

CSI - Ohio

The Common Sense Initiative

Business Impact Analysis

Agency Name: Ohio Environmental Protection Agency

Regulation/Package Title: Operational Requirements and Operator Certification

Amendments (2015)

Rule Number(s): 3745-7-01, 3745-7-03, 3745-83-01

Date: 02-03-15

Rule Type:

New

5-Year Review

Amended

Rescinded

The Common Sense Initiative was established by Executive Order 2011-01K and placed within the Office of the Lieutenant Governor. Under the CSI Initiative, agencies should balance the critical objectives of all regulations with the costs of compliance by the regulated parties. Agencies should promote transparency, consistency, predictability, and flexibility in regulatory activities. Agencies should prioritize compliance over punishment, and to that end, should utilize plain language in the development of regulations.

Regulatory Intent

1. Please briefly describe the draft regulation in plain language.

Ohio EPA is proposing to amend three rules in the Ohio Administrative Code (OAC). OAC rule 3745-7-01 covers definitions for the operator certification rules in Chapter 3745-7 of the OAC. Rule 3745-7-03 describes how each public water system (PWS) or treatment plant and distribution system is classified, and the staffing requirements for each classification of system. Rule 3745-83-01 outlines operational practices for systems to ensure optimal water

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quality, including disinfection requirements, approval of chemicals being used, minimum pressure requirements, operational analyses and reporting requirements.

These rules have been reviewed pursuant to the five year rule requirements set forth in ORC 106.03 and Ohio EPA is proposing changes. Revisions drafted in rule 3745-7-01 include a few clarifications to definitions. Revisions to rule 3745-7-03 include clarifying classification of systems, including satellite and consecutive systems, and to require a class I operator for transient noncommunity PWSs serving less than 250 people treating for nitrate or 4-log virus inactivation and removal. In addition, a revision was drafted to require continuous fluoride monitoring as one of the parameters required for a reduction in minimum staffing requirements.

Lastly, rule 3745-83-01 is proposed to be revised to accomplish the following:

- Require noncommunity PWSs serving less than 1,000 people that opt to chlorinate but are not required to, to meet the minimum chlorine residual requirements unless the chlorine is used solely for the oxidation for iron, manganese or hydrogen sulfide.
- Add a requirement to maintain records of monthly operational reports (MOR) for a period of ten years.
- Require MORs to be signed by the operator of record.
- Add a requirement for maintenance, so facilities and equipment operate as intended.
- Remove expired electronic reporting deadlines.
- Update the version of a technical document referenced.

2. Please list the Ohio statute authorizing the Agency to adopt this regulation.

ORC section 6109.04 paragraph (B)(2), “Adopt, amend, and rescind such rules in accordance with Chapter 119. Of the Revised Code as may be necessary or desirable to... Govern public water systems to protect the public welfare, including rules governing contaminants in water that may adversely affect the suitability of the water for its intended uses or that may otherwise adversely affect the public health or welfare.”

3. Does the regulation implement a federal requirement? Is the proposed regulation being adopted or amended to enable the state to obtain or maintain approval to administer and enforce a federal law or to participate in a federal program?

If yes, please briefly explain the source and substance of the federal requirement.

Yes, these rules enables Ohio EPA to administer the Safe Drinking Water Act (SDWA), as well as retain primary enforcement authority from the Federal Government and this rule is

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used to protect the public from potential contaminants found in drinking water as outlined in the SDWA.

4. If the regulation includes provisions not specifically required by the federal government, please explain the rationale for exceeding the federal requirement.

U.S. EPA does not have a direct counterpart to rules 3745-7-01 and 3745-7-03. However, they do require Ohio EPA to have an established program for certifying PWS operators. Failure to have a U.S. EPA approved program would result in Ohio EPA losing 20% of the money the federal government provides the state for Ohio's Revolving Fund Loan program. OAC rule 3745-83-01 does not specifically implement federal requirements, but it sets forth monitoring and reporting requirements for several parameters used in the operation of a PWS.

5. What is the public purpose for this regulation (i.e., why does the Agency feel that there needs to be any regulation in this area at all)?

The purpose for adopting such regulations is ensuring the availability of a safe and adequate supply of public drinking water. These rules help to achieve this purpose by ensuring PWSs have the appropriate staffing with the technical expertise to operate and oversee their system. The rules also require PWSs to monitor operational parameters to ensure the water system is operating properly, meeting regulatory standards.

6. How will the Agency measure the success of this regulation in terms of outputs and/or outcomes?

The Agency will base success of all of the rules in this package on public water system compliance rates within our various drinking and ground water programs. PWS compliance rates are typically discovered through reported data, during sanitary surveys of said system and by reviewing certified operator log books.

Development of the Regulation

7. Please list the stakeholders included by the Agency in the development or initial review of the draft regulation.

If applicable, please include the date and medium by which the stakeholders were initially contacted.

Stakeholders include public water system owners and operators, industry consultants, environmental organizations, other state agencies and in general, the public at large. The

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only measure someone has to take to be notified of DDAGW's potential rule activity is to request to be added to our electronic or hard-copy mailing list.

Stakeholders were notified of DDAGW's plans to revise rules on January 6, 2014 by electronic or regular mail in accordance with their request. In addition, DDAGW will be seeking comment from stakeholders during the division's interested party review period. The interested party review period occurs before the rules are filed with JCARR and is used to address any concerns or questions from staff and our stakeholders.

8. What input was provided by the stakeholders, and how did that input affect the draft regulation being proposed by the Agency?

Stakeholders did not provide any comments on the rules in this rule-making package during early stakeholder outreach, held from January 6 – February 7, 2014.

9. What scientific data was used to develop the rule or the measurable outcomes of the rule? How does this data support the regulation being proposed?

The federal rules, which include the SDWA Amendments of 1996, are the foundation for these rules. Statutory authority for these rules is established in Section 6109. of the Revised Code. Ohio EPA promulgated two of these rules under OAC Chapter 3745-7. References used include U.S. EPA's "Operator Certification Guidelines, Implementation Guidance" and the latest revisions to 40 CFR Parts 141 and 142.

10. What alternative regulations (or specific provisions within the regulation) did the Agency consider, and why did it determine that these alternatives were not appropriate? If none, why didn't the Agency consider regulatory alternatives?

In order to retain primary enforcement authority, Ohio EPA is required to develop and implement a federally approved operator certification program. Ohio EPA considered what other states developed and this rule as first adopted in the OAC. The Agency determined to add alternatives for small businesses.

OAC rule 3745-83-01 maintains consistency with existing industry and agency-wide standards.

11. Did the Agency specifically consider a performance-based regulation? Please explain. *Performance-based regulations define the required outcome, but don't dictate the process the regulated stakeholders must use to achieve compliance.*

Rule 3745-7-03 has a performance-based component. Ohio EPA established staffing requirements based on the classification of a PWS. These staffing requirements help ensure operators with both technical and experiential skills comparable to the complexity of the system are operating and maintaining the PWS.

There are some requirements, such as maintaining records that are performance-based components in rule 3745-83-01.

12. What measures did the Agency take to ensure that this regulation does not duplicate an existing Ohio regulation?

Ohio EPA reviewed internal regulations and determined there are no duplications.

13. Please describe the Agency's plan for implementation of the regulation, including any measures to ensure that the regulation is applied consistently and predictably for the regulated community.

Ohio EPA implementation of this rule package includes the following:

- Seeking input from staff on implementation problems and developing solutions.
- Involving staff in developing the rule amendments.
- Developing internal procedures and guidance documents for staff to use in implementing rules.
- Regularly notifying staff of rule changes.
- Giving presentations on rule updates.

Adverse Impact to Business

14. Provide a summary of the estimated cost of compliance with the rule. Specifically, please do the following:

a. Identify the scope of the impacted business community;

3745-7-01: There is no direct impact, as this rule covers definitions for Chapter 3745-7 of the OAC.

3745-7-03: The impact is to PWS owners and operators.

3745-83-01: This rule will impact PWSs of all types and population sizes.

b. Identify the nature of the adverse impact (e.g., license fees, fines, employer time for compliance); and

3745-7-03: The costs related to this rule include employing operators for the different PWSs.

3745-83-01: The cost of compliance for these rules varies depending on the PWS size and type but may include the cost to disinfect the PWS, finished storage water tanks and water mains, using NSF approved materials and chemicals, maintaining adequate pressure, and preparing and submitting monthly operational reports.

c. Quantify the expected adverse impact from the regulation.

The adverse impact can be quantified in terms of dollars, hours to comply, or other factors; and may be estimated for the entire regulated population or for a “representative business.” Please include the source for your information/estimated impact.

3745-7-03: The cost of compliance with this rule is tied to the cost of compliance of rule 3745-7-02. Rule 3745-7-02 requires public water systems have an operator of record onsite in accordance with staffing times in this rule. Ohio EPA estimates that the total statewide cost of compliance with these two rules for public water systems is approximately \$28,245,310.08 per year. Please note that the estimate does not take into account the rule's several provisions allowing for reductions in the amount of time the operator of record is required to be onsite. Should those provisions be taken advantage of, the overall cost of compliance could be much less.

System Classification	Operator’s Hourly Wage + 50% indirect cost	Minimum Staffing Requirement	Estimated Cost per System per Year (Median Wage x Hours)	Number of Systems Affected Statewide	Estimated Statewide Cost per Year
Class A without treatment	\$31.56	0.5 hours / week	\$820.56	241	\$197,754.96
Class A with treatment	\$31.56	1 hour / week	\$1,641.12	1630	\$2,675,025.60
Class I	\$31.56	1.5 hours / week	\$2,461.68	1719	\$4,231,627.92
Class II	\$33.69	20 hours / week	\$35,037.60	211	\$7,392,933.60

Class III	\$37.20	40 hours / week	\$77,376.00	120	\$9,285,120.00
Class IV	\$44.70	40 hours / week	\$92,976.00	48	\$4,462,848.00

3745-83-01: The cost of compliance with this rule is highly variable, depending on the public water system size, source of water and complexity of treatment. To provide an estimate, public water systems of different sizes were surveyed for the following: costs of disinfection including maintaining chlorine residuals, raising chlorine residual levels during an emergency, disinfecting finished water storage tanks and water mains, using NSF approved materials and chemicals, maintaining adequate pressure, covering finished water storage facilities, and submitting monthly operational reports. Costs also associated with the proposed amendments are for monitoring for chlorine residual prior to returning to service finished water storage facilities and water mains, and costs of operational analysis. The estimated cost of compliance ranges from \$3,279.00 to \$6,731,409.00 per year.

Type	Ground water	Surface water	Ground water	Ground water	Surface water
Treatment	Chlorination only	Settling, filtration, fluoridation, chlorination	Lime softening, fluoridation, chlorination	Manganese greensand, filtration, fluoridation, chlorination	Settling, filtration, fluoridation, chlorination
Population	53	5900	21796	35600	983264
Maintaining chlorine residual at 0.2 mg/l free (cost per year)	\$582.00	\$2,097.00	\$12,388.00	\$24,456.00	\$279,491.00
Increase chlorine residual to 1.0 mg/l free or 6.0 combined during actual or threatened waterborne disease outbreak (cost per year)	\$582.00	\$2,911.00	Extra \$27.00/day	None	None
Disinfect finished water storage facilities per AWWA standard C652 prior to	\$175.00	\$4,076.00	\$3,904.00	\$8,152.00	\$23,291.00

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Population	53	5900	21796	35600	983264
being placed into service or after repairs, inspections, painting, cleaning, or other activities that may lead to contamination (cost per year)					
Disinfecting water mains per AWWA standards C651 prior to being placed into service or after repairs or inspections unless a minimum of 20 psi is maintained (cost per year)	\$233.00	\$2,329.00	\$3,494.00	\$4,076.00	\$197,972.00
Monitoring chlorine residual in finished water storage facilities and returning to 0.2 mg/l free prior to returning to service (cost per year)	\$640.00	\$6,987.00	\$4,892.00	\$8,152.00	\$349.00
Using only chemicals approved in accordance with ANSI/NSF standards 60/61 (cost per year)	None*	None*	None*	None*	None*
Maintaining a minimum pressure of 20 psi (cost per year)	N/A	\$37,265.00	\$415,00.00 +	\$203,795.00	\$5,822,717.00
Providing a cover of finished water storage	N/A	\$60,556.00	\$14,207.00	\$14,557.00	\$0.00

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facilities (cost per year)					
Operational analysis (cost per year):					
Free chlorine or combined residual	\$369.00	\$1,747.00	\$7,778.00	\$8,734.00	\$401,767.00
Fluoride	N/A	\$9,317.00	\$9,155.00	\$8,734.00	
Total phosphate	N/A	N/A	\$555.00	N/A	
Orthophosphate	N/A	N/A	N/A	N/A	
pH	N/A	\$8,967.00	\$47,895.00	\$2,329.00	
Alkalinity	N/A	\$8,967.00	\$11,323.00	\$2,329.00	
Hardness	N/A	\$6,987.00	\$11,323.00	\$2,329.00	
Iron	N/A	N/A	N/A	\$9,317.00	
Manganese	N/A	N/A	N/A	\$9,317.00	
Copper	N/A	N/A	N/A	N/A	
Submit MOR's	\$699.00	\$999.00	\$3,220.00	\$1,397.00	
Total annual cost	\$3,279.00	\$151,216.00	\$130,134.00	\$307,674.00	\$6,731,409.00

* Many chemical and material suppliers are NSF certified and for some of the chemicals and materials non NSF grades don't exist. Further, using the NSF certification process is a more cost-effective and efficient way of providing quality control than the agency making a determination regarding acceptable chemicals and materials

Note: All dollar figures have been adjusted using U.S. Department of Labor, Bureau of Labor Statistics Inflation Calendar used to account for inflation 2011 - 2015.

In addition to the costs listed above, PWS owners and operators are required to ensure facilities and equipment used for the operation of their system is maintained. They are also

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required to maintain records of operation reports. There are no additional costs to the system, as these requirements are not outside of the normal operation of PWSs, as established in other rules adopted under Chapter 6109. of the Revised Code.

15. Why did the Agency determine that the regulatory intent justifies the adverse impact to the regulated business community?

The Agency considers the overall cost for complying with these regulations to be minor in comparison with ensuring the public is supplied with a safe and reliable source of drinking water.

Regulatory Flexibility

16. Does the regulation provide any exemptions or alternative means of compliance for small businesses? Please explain.

There are exceptions for minimum staffing requirements in rule 3745-7-03. In this rule, there is also a provision for a PWS to retain a backup operator with a lower certificate for a period of up to thirty consecutive days.

17. How will the agency apply Ohio Revised Code section 119.14 (waiver of fines and penalties for paperwork violations and first-time offenders) into implementation of the regulation?

Ohio EPA does not assign fines and penalties for first-time offenders, and prefers to obtain compliance through outreach first and if needed, written notice of violations prior to any type of formal enforcement.

18. What resources are available to assist small businesses with compliance of the regulation?

Small businesses PWSs can turn to their Ohio EPA District Office Inspector or Rural Community Assistance Program (RCAP) for technical assistance. Ohio EPA contracts with RCAP to provide assistance for PWSs with a population of 10,000 or less. RCAP can help small business PWSs with a number of tasks, such as:

- Preparing loan applications, including determining the ability to repay;
- Determining the most cost effective action for providing a safe drinking water supply;
- Developing and/or completing their capability assurance plan.

RCAP also sponsors training seminars such as utility board training, financial management, asset management and budget and rate setting training. Ohio EPA also provides both

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administrative and technical training for PWSs at low to no-cost. In addition to these informational resources, financial assistance may be available through Ohio EPA's Drinking Water Assistance Fund (DWAF).