The costs and burden associated with the 3-year period of this ICR is described in Section 6 while the costs and burden of the 10-year full implementation period is provided in Appendix A.

1(b) Short Characterization

The Revised Total Coliform Rule (RTC~~R~~) requires information collection regarding the effectiveness of treatment, the integrity of the distribution system, and the possible presence of fecal contamination. All public water systems (PWSs) are included in this information collection. The RTC~~R~~ uses total coliforms as an indicator to start an evaluation process that, when necessary, will require the PWS to correct sanitary defects found. Under the RTC~~R~~, *E. coli* will remain a regulated contaminant with a maximum contaminant level goal (MCLG) of zero and a maximum contaminant level (MCL) based on the presence of total coliforms and/or *E. coli*. All fecal coliform provisions (including the MCLG and MCL) are removed in the RTC~~R~~. Under the RTC~~R~~ there is no longer an MCL violation for multiple total coliform detections. The intent of the RTC~~R~~ is to better address the 1989 Total Coliform Rule (TCR) objectives and enhance the multi-barrier approach to protecting public health, especially with respect to smaller ground water PWSs.

A large portion of the data collection under the RTC~~R~~ will involve monitoring, assessments, corrective actions, and public notification. Under the RTC~~R~~, PWSs would continue to monitor for total coliforms and *E. coli* in the distribution system. All PWSs that meet certain trigger conditions (either a Level 1 or Level 2 trigger) are required to complete a Level 1 or Level 2 assessment and submit an assessment form to the state¹ within a specified time period. For corrective actions not completed within the specified time period, PWSs must submit to the state a timetable for completing the corrective actions. Additionally, PWSs would continue to be required to provide public notification for violations (the level of notification depends on the degree of public health implication of the violation). Some state activities under the RTC~~R~~ include review and revision of PWSs' sample siting plans; review of PWSs' sampling results; review of completed assessment forms; consultation and coordination with PWSs to determine the appropriate corrective action to be implemented; review of PWSs' certification of public notification; and recordkeeping of PWSs' submissions.

PWSs and states have monitoring, reporting, and recordkeeping requirements under the national primary drinking water regulations (NPDWRs) (see 40 CFR² 141.402, 40 CFR 141.403, 40 CFR 142.405, 40 CFR 142.14, 40 CFR 142.15). All affected PWSs shall maintain and report to the state information documenting compliance with the treatment and monitoring requirements under the NPDWRs. States shall maintain records essential for program implementation and oversight. These records, retained in the Safe Drinking Water Information System (SDWIS), allow the Environmental Protection Agency (EPA) to track PWS compliance with NPDWRs.

Data collected under the Safe Drinking Water Act (SDWA) are used by EPA's Office of Ground Water and Drinking Water (OGWDW), and other EPA programs such as Superfund and Resource Conservation and Recovery Act (RCRA). The data may also be used by the Farmers Home Administration, the Department of the Interior, the Department of Housing and Urban Development, the U.S. Army Corps of Engineers, White House Task forces, the Federal Emergency Management Agency, the Food and Drug Administration, other government agencies, public interest groups, and many private companies and individuals.

This ICR presents the burden and costs of the RTCR to PWSs and states during the first three years following rule promulgation. For this 3-year ICR period, the average annual net change in respondent burden and cost to PWSs and states is estimated at 839,526 hours and \$23,767,060. The annual net change burden and cost to PWSs is estimated at 747,848 hours and \$20,171,639. The estimated net change annual state burden for this ICR is 91,678 hours, at an estimated annual net change cost of \$3,595,421. All costs estimated are labor costs. There are no operation and maintenance (O&M) or capital costs for the 3-year period covered by this ICR. The net change burden and cost estimates are discussed in greater detail in Section 6 of this document.

Beyond the first three years after rule promulgation (when PWSs and states need to comply with the rule), the burden and costs associated with complying with the rule for states and PWSs will be captured in the Microbial Rules ICR (for monitoring burden and costs) and the Public Water System Supervision (PWSS) ICR (for public notification reporting and recordkeeping burden and costs). Since there are ongoing reporting and recordkeeping requirements under the 1989 TCR, Appendix A of this ICR shows the net change in the reporting and recordkeeping burden and costs to be incurred by PWSs under the RTCR. Note that these calculations are for informational purposes only and are not part of this ICR.

The total number of respondents for this ICR is 154,894; 154,837 respondents are PWSs and 57 respondents are states and territories. The average annual net change in the number of responses for PWSs is 103,225 and averages 2.0 responses per respondent annually. The average annual net change in the number of responses for states is 51,669 and averages 906.5 responses per respondent annually.

This ICR was prepared in accordance with the November 2005 version of EPA's Guide to Writing Information Collection Requests Under the Paperwork Reduction Act (PRA) of 1995 (or "ICR Handbook") prepared 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 the Office of Management and Budget's (OMB) implementing guidelines.

2 NEED FOR AND USE OF THE COLLECTION

The following sections describe the need for this information collection and the legal authority under which this information will be collected. Section 4 contains a summary of the major recordkeeping and reporting requirements for the RTCR.

2(a) Need/Authority for the Collection

The RTCR achieves the objectives of the 1989 TCR more effectively and efficiently, taking into account the changes in regulatory framework for implementing the SDWA over the past 20 years and experience with the TCR since it was promulgated in 1989.

The information collected under the RTCR is required by EPA to carry out its monitoring and enforcement responsibilities under the SDWA. Without comprehensive, up-to-date information on drinking water contamination, EPA would not be able to meet the SDWA statutory requirements.

Section 1401(1)(D) of the SDWA requires that a NPDWR

contains criteria and procedures to assure a supply of drinking water which dependably complies with such maximum contaminant levels; including accepted methods for quality control and testing procedures to insure compliance with such levels and to insure proper operation and maintenance of the system...

This section also authorizes EPA to require PWSs and laboratories to use EPA-approved methods and quality assurance criteria for collecting and analyzing water samples.

Section 1445(a)(1)(A) of the SDWA requires that persons subject to the NPDWR requirements

establish and maintain such records, make such reports, conduct such monitoring, and provide such information as the Administrator may reasonably require by regulation to assist the Administrator in establishing regulations under this subchapter, in determining whether such person has acted or is acting in compliance with this subchapter...

2(b) Use/Users of the Data

Once compliance with the RTCR begins, each PWS maintains PWS-level records on the analytical results of monitoring actions and corrective actions taken and of the reports or written communications with the state regarding violations, assessments, corrective actions, and public notification (see 40 CFR 141.31 and 141.33). PWSs will use the data collected from this ICR and from the Microbial Rules ICR and PWSS ICR, when the rules goes into compliance, to:

- Determine system-specific needs;
- Evaluate the effectiveness of treatment;
- Determine the integrity of the distribution system;
- Signal the possible presence of fecal contamination;
- Correct significant deficiencies; and
- Alert the public through notices in the mass media or water bills when PWSs are

States are required to maintain records compiled from PWS respondents (40 CFR 142.14). States can use these records to track PWS monitoring, compliance violations, and enforcement activities. States can also track schedules for PWSs trying to achieve compliance. States are required to report the number of violations to SDWIS, which will help them target PWSs for compliance and take the necessary remedial action. SDWIS is a Federal information system that allows EPA and the states to store and retrieve information over time. Trends in compliance data can be evaluated at the PWS level, at the state level, and at the national program level. Usually, these data are used by EPA for maintaining oversight of the drinking water program (including supporting the Six-Year Review of NPDWRs mandated by SDWA) and for supporting Federal enforcement actions in cases where states fail to enforce.

The states and EPA have a number of critical questions to answer as part of their supervision of PWSs. Information and data collected from this ICR and from the Microbial Rules ICR and PWSS ICR can be used to answer these questions, some of which are listed below. At the PWS level:

- Does a PWS have Level 1 or Level 2 triggers requiring Level 1 or Level 2 assessments?
- Does the result of a Level 1 or a Level 2 assessment indicate the presence of (a) sanitary defect(s) that require(s) corrective actions?
- For PWSs not in compliance, why are they not in compliance and how can compliance be achieved?
- What is the threat to public health of a PWS that is not in compliance?

At the national and state level:

- What are the national and state compliance trends?
- What changes in national policy or regulation may be needed to increase the national compliance rate?
- Is noncompliance a function of location, size, or other identifiable variable?

Requests for PWS data and related statistical analyses are frequent. Requests for SDWIS data are often received under the Freedom of Information Act (FOIA). Approximately 200 FOIA requests are received per year. EPA also maintains an Internet access point for SDWIS data at their “Envirofacts” Internet site.

3 NON-DUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

The following sections verify and affirm that this ICR satisfies the PRA requirements, meets the OMB data-collection guidelines, has public support, and does not duplicate another collection.

3(a) Non-duplication

EPA has searched the Federal Information Locator System in an effort to ensure non-duplication of the data collection efforts. The information collected under the RTCR is needed to determine a PWS's risk of microbial contamination and to evaluate the PWS's compliance. To the best of EPA's knowledge, data required by this rule are not available from any other source.

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

As part of the Federal Register notice on the proposed RTCR Rule, EPA solicited comments on this information collection and the estimates in this ICR. EPA solicited comments on specific aspects of the proposed information collection, as described below:

- 1) Whether the collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;
- 2) Whether the Agency's burden estimate is accurate including the validity of the methodology and assumptions used;
- 3) How to enhance the quality, utility, and clarity of the information to be collected; and
- 4) How to minimize the burden on respondents, including use of appropriate automated electronic, mechanical, or other technological collection techniques or other forms of information technology.

EPA did not receive comments that specifically referred to the ICR prepared for the proposed rule; however, it received several comments (such as the need to increase unit costs) on the associated Economic Analysis (EA), as well as the Technology and Cost (T&C) Document (which contains many of the unit costs used for the cost analysis in the Economic Analysis (EA) and this ICR, which were obtained from the advisory committee technical work group and vendors). For the final rule, EPA adjusted some of the unit costs associated with corrective actions to reflect a more realistic scenario but these adjustments had little impact on the costs in the EA or this ICR. These changes have been incorporated into the analyses shown in Appendix A of this ICR.

EPA's responses to comments received on the proposed rule are available at <http://www.regulations.gov>, docket ID number EPA-HQ-OW-2008-0878.

In compliance with the PRA (44 USC 3501 *et seq.*), EPA submitted this ICR for the RTCR to OMB for review and approval prior to proposal. EPA did not receive any comments from OMB on the ICR at that time.

3(c) Consultations

EPA noticed its intent to revise the 1989 TCR in July 2003 (68 FR 42908, July 18, 2003).

Washington, DC, from January 30 to February 1, 2007 to discuss available information on the 1989 TCR and available information regarding risks in distribution systems.

In June 2007, EPA established the Total Coliform Rule / Distribution System Advisory Committee (TCRDSAC) in accordance with the provisions of the Federal Advisory Committee Act, to provide recommendations to EPA on revisions to the 1989 TCR and on what information about distribution systems is needed to better understand and address public health impacts from potential degradation of drinking water quality in distribution systems. The committee members agreed on and signed the Agreement in Principle (AIP) that contains the advisory committee's recommendations on revisions to the 1989 TCR that will improve implementation while maintaining or improving public health protection and distribution system water quality. The provisions of the RTCR are based on the AIP.

EPA had also committed in the AIP to hold a stakeholder meeting no less than once per year to engage stakeholders in the development of the proposed RTCR. EPA held two stakeholder meetings, the first one in April 2009 and the second one in May 2010, to provide draft proposed regulation updates and an opportunity for stakeholders to provide feedback on the development of the proposed RTCR.

As mandated by SDWA, EPA also consulted with the Science Advisory Board, the National Drinking Water Advisory Council (NDWAC), and the Secretary of the US Department of Health and Human Services (HHS) on the proposed RTCR, and again with NDWAC and HHS for the final rule. EPA also consulted with Tribal governments in accordance with Executive Order 13175: *Consultation and Coordination with Tribal Governments*. EPA also convened a Small Business Advocacy Review Panel (SBARP) to look at the impacts of the proposed RTCR on small entities. A more detailed discussion on this latter consultation can be found in Section 5(c) of this ICR. EPA considered the recommendations received during these consultations in developing the RTCR.

3(d) Effects of Less Frequent Collection

During the three-year period covered by this ICR, EPA requires no reporting and recordkeeping associated with complying with the RTCR.

For compliance with the RTCR (which happens beyond the three years covered by this ICR) EPA has determined that the monitoring frequencies for total coliforms and *E. coli* required of PWSs under the RTCR are appropriate since less frequent data collection may fail to identify, in a timely manner, significant contaminant concentrations that may threaten the health and safety of drinking water consumers. EPA has considered alternatives for a wide range of frequency and burden estimates for data collection. EPA has selected the approach that requires the least frequent collection possible while maintaining its public health protection objectives.

3(e) General Guidelines

This ICR was prepared in accordance with the November 2005 ICR Handbook prepared 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.

3(f) Confidentiality

No confidential information will be collected as a result of this ICR.

4 RESPONDENTS AND INFORMATION REQUESTED

The following sections provide information on the respondents and the information they are requested to provide.

4(a) Respondents/NAICS Codes

Under the RTCR, respondents to the monitoring, reporting, and recordkeeping requirements include the operators and owners of PWSs, which include noncommunity water systems (NCWSs). The North American Industry Classification System (NAICS) Code for investor-owned water systems is 22131; the Standard Industrial Classification (SIC) Code is 4941. The NAICS Code for both publicly owned water systems and state agencies is 92411 and the SIC Code is 9511. State officials serve in a role of respondent when reporting compliance data to EPA.

PWSs are defined as those systems that provide piped water for human consumption and have at least 15 service connections or regularly serve at least 25 people at least 60 days per year. A community water system (CWS) is a PWS that serves at least 15 connections used by year-round residents or regularly serves at least 25 year-round residents. NCWSs, by definition, are all other PWSs. NCWSs include transient systems and non-transient systems. Non-transient systems serve the same 25 people at least 6 months per year (40 CFR 141.2).

4(b) Information Requested

4(b)(i) Data Items

States

During the first three years after rule promulgation, EPA expects states to prepare and submit their primacy applications. Additionally, states would incur administrative costs to implement the RTCR. These implementation costs are not directly required by specific provisions of the RTCR but are necessary for states to ensure that the provisions of the RTCR are properly carried out. States would need to allocate time for their staff to establish and maintain the programs necessary to comply with the RTCR, including developing and adopting state regulations and modifying data management systems to track new required PWS reports to the states. In addition to the general requirements contained in 40 CFR 142.16, EPA requires a state's primacy application to contain information specific to the RTCR. This information includes:

- The baseline and reduced monitoring provisions of the RTCR the state will adopt and how the state will implement those provisions;
- Written descriptions of the following:
 - Frequency and process used to review and revise sample siting plans;
 - Criteria for reduced monitoring;
 - Process for implementing the new assessment and corrective action provisions of the RTCR;
 - Criteria and process for invalidating routine or repeat samples;
 - Criteria and process for approval of individuals allowed to conduct Level 2

- Procedure for performing special monitoring evaluations during sanitary surveys for ground water systems serving 1,000 or fewer people to determine whether systems are on an appropriate monitoring schedule;
- Process of identifying seasonal systems and determining their monitoring schedule and start-up procedures;
- Additional criteria for reduced monitoring; and
- Criteria for extending the 24-hour period for collecting repeat samples for states not electing to use only case-by-case waivers.

The following are the reporting and recordkeeping requirements for states beyond the first three years after rule promulgation (when PWSs need to comply with the RTCR). The costs and burden determination to comply with these requirements are not included in this ICR.

In addition to the reporting requirements specified in 40 CFR 142.15, the RTCR requires states to report the following to EPA (see §142.15(c)(3)):

- A list of systems that the state is allowing to monitor under a reduced monitoring frequency.

In addition to those already specified in 40 CFR 142.14, states are required to keep records of the following (see §142.14(a)(10)):

- Any case-by-case decision to waive or extend the 24-hour time limit for collecting samples following either a total coliform-positive routine sample, invalidation, or a high turbidity measurement;
- Any decision to allow a system to waive the requirement for three routine samples the month following a total coliform-positive sample;
- Any decision to invalidate a total coliform-positive sample;
- Completed and approved Level 1 and/or Level 2 assessments, including reports from the system that corrective action has been completed;
- Any decision to reduce the total coliform monitoring frequency for a community water system serving 1,000 or fewer people to less than once per month;
- Any decision to reduce the total coliform monitoring frequency for a noncommunity water system using only ground water and serving 1,000 or fewer people to less than once per quarter;
- Any decision to reduce the total coliform monitoring frequency for a noncommunity water system using only ground water and serving more than 1,000 people during any month the system serves 1,000 or fewer people; and
- Any decision to allow a system to forgo *E. coli* testing of a total coliform-positive sample if that system assumes that the total coliform-positive sample is *E. coli*-positive.

Public Water Systems

During the first three years after rule promulgation, PWSs need not comply with the

familiar with its provisions and to train employees on rule requirements. Additionally, EPA expects that PWSs will start revising their sample siting plans as necessary so that they will be available for state review and revision when the systems have to comply with the rule.

The following are the reporting and recordkeeping requirements for PWSs beyond the first three years after rule promulgation (when PWSs need to comply with the RTCR). The costs and burden determination to comply with these requirements are not included in this ICR.

In addition to the reporting requirements specified in 40 CFR 141.31, PWSs are required by the RTCR to report the following to the states (see §141.861(a)):

- *E. coli* MCL violation by the end of the day when the system learns of the violation, or by the end of the next business day if the state office is closed when the system learns of the violation, and provide public notification;
- *E. coli*-positive sample by the end of the day when the system learns of the analytical result, or by the end of the next business if the state office is closed when the system learns of the result;
- Treatment technique violation for total coliforms by no later than the end of the next business day after the PWS learns of the violation. The PWS must provide public notification;
- Assessment form within 30 days of triggering an assessment and completion of each scheduled corrective action for corrections not completed by the time of submission of the assessment form; and
- Monitoring violation within 10 days after the PWS discovers the violation. The PWS must provide public notification.

In addition to the recordkeeping requirements for PWSs specified in 40 CFR 141.33, PWSs are required by the RTCR to keep records of the following (see §141.861(b)):

- Any assessment form, documentation of corrective actions completed as a result of assessments, or other available summary documentation of the sanitary defects found and corrective actions taken for state review; and
- Any repeat sample taken that meets state criteria for an extension of the 24-hour period for collecting repeat samples.

4(b)(ii) Respondent Activities

States

During the first three years after rule promulgation, the only activities that take place are state primacy application and start-up activities, which include:

- Reading and understanding the rule;
- Adopting the rule and developing state program that will support implementation of the rule;
- Modifying data management system;
- Training staff; and

- Reviewing PWS sample siting plans and providing recommendations for revisions to PWSs.

Beyond the first three years, when PWSs need to comply with the RTCR, EPA expects the states to be involved in the following incremental activities (note that these activities are not part of the cost and burden determination for this ICR). Figure 4.1 shows the schedule of information collection and other compliance activities under the RTCR.

- Tracking compliance;
- Analyzing and reviewing PWS data;
- Making determinations concerning PWS monitoring requirements;
- Responding to PWSs with positive samples (for the calculations shown in Appendix A, note that the net change in burden and costs for states to review PWSs monitoring results is zero because the 1989 TCR methodology is calculated on a per PWS basis and the total number of PWSs is the same for modeling under the 1989 TCR and RTCR);
- Recordkeeping;
- Reviewing completed assessment forms and consulting with the PWS about the assessment form;
- Reviewing and coordinating with PWSs to determine the optimal corrective action to be implemented; and
- Providing consultation, reviewing the public notification certification, and filing the report of the violation.

Public Water Systems

During the first three years after rule promulgation, EPA anticipates PWSs to perform start-up activities, which include:

- Reading and understanding the rule;
- Planning, and mobilization; and
- Revising existing sample siting plans to identify sampling locations and collection schedules that are representative of water throughout the distribution system.

Beyond the first three years, when PWSs need to comply with the RTCR, EPA anticipates PWSs to be involved in the following incremental activities (note that these activities are not part of the cost and burden determination for this ICR). Figure 4.1 shows the schedule for information collection and other compliance activities under the RTCR.

- Conducting routine, additional routine, and repeat coliform monitoring and report the results as required.³
- Completing a Level 1 assessment if the PWS experiences a Level 1 trigger, and submitting a form to the state to identify sanitary defects detected, corrective

actions completed, and a timetable for any corrective actions not already completed.

- Completing a Level 2 assessment if the PWS experiences a Level 2 trigger, and submitting a form to the state to identify sanitary defects detected, corrective actions completed, and a timetable for any corrective actions not already completed.
- Correcting sanitary defects found through the performance of Level 1 or Level 2 assessments and report on completion of corrective actions as required.⁴
- Developing and distributing Tier 1 public notices when *E. coli* MCL violations occur.
- Developing and distributing Tier 2 public notices when the PWSs fail to take corrective action.
- Developing and distributing Tier 3 public notices when the PWSs fail to comply with the monitoring requirements or with mandatory reporting of required information within the specified timeframe.

⁴ For the calculations shown in Appendix A, note that only the net change in the number of corrective actions performed under the RTCR is accounted for. EPA estimates that additional corrective actions would be performed for only 10% of the assessments undertaken as a result of the RTCR, representing the net increase of the RTCR over the 1989 TCR. EPA estimates that corrective actions found through Level 1 assessments would result in corrective

Figure 4-1: Implementation Schedule

	Year										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
State	Implementation										
		Revising Sample Siting Plan									
				Routine Monitoring, Additional Routine Monitoring, Repeat Monitoring							
				Annual Site Visits							
				Level 1 and Level 2 Assessments							
				Correction Actions Based on Level 1 and Level 2 Assessments							
			Public Notification								
PWS	Implementation										
		Revising Sample Siting Plan									
				Routine Monitoring, Additional Routine Monitoring, Repeat Monitoring							
				Annual Site Visits							
				Level 1 and Level 2 Assessments							
				Correction Actions Based on Level 1 and Level 2 Assessments							
			Public Notification								

Note: Activities occurring in Year 10 continue throughout the remaining years of analysis.

5 INFORMATION COLLECTED – AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT

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

5(a) EPA Activities

EPA will be responsible for promulgating the RTCR once it has been finalized and overseeing its implementation. Implementation of monitoring requirements will rely extensively on state governments in those states that have assumed primacy under section 1413 of the SDWA and §142.16 of the RTCR. EPA will be involved in the following activities:

- Developing the RTCR and guidance materials;
- Reviewing and analyzing data submissions from the states; and
- Processing and maintaining SDWIS.

These are all general activities that are covered under the PWSS Program ICR, and therefore, are not included in the EPA burden and costs estimates for this ICR.

5(b) Collection Methodology and Management

Upon compliance, states will send to SDWIS their records of PWSs' violations and whether a PWS had a sanitary survey. EPA will modify SDWIS and data verification procedures to accommodate the new information from the RTCR.

EPA will check data quality by doing the following:

- Developing standard operating procedures for each rule;
- Editing the data submitted for content and required format in SDWIS;
- Sending rejected data back to the states for error corrections;
- Requiring states to resubmit corrected data;
- Data verification audit of states based on data verification protocol established by EPA; and
- Conducting a review of states annually for corrective actions.
- EPA plans to modify its existing data verification process to:
 - Include the number of PWSs with discrepancies;
 - Include onsite verification in states and PWSs, if necessary, every 2 to 3 years;
 - Train states on data verification procedures so they can conduct self-audits;
 - Include timeliness reviews;
 - Incorporate RTCR-related activities into EPA Regional quarterly/annual reviews;

- Include a regional check with states within six months of the previous data verification.

SDWIS runs on an IBM ES9000 12 way processor using mainframe edit programs (in JCL). EPA defines information requirements and states update the data in batch file mode in a pre-defined format. The public may access the violations data in SDWIS through the Internet at http://www.epa.gov/enviro/html/sdwis/sdwis_query.html.

5(c) Small Entity Flexibility

In developing this ICR (and for subsequent renewals of the Microbial Rules ICR and PWSS ICR), EPA considered the requirement of the Small Business Regulatory Enforcement Fairness Act (SBREFA) to minimize the burden of information collections on small entities. EPA considers small entities to be PWSs serving fewer than 10,000 people (63 FR 44524, August 19, 1998).

The RTCR will have the greatest impact on small PWSs. Under the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., as amended by SBREFA, EPA generally is required to conduct a regulatory flexibility analysis that describes the impact of a regulatory action on small entities. To assess this impact, EPA conducted outreach to small entities and convened a SBARP in February 2008 to obtain advice and recommendations of representatives of the small entities that potentially would be subject to the rule's requirements. These recommendations are discussed below.

5(c)(i) Small Business Advocacy Review Panel Recommendations

The Panel recommended to use total coliforms as a trigger for investigation and/or corrective action, to balance monitoring requirements and costs with risk, to further differentiate requirements with other related rules, and to consider reporting and recordkeeping costs in estimating burden.

EPA and the TCRDSAC considered the Panel's recommendations in developing the RTCR. The RTCR eliminates the MCLG and MCL for total coliforms and instead uses total coliforms as an indicator of the potential pathway of contamination into the distribution system. PWSs that may be vulnerable to fecal contamination (as indicated by their monitoring results) are required to do an assessment and if necessary, take appropriate corrective action. Other provisions of the RTCR also result in reduced costs for many small PWSs and address the recommendations of the Panel mentioned previously. The provisions resulting in reduced costs include:

- Reduced routine monitoring for qualifying PWS serving 1,000 or fewer people.
- Reduced number of repeat samples required.
- Reduced additional routine monitoring for PWS serving 4,100 or fewer people.
- Reduced public notification requirements for all systems, including small systems.
- Reductions in corrective actions over time as a result of enhanced system performance for all small systems.

Furthermore, consistent with the Panel recommendation to evaluate which parameters are most appropriate for routine monitoring and as potential triggers for investigative and corrective actions, EPA is conducting a review of existing methods for total coliform and *E. coli* analysis

considering what research and information would be valuable in order to more fully evaluate the public health risks associated with water quality degradation in the distribution system.

5(d) Collection Schedule

The RTCR is scheduled to be promulgated in 2012, with monitoring beginning 3 years after promulgation. Figure 4.1 illustrates the information collection periods for compliance with the RTCR over the first 10 years following rule promulgation.

6 ESTIMATING BURDEN AND COST OF COLLECTION

The following sections discuss costs and burden for all information collection, recordkeeping, and reporting requirements for the RTCR.

6(a) Estimating Respondent Burden and Cost

The following sections discuss the costs and burden faced by PWSs and states. Note that the majority of the monitoring, recordkeeping, and reporting burden occurs beyond the 3-year period of the ICR. Exhibits A.34 and A.37, located in Appendix A, include a ten-year time frame showing the burden and costs beyond the initial period covered by this ICR. This reflects the reality of rule implementation. Figure 6.1 presents a summary of estimated responses, burden, and costs for the 3-year window of the ICR.

Figure 6.1: Average Annual Net Change Burden and Costs for the RTCR ICR

Respondent Type	Annual Burden Hours	Cost				Annual Responses
		Annual Labor Cost	Annual O&M Cost	Annual Capital Cost	Total Annual Cost	
PWSs	747,848	\$ 20,171,639	\$ -	\$ -	\$ 20,171,639	103,225
States and Territories	91,678	\$ 3,595,421	\$ -	\$ -	\$ 3,595,421	51,669
TOTAL	839,526	\$ 23,767,060	\$ -	\$ -	\$ 23,767,060	154,894

Notes:

- 1) Detail may not add exactly to total due to independent rounding.
- 2) "Annual Burden Hours" reflects an annual average for all system sizes over the 3-year ICR period.

6(a)(i) Burden and Cost to PWSs

Information collection activities of PWSs required under the RTCR will result in average annual net change national labor costs of \$20.2 million and a corresponding annual net change burden of 747,848 hours as shown in Figure 6.1 and in Exhibits A.34 and A.37. The exhibits also include annual net change costs and burden up to 10 years following rule promulgation.

The net change burden and costs are estimated for start-up activities, including reading the rule and training staff. The assumptions and methodologies used in deriving these estimates are discussed in the following section.

6(a)(i)(a) Start-Up Activities

Start-up activities are estimated at a one-time expense of \$60.5 million (Exhibit A.37) and 2.2 million burden hours (Exhibits A.34). Start-up activities include reading the final rule to become familiar with the requirements and performing additional or transitional implementation activities such as training staff on rule requirements. Additionally, all PWSs will incur one-time costs to revise existing sample siting plans to identify sampling locations and collection schedules that are representative of water throughout the distribution system.

For costing purposes, EPA estimates the labor needs and hourly labor rates of PWSs and states for two labor categories: managerial and technical. For PWSs, all analyses use labor rates presented in EPA's document, *Labor Costs for National Drinking Water Rules*⁵. The technical and managerial wage rates vary with PWS size and include fringe benefits. To account for the general composition of staff at PWSs of smaller sizes (e.g., PWSs serving 3,300 or fewer), EPA uses only the technical rate. For PWSs serving more than 3,300 people, EPA uses a ratio of 80

rate. A full description of the derivation of the labor rates used is provided in the *Technology and Cost Document for the Final Revised Total Coliform Rule*⁶. The weighted labor rates (\$2007) are shown in Exhibit A.1.

6(a)(i)(b) Annual Activities

In the tenth year of rule implementation, a net savings of \$1.5 million (Exhibit A.37) and 0.09 million burden hours (Exhibit A.34) is expected for annual PWS activity costs and burden, respectively. Included in this category are costs and burden to revise sample siting plans; to conduct routine monitoring, additional routine monitoring, and repeat monitoring; to perform Level 1 and Level 2 assessments; to perform reporting and recordkeeping related to corrective actions; and to provide public notification. The net change cost and burden estimates for PWS annual activities are shown in Exhibits A.34 and A.37. These net change costs are for data collection and review and will occur outside of the three years covered by this ICR.

6(a)(ii) Burden and Cost to States

Total annual average net change state labor cost is \$3.6 million, and the annual average net change burden is 91,678 hours for the three years covered by this ICR.

6(a)(ii)(a) Start-Up Activities

States are estimated to incur a one-time cost of \$10.8 million (Exhibit A.37) and a one-time burden of 275,033 hours (Exhibit A.34). For states, the administrative and field engineer labor rates from the *2001 State Drinking Water Needs Analysis*⁷ are used in the RTCR EA (as used in the Ground Water Rule EA⁸). These rates include a 60 percent overhead rate and were inflated to 2007\$ using the Employee Cost Index (ECI). The state labor rates in 2007\$ are \$39.22 for an administrative state employee and \$43.58 for a state field engineer. EPA assumes that the state field engineer would conduct annual site visits, and the administrative state employee would work with PWSs on all remaining aspects of the RTCR. Because this separation between field engineer and administrative employee is used, the 80/20 weighting ratio between technical and managerial rates is not used to develop state costs.

6(a)(ii)(b) Annual Activities

In the tenth year of rule implementation, a net savings of \$0.54 million (Exhibit A.37) and 0.01 million burden hours (Exhibit A.34) is expected for annual state activities (e.g., responding to positive sample results; reviewing completed assessment forms required to be filed by PWSs and consulting with PWSs about their assessment form; reviewing and coordinate with PWSs to determine the appropriate corrective action to be implemented; and providing consultation, reviewing the public notification certification, and filing the report of the violation. States must also submit information to SDWIS to assist both EPA and states in tracking PWS compliance (see Exhibits A.34 and A.37).

State net change costs and burden for activities occurring outside of the 3-year ICR window are calculated in the same way as state net change start-up costs and burden. The administrative state employee labor rate is used for all rule activities under the RTCR.

⁶ US Environmental Protection Agency. 2010. *Technology and Cost Document for the Final Revised Total Coliform Rule*. EPA-815-R-10-002.

⁷ Association of State Drinking Water Administrators (ASDWA). 2001. *Drinking water program resource needs*

6(b) Time Frame for Cost and Burden Estimates

To provide a coherent understanding of how the burden for the rule will occur, the time frame for rule implementation is described below.

In the first 3 years, EPA has estimated that states will adopt regulations for transitional implementation of the RTCR and will apply for program primacy approval, and that states and PWSs will conduct transitional start-up activities for implementing the RTCR, such as training, and data management system modifications.

States are expected to incur one-time costs to review sample siting plans and recommend any revisions to PWSs. PWSs are expected to revise sampling siting plans before monitoring begins. For modeling purposes costs are split between years 2 and 3 of the 25-year compliance period (monitoring is required starting in year 4).

Beginning in the fourth year following promulgation, PWSs would begin routine, additional routine, and repeat monitoring. EPA assumed that only the percentage of systems that received an annual site visit under the 1989 TCR would continue on annual monitoring under RTCR; the percentage of systems that would therefore no longer qualify for annual monitoring under the RTCR were assumed to revert to baseline quarterly monitoring. Additionally, EPA expects that, beginning in the fourth year, PWSs would be required to correct sanitary defects found through the performance of Level 1 or Level 2 assessments. Reporting and recordkeeping burden from corrective actions resulting from Level 1 and Level 2 assessments would also begin in the fourth year following promulgation. For each corrective action performed, states would incur recordkeeping and reporting burden to review and coordinate with PWSs. Revised public notification activities would also begin in the fourth year following promulgation.

6(c) Estimating EPA Burden and Cost

EPA's costs include those incurred by both regional offices and headquarters to process, analyze, and maintain SDWIS data. These costs cannot be derived on a per rule basis but are presented as an overall program cost in the PWSS Program ICR. Headquarters personnel who design and administer SDWIS believe that the net additional cost of this rule is not significantly greater than that of the PWSS Program.

The EPA also performs the role attributed to states and territories, for those states and territories over which it has primacy. This cost is included as part of the total burden and cost for states.

6(d) Respondent Universe

There are a total of 154,837 PWSs and 57 states and territories considered for this ICR.

6(e) Bottom Line Burden Hours and Costs

This section provides a description of bottom line estimates for implementation of the RTCR. The bottom line net change burden hours and costs for PWSs and states are the summaries of the hours and costs collectively incurred for all additional activities under the RTCR in comparison to the 1989 TCR. The first part of this section describes the estimated average annual net change costs and hourly burdens for respondents to the rule. The second part discusses the potential net change cost and burden to EPA. Figure 6.2 presents a summary of the average annual net change respondent burden over three years for PWSs and states. All additional exhibits relating to this ICR are in Appendix A.

Figure 6.2: Bottom Line Average Annual Net Change Burden and Costs for the 3-Year ICR Period

Annual Number of Respondents	A	51,669 (=) 51,612 (+) 57	PWSs States
Total Annual Responses	B	154,894 (=) 103,225 (+) 51,669	PWS responses State responses
Annual Number of Responses per PWS	C	2.00 (=) 103,225 (/) 51,612	Total annual PWS responses (from B) Total annual number of PWS respondents (from A)
Annual Number of Responses per State	D	906.5 (=) 51,669 (/) 57	Total annual state responses (from B) Total annual number of state respondents (from A)
Total Annual Respondent Burden Hours	E	839,526 (=) 747,848 (+) 91,678	PWS hours State hours
Hours per Response for PWSs	F	7.2 (=) 747,848 (/) 103,225	Total PWS annual hours (from E) Total PWS responses (from B)
Hours per Response for States	G	1.77 (=) 91,678 (/) 51,669	Total state annual hours (from E) Total state responses (from D)
Annual O&M and Capital Cost	H	\$0 (=) \$0 (+) \$0	PWS O&M costs State O&M costs
Total Annual Respondent Cost	I	\$23,767,060 (=) \$20,171,639 (+) \$3,595,421	PWS costs State costs
Total Annual Hours (Respondents + EPA)	J	839,526 (=) 839,526 (+) 0	Total respondent hours (from E) Total EPA hours
Total Annual Cost (Respondents + EPA)	K	\$23,767,060 (=) \$23,767,060 (+) \$0	Total respondent cost Total EPA cost

Notes:

1) Detail may not add exactly to totals due to independent rounding.

6(e)(i) Bottom Line Burden and Cost Estimates for Respondents

For this ICR, EPA estimates that PWSs will have an annual net change respondent burden of 747,848 hours and an annual net change in respondent costs of \$20.2 million. EPA estimates that states will have an annual net change respondent burden of 91,678 hours and a corresponding average annual net change respondent costs of \$3.6 million. Therefore, the total average annual net change respondent burden is estimated to be 839,526 hours and the corresponding total average annual net change respondent labor costs are estimated to be \$23.8 million. See Figure 6.2. There are neither capital costs nor O&M costs during the 3-year ICR period.

6(e)(ii) Bottom Line Estimate for EPA

As mentioned previously in Section 6c, the costs and burden incurred by EPA to process, analyze, and maintain SDWIS are presented as part of the PWSS Program ICR. Additional costs that are likely to be incurred by EPA for tribes and the state of Wyoming are included in the tally for the costs and burden to states and territories because most costs are estimated on a per system basis and because the number of PWSs on tribal land or in Wyoming affected by various provisions of the rule is uncertain.

6(f) Reasons for Change in Burden

The primary goal of the RTCR is to achieve the objectives of the 1989 TCR more effectively and efficiently, taking into account the changes in regulatory framework for implementing the SDWA over the past 20 years and experience with the TCR since it was promulgated in 1989. National burden estimates increase primarily because PWS requirements are being strengthened under the RTCR.

6(g) Burden Statement

The annual net change in public reporting and recordkeeping burden for this collection of information is estimated to average 14.5 hours per PWS respondent per year and 1,608.4 hours per state respondent per year for the 3-year ICR period.⁹

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 PWSs 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.