

# Regulatory Analysis Form

(Completed by Promulgating Agency)

**INDEPENDENT REGULATORY  
REVIEW COMMISSION**

(All Comments submitted on this regulation will appear on IRRC's website)

(1) Agency  
Department of Environmental Protection

(2) Agency Number:  
Identification Number: 7-494

IRRC Number: **3119**

(3) PA Code Cite: 25 Pa. Code, Chapter 109

(4) Short Title:  
Revised Total Coliform Rule (RTCR)

(5) Agency Contacts (List Telephone Number and Email Address):

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(6) Type of Rulemaking (check applicable box):

- Proposed Regulation  
 Final Regulation  
 Final Omitted Regulation

- Emergency Certification Regulation;  
 Certification by the Governor  
 Certification by the Attorney General

(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

The purpose of the RTCR is to protect public health by ensuring the integrity of drinking water distribution systems and monitoring for the presence of microbial contamination. EPA anticipates greater public health protection under the RTCR, as it requires public water systems (PWS) that are vulnerable to microbial contamination to perform assessments to identify sanitary defects and subsequently take action to correct them.

(8) State the statutory authority for the regulation. Include specific statutory citation.

Section 4(a) of the Pennsylvania Safe Drinking Water Act, 35 P.S. § 721.4(a), and section 1920-A of the Administrative Code of 1929, 71 P.S. § 510-20(b).

(9) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

Yes.

Section 1413 of the Federal Safe Drinking Water Act, 42 U.S.C. § 300g-2a, requires that, in order for the

state to retain primary enforcement authority (primacy), the state must adopt drinking water regulations that are “no less stringent than” the national primary drinking water regulations not later than 2 years after the date on which the regulations are promulgated by the United States Environmental Protection Agency (EPA), or must ask EPA for an extension of up to 2 years. The federal drinking water primacy regulations at 40 CFR § 142.12(a) also require the state to adopt all new and revised national primary drinking water regulations contained in 40 CFR Part 141 in order to retain primary enforcement responsibility. Furthermore, Section 4(a) of the Pennsylvania Safe Drinking Water Act, 35 P.S. § 721.4(a), requires the Environmental Quality Board to adopt maximum contaminant levels and treatment technique requirements no less stringent than those promulgated under the Federal act for all contaminants regulated under the national primary and secondary drinking water regulations. Also Section 5(a) of the state act, 35 P.S. § 721.5(a), requires the Department to adopt and implement a public water supply program which includes those program elements necessary to assume state primary enforcement responsibility under the Federal act.

EPA promulgated the Federal RTCR on February 13, 2013. EPA granted Pennsylvania an extension to adopt regulations through February 13, 2017. Therefore, Pennsylvania must adopt regulations implementing the Federal RTCR rules by February 13, 2017. Failure to adopt regulations prior to February 13, 2017 may result in Pennsylvania losing primacy.

(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

According to the preamble to the federal rule, the RTCR aims for greater public health protection than the 1989 Total Coliform Rule (TCR) in a cost-effective manner by: (1) Maintaining the objectives of the 1989 TCR (i.e., to evaluate the effectiveness of treatment, to determine the integrity of the distribution system, and to signal the possible presence of fecal contamination); (2) reducing the potential pathways of contamination into the distribution system; (3) using the optimal indicator for the intended objectives (i.e., using total coliforms as an indicator of system operation and condition rather than an immediate public health concern and using *E. coli* as a fecal indicator); and (4) requiring systems that may be vulnerable to contamination, as indicated by the nature of their operation, to have in place procedures that will minimize the incidence of contamination (e.g., requiring start-up procedures for seasonal systems). EPA, therefore, anticipates greater public health protection under the RTCR compared to the 1989 TCR because of the RTCR’s more preventive approach to identifying and fixing problems that affect or may affect public health. (78 FR 10272 – 10273, February 13, 2013)

One or more of these revisions affect all 8,868 PWS that serve a total population of over 12 million Pennsylvanians. A decrease in fecal contamination should reduce the potential risk to human health for PWS customers. Thus, any reduction in *E. coli* occurrence is considered a benefit of the RTCR. Fecal contamination may contain waterborne pathogens including bacteria, viruses, and parasitic protozoa; a reduction in fecal contamination should reduce the health risk from each of these contaminants.

(11) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

There are four provisions in this final rule that are more stringent than federal requirements. The Department developed these provisions to better protect public health and to be consistent with existing Pennsylvania drinking water regulations.

- Sections 109.202(c)(4), 109.202(c)(5) and 109.701(a)(3)(iv) require one-hour notification for violations or situations where the federal rule does not. These provisions have been added to clarify that these situations are covered by the existing one-hour reporting requirements of § 109.701(a)(3). Pennsylvania's one-hour reporting requirements remain more stringent than federal standards and ensure that the Department and the public is alerted to potential problems as soon as possible so that appropriate investigative and corrective actions can be taken.
- Section 109.705(b)(7) requires a PWS to consult with DEP within 14 days of receiving written notification that a Level 1 or Level 2 assessment is determined to be insufficient. The federal rule requires consultation but does not set a time limit. This provision will prevent violations by ensuring that systems consult with the Department and take steps to make corrections to an improperly completed assessment in advance of the 30-day due date for the revised assessment.

(12) How does this regulation compare with those of the other states? How will this affect Pennsylvania's ability to compete with other states?

The federal RTCR will need to be complied with or adopted in all of the other 49 states.

(13) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

The amendments will be incorporated into the existing language of 25 Pa Code Chapter 109. Other than this incorporation, the amendments should not affect any existing or proposed regulations of DEP or any other state agency.

(14) Describe the communications with and solicitation of input from the public, any advisory council/group, small businesses and groups representing small businesses in the development and drafting of the regulation. List the specific persons and/or groups who were involved. ("Small business" is defined in Section 3 of the Regulatory Review Act, Act 76 of 2012.)

The draft proposed rulemaking was submitted to the Small Water Systems Technical Assistance Center (TAC) Advisory Board for review and discussion on June 18, 2014. Comments and recommendations were received from TAC on July 3, 2014. Discussion with TAC was continued on September 23, 2014 and TAC's revised comments were received on October 20, 2014.

The draft final-form rulemaking was submitted to TAC for review and discussion on March 16, 2016. Comments were received from TAC on March 25, 2016.

(15) Identify the types and number of persons, businesses, small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) and organizations which will be affected by the regulation. How are they affected?

One or more of these revisions will affect all PWS as well as the people to which they provide water. Currently, there are 8,868 PWS that serve a total population of over 12 million Pennsylvanians. Of the 8,868 PWS, approximately 2,408 are owned by a municipality, an authority, the Commonwealth of Pennsylvania, the federal government, or another not-for-profit entity. The other 6,460 PWS are either privately or investor owned.

A review of the USA Small Business Size Regulations under 13 CFR Chapter 1, Part 121 provides a standard for determining what constitutes a small business for the NAICS category relating to PWS. A PWS falls within NAICS category 221310, Water Supply and Irrigation Systems, which comprises establishments primarily engaged in operating water treatment plants and/or operating water supply systems. The small size standard for this NAICS category is annual receipts of not more than \$7.0 million.

For the 6,460 privately or investor owned PWS, the Department has no way to estimate annual receipts. Therefore, the Department used the federal definition of a small water system in 40 CFR 141.2, which states that a small water system is “a water system that serves 3,300 persons or fewer”. Under this regulatory package, a PWS owned by a private individual or investor serving less than or equal to 3,300 persons was considered to be a small business. In Pennsylvania, there are approximately 6,177 PWS meeting this criteria and can be considered as a small business.

The persons served by a PWS will benefit from this regulation, because a decrease in fecal contamination should reduce the potential risk to human health.

Some PWS will be affected by the need to change operation or make capital improvements to comply with some of the provisions set forth in the regulation. Additionally, PWSs which identify sanitary defects will need to correct those problems.

(16) List the persons, groups or entities, including small businesses that will be required to comply with the regulation. Approximate the number that will be required to comply.

8,868 PWS will be required to comply with one or more of these revisions. Of the 8,868 PWS, approximately 6,177 may be considered to be small businesses. For the purposes of this regulatory package, a PWS owned by a private individual or investor serving less than or equal to 3,300 persons was identified as a small business.

(17) Identify the financial, economic and social impact of the regulation on individuals, small businesses, businesses and labor communities and other public and private organizations. Evaluate the benefits expected as a result of the regulation.

The expected benefits of this regulation are (1) the avoidance of a full range of health effects from the consumption of contaminated drinking water such as: acute and chronic illness, endemic and epidemic disease, waterborne disease outbreaks, and death; and (2) healthy and sustainable communities.

This regulation will provide a positive economic impact to individuals, small businesses and businesses that provide services to the drinking water industry.

The financial impact of these revisions to the regulated community will be: increased monitoring for noncommunity water systems, hiring a certified operator to conduct a Level 2 assessment for transient noncommunity water systems (TNC), and correcting sanitary defects which have been identified during an assessment for all systems.

(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.

Implementation of the proposed amendments is not anticipated to produce adverse effects. The benefits as discussed by EPA are largely unquantifiable but include the potential for decreased incidence of endemic illness from fecal contamination and other waterborne pathogens, increased knowledge regarding system operation, accelerated maintenance and repair, avoided costs of outbreaks, and reductions in averting behavior. (78 FR 10302 – 10303, February 13, 2013). These benefits outweigh the costs because of the increased protection of public health.

(19) Provide a specific estimate of the costs and/or savings to the **regulated community** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

Costs were derived from the alternative option of EPA’s economic analysis of the Federal RTCR. The alternative option looks at the costs associated with monthly monitoring for all PWSs and shows that costs are relatively insignificant. National costs were adjusted to represent the ratio of Pennsylvania PWSs compared to the number of PWSs nationwide.

CWS: \$126.77 per system/year  
NTNC: \$128.90 per system/year  
TNC: \$229.31 per system/year

Mandating monthly monitoring for all PWS will eliminate the requirement to collect 3 additional samples in the month following a total coliform positive sample. Based on a five-year average of approximately 580 positive samples per year, regulated noncommunity water systems (NCWS) are expected to save approximately \$40,000 per year in these extra sampling costs.

(20) Provide a specific estimate of the costs and/or savings to the **local governments** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

The proposed amendments will affect all PWS, which includes local government agencies and municipal authorities operating such systems. The only costs to local government will be costs incurred by systems that are owned and/or operated by local government. The cost estimates are based on the figures in question 19. Of the 8,868 PWSs in Pennsylvania affected by this regulation, approximately 1,000 are operated by local governments. The total annual cost to these cities/boroughs or other municipal authorities are calculated and estimated to be \$156,393.

(21) Provide a specific estimate of the costs and/or savings to the **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

The costs to state government will be those incurred by systems that are owned and/or operated by state government and costs associated with implementing and administering the rule. The cost estimates are based on the figures in question 19.

208 systems are owned and/or operated by the Commonwealth of Pennsylvania. The total cost to the Commonwealth for these systems is estimated to be \$44,139.

Implementation of the proposed amendments will result in Pennsylvania state government incurring costs associated with implementing and administering the rule, reviewing sample siting plans, reviewing sampling results, reviewing seasonal system start-up procedures and annual certification, reviewing completed assessment forms, tracking corrective actions, and tracking public notifications. EPA estimates nationwide costs for state government to equate to approximately \$200,000. The expected annual cost to Pennsylvania state government equates to \$11,000.

(22) For each of the groups and entities identified in items (19)-(21) above, submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

When sample results indicate the presence of total coliform and/or *E. coli* in a sufficient number of samples as designated by the rule, PWSs are required to complete a Level 1 and/or Level 2 Assessment form. Level 2 assessments must be completed by certified operators. Therefore, PWSs which do not employ a certified operator will need to contract with one. PWSs which operate seasonally are required to submit a Seasonal System Start-up Plan and then annually submit a form to the Department certifying that the start-up plan was implemented prior to opening for the season.

(23) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	<b>Current FY Year</b>	<b>FY +1 Year</b>	<b>FY +2 Year</b>	<b>FY +3 Year</b>	<b>FY +4 Year</b>	<b>FY +5 Year</b>
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	0	0	0	0	0	0
<b>Local Government</b>	0	0	0	0	0	0
<b>State Government</b>	0	0	0	0	0	0
<b>Total Savings</b>	0	0	0	0	0	0

<b>COSTS:</b>						
<b>Regulated Community</b>	1,720,610	1,720,610	1,720,610	1,720,610	1,720,610	1,720,610
<b>Local Government</b>	156,393	156,393	156,393	156,393	156,393	156,393
<b>State Government</b>	11,000 (44,139)	11,000 (44,139)	11,000 (44,139)	11,000 (44,139)	11,000 (44,139)	11,000 (44,139)
<b>Total Costs</b>	1,731,610	1,731,610	1,731,610	1,731,610	1,731,610	1,731,610
<b>REVENUE LOSSES:</b>						
<b>Regulated Community</b>	0	0	0	0	0	0
<b>Local Government</b>	0	0	0	0	0	0
<b>State Government</b>	0	0	0	0	0	0
<b>Total Revenue Losses</b>	0	0	0	0	0	0

**\*Notes:**

- **Costs for the regulated community is the cost for all PWSs which includes the cost to local and state government PWS.**
- **Local Government in this analysis is the regulated community, not the regulating agencies. Thus, the costs under local government are a portion of the costs identified for the regulated community.**
- **The top number in the State Government row is the State's oversight costs. The number in parentheses represents the portion of the costs identified for the regulated community for state-owned water systems.**
- **The Total Costs is equal to the cost to the regulated community plus the portion of the State Government oversight costs.**

(23a) Provide the past three-year expenditure history for programs affected by the regulation.

<b>Program</b>	<b>FY -3 2012-13</b>	<b>FY -2 2013-14</b>	<b>FY -1 2014-15</b>	<b>Current FY 2015-16</b>
Environmental Program Operations	\$7,184,356	\$7,357,140	\$6,972,192	\$5,818,214
Environmental Program Management	\$570,817	\$709,938	\$296,337	\$288,919
General Government Operations	\$0	\$385	\$0	\$0
Safe Drinking Water Act	\$58,481	\$15,439	\$50,927	\$52,334

(24) For any regulation that may have an adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), provide an economic impact statement that includes the following:

- (a) An identification and estimate of the number of small businesses subject to the regulation.
- (b) The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed regulation, including the type of professional skills necessary for preparation of the report or record.
- (c) A statement of probable effect on impacted small businesses.
- (d) A description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

- (a) Of the 8,868 PWSs approximately 6,177 may be considered to be small businesses (as defined in Question 15).
- (b) When sample results indicate the presence of total coliform and/or *E. coli* in a sufficient number of samples as designated by the rule, PWSs are required to complete a Level 1 and/or Level 2 Assessment form. Level 2 assessments must be completed by certified operators. Therefore, a PWS which does not employ a certified operator will need to contract with one. PWSs which operate seasonally are required to submit a Seasonal System Start-up Plan and then annually submit a form to the Department certifying that the start-up plan was implemented prior to opening for the season. The costs to complete these activities are part of the total implementation cost detailed in (c).
- (c) Depending on the PWS type, businesses are expected to incur from \$126.77 for Community Water Systems (CWS) up to \$229.31 for Transient Noncommunity Water Systems (TNC) per system per year. Some of the associated expenses will only be realized if sampling indicates the potential for *E. coli* contamination, which then needs to be further evaluated through a Level 1 or Level 2 Assessment.
- (d) For the RTCR provisions, no alternative regulatory schemes were considered. These amendments reflect federal rules that must be complied with or adopted by the individual state in order to assume primary enforcement responsibility.

(25) List any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, the elderly, small businesses, and farmers.

The amendments should have no effects on one particular group relative to another since it will apply to most of Pennsylvania's population served by public water systems. However, the Safe Drinking Water Program is prepared to develop special provisions or provide special services to accommodate any such group as the need arises.

(26) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

No alternative regulatory schemes were considered. These amendments reflect federal rules that must be complied with or adopted by the individual states.



(27) In conducting a regulatory flexibility analysis, explain whether regulatory methods were considered that will minimize any adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), including:

- a) The establishment of less stringent compliance or reporting requirements for small businesses;
- b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses;
- c) The consolidation or simplification of compliance or reporting requirements for small businesses;
- d) The establishment of performing standards for small businesses to replace design or operational standards required in the regulation; and
- e) The exemption of small businesses from all or any part of the requirements contained in the regulation.

- a) For these provisions, no less stringent compliance or reporting requirements for small businesses were considered.
- b) For these provisions, no less stringent schedules or deadlines for small businesses were considered.
- c) For these provisions, neither consolidation nor simplification of compliance or reporting requirements for small businesses was considered.
- d) For these provisions, no performing standards for small businesses to replace design or operational standards required in the regulation for small businesses were considered.
- e) For these provisions, no exemptions for small businesses from all or any part of the requirements contained in the regulation were considered.

Alternative provisions were not considered for small businesses, because the requirements reflect federal regulations that must be adopted to maintain primacy.

(28) If data is the basis for this regulation, please provide a description of the data, explain in detail how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.

These amendments reflect federal rules that must be complied with or adopted by the individual states.

(29) Include a schedule for review of the regulation including:

A. The date by which the agency must receive public comments: August 13, 2015

- B. The date or dates on which public meetings or hearings will be held: November 3 and November 5, 2015
- C. The expected date of promulgation of the proposed regulation as a final-form regulation: Quarter 3, 2016
- D. The expected effective date of the final-form regulation: Upon publication in the PA Bulletin
- E. The date by which compliance with the final-form regulation will be required: Upon publication in the PA Bulletin
- F. The date by which required permits, licenses or other approvals must be obtained: Upon publication in the PA Bulletin

Note: In February 2013, the EPA adopted regulations amending 40 CFR Part 141 (relating to National primary drinking water regulations) to implement an RTCR. The compliance date for the federal RTCR was April 1, 2016.

(30) Describe the plan developed for evaluating the continuing effectiveness of the regulations after its implementation.

The amendments will be reviewed in accordance with the Sunset Review Schedule published by the Department.