

Rule Summary and Fiscal Analysis (Part A)**Ohio Environmental Protection Agency**

Agency Name

**Division of Drinking and Ground Water
(DDAGW)**

Division

Holly Kaloz

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3745-81-23

Rule Number

AMENDMENT

TYPE of rule filing

Rule Title/Tag Line

Inorganic chemical monitoring requirements.**RULE SUMMARY**

1. Is the rule being filed consistent with the requirements of the RC 119.032 review? **Yes**

2. Are you proposing this rule as a result of recent legislation? **No**

3. Statute prescribing the procedure in accordance with the agency is required to adopt the rule: **119.03**

4. Statute(s) authorizing agency to adopt the rule: **6109.04**

5. Statute(s) the rule, as filed, amplifies or implements: **6109.04**

6. State the reason(s) for proposing (i.e., why are you filing,) this rule:

This rule is being proposed in order to adopt the new federal requirements of U.S. EPA's Stage 2 Disinfectants and Disinfection Byproducts Rule, Final Rule, published in the Federal Register on January 4, 2006. This rule is also being proposed to fulfill the five year rule review requirements of section 119.032 of the Revised Code.

7. If the rule is an AMENDMENT, then summarize the changes and the content of the proposed rule; If the rule type is RESCISSION, NEW or NO CHANGE,

then summarize the content of the rule:

This rule requires that all public water systems monitor their drinking water for nitrate and nitrite and all community and nontransient noncommunity public water systems monitor for certain other inorganic contaminants and details the specific monitoring requirements for each. The proposed amendments align the method detection limits with U.S. EPA requirements, and modify provisions for reduced monitoring frequency for bromate.

8. If the rule incorporates a text or other material by reference and the agency claims the incorporation by reference is exempt from compliance with sections 121.71 to 121.74 of the Revised Code because the text or other material is **generally available** to persons who reasonably can be expected to be affected by the rule, provide an explanation of how the text or other material is generally available to those persons:

This rule references rules and chapters of the Administrative Code. In accordance with section 121.76 of the Revised Code references to the Administrative Code are exempt from the requirements of sections 121.71 to 121.75.

This rule also references EMSL94 methods 200.7, 200.8, and 200.9. These methods are generally accepted industry standards cited in an understandable manner and generally available to the persons affected by this rule, and have also been dated because they are subject to change. In accordance with section 121.75 of the Revised Code these references are therefore also exempt from the requirements of sections 121.71 to 121.74.

9. If the rule incorporates a text or other material by reference, and it was **infeasible** for the agency to file the text or other material electronically, provide an explanation of why filing the text or other material electronically was infeasible:

Not applicable.

10. If the rule is being **rescinded** and incorporates a text or other material by reference, and it was **infeasible** for the agency to file the text or other material, provide an explanation of why filing the text or other material was infeasible:

Not Applicable.

11. If **revising** or **refiling** this rule, identify changes made from the previously filed version of this rule; if none, please state so:

Not Applicable.

12. 119.032 Rule Review Date: **9/18/2009**

(If the rule is not exempt and you answered NO to question No. 1, provide the scheduled review date. If you answered YES to No. 1, the review date for this rule is the filing date.)

NOTE: If the rule is not exempt at the time of final filing, two dates are required: the current review date plus a date not to exceed 5 years from the effective date for Amended rules or a date not to exceed 5 years from the review date for No Change rules.

FISCAL ANALYSIS

13. Estimate the total amount by which *this proposed rule* would **increase / decrease** either **revenues / expenditures** for the agency during the current biennium (in dollars): Explain the net impact of the proposed changes to the budget of your agency/department.

This will have no impact on revenues or expenditures.

0.00

The proposed amendments will not affect the Agency's budget.

14. Identify the appropriation (by line item etc.) that authorizes each expenditure necessitated by the proposed rule:

Not applicable.

15. Provide a summary of the estimated cost of compliance with the rule to all directly affected persons. When appropriate, please include the source for your information/estimated costs, e.g. industry, CFR, internal/agency:

Please see RSFA Attachment B.

16. Does this rule have a fiscal effect on school districts, counties, townships, or municipal corporations? **Yes**

You must complete Part B of the Rule Summary and Fiscal Analysis in order to comply with Am. Sub. S.B. 33 of the 120th General Assembly.

17. Does this rule deal with environmental protection or contain a component dealing with environmental protection as defined in R. C. 121.39? **Yes**

You must complete the Environmental rule Adoption/Amendment Form in order to comply with Am. Sub. 106 of the 121st General Assembly.

Rule Summary and Fiscal Analysis (Part B)

1. Does the Proposed rule have a fiscal effect on any of the following?

(a) School Districts	(b) Counties	(c) Townships	(d) Municipal Corporations
Yes	Yes	Yes	Yes

2. Please provide an estimate in dollars of the cost of compliance with the proposed rule for school districts, counties, townships, or municipal corporations. If you are unable to provide an estimate in dollars, please provide a written explanation of why it is not possible to provide such an estimate.

Please see RSFA Attachment B.

3. If the proposed rule is the result of a federal requirement, does the proposed rule exceed the scope and intent of the federal requirement? **No**

4. If the proposed rule exceeds the minimum necessary federal requirement, please provide an estimate of, and justification for, the excess costs that exceed the cost of the federal requirement. In particular, please provide an estimate of the excess costs that exceed the cost of the federal requirement for (a) school districts, (b) counties, (c) townships, and (d) municipal corporations.

Not Applicable.

5. Please provide a comprehensive cost estimate for the proposed rule that includes the procedure and method used for calculating the cost of compliance. This comprehensive cost estimate should identify all of the major cost categories including, but not limited to, (a) personnel costs, (b) new equipment or other capital costs, (c) operating costs, and (d) any indirect central service costs.

Please see RSFA Attachment B. These costs would be considered operating costs.

(a) Personnel Costs

Not applicable.

(b) New Equipment or Other Capital Costs

Not applicable.

(c) Operating Costs

See above.

(d) Any Indirect Central Service Costs

Not applicable.

(e) Other Costs

Not applicable.

6. Please provide a written explanation of the agency's and the local government's ability to pay for the new requirements imposed by the proposed rule.

The 1996 Amendments to the Safe Drinking Water Act provided capitalization grants to states with primary enforcement authority to help fund infrastructure improvements needed to comply with the new requirements. These grants fund the Water Supply Revolving Loan Fund, which provides low-interest loans to community and not for profit water systems. Loans can provide support for design work in addition to capital improvements. Operating costs would be supported through conventional mechanisms such as collecting fees from customers based on the amount of water used or rental fees.

7. Please provide a statement on the proposed rule's impact on economic development.

This rule is not anticipated to have any impact on economic development.

Environmental Rule Adoption/Amendment Form

Pursuant to Am. Sub. H.B. 106 of the 121st General Assembly, prior to adopting a rule or an amendment to a rule dealing with environmental protection, or containing a component dealing with environmental protection, a state agency shall:

- (1) Consult with organizations that represent political subdivisions, environmental interests, business interests, and other persons affected by the proposed rule or amendment.
 - (2) Consider documentation relevant to the need for, the environmental benefits or consequences of, other benefits of, and the technological feasibility of the proposed rule or rule amendment.
 - (3) Specifically identify whether the proposed rule or rule amendment is being adopted or amended to enable the state to obtain or maintain approval to administer and enforce a federal environmental law or to participate in a federal environmental program, whether the proposed rule or rule amendment is more stringent than its federal counterpart, and, if the proposed rule or rule amendment is more stringent, the rationale for not incorporating its federal counterpart.
 - (4) Include with the proposed rule or rule amendment and rule summary and fiscal analysis required to be filed with the Joint Committee on Agency Rule Review information relevant to the previously listed requirements.
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(A) Were organizations that represent political subdivisions, environmental interests, business interests, and other persons affected by the proposed rule or amendment consulted ? **Yes**

Please list each contact.

Ohio EPA invited interested parties to comment on this rule during the period of February 18 to March 30, 2009. Comments received were considered and appropriate revisions to the rules were made. A list of interested parties will be furnished upon request.

(B) Was documentation that is relevant to the need for, the environmental benefits or consequences of, other benefits of, and the technological feasibility of the proposed rule or amendment considered ? **Yes**

Please list the information provided and attach a copy of each piece of documentation to this form. (A SUMMARY OR INDEX MAY BE ATTACHED IN LIEU OF THE ACTUAL DOCUMENTATION.)

Please see RSFA Attachment A.

(C) Is the proposed rule or rule amendment being adopted or amended to enable the state to obtain or maintain approval to administer and enforce a federal environmental law or to participate in a federal environmental program ?

Yes

Is the proposed rule or rule amendment more stringent than its federal counterpart ? **No**

(D) If this is a rule amendment that is being adopted under a state statute that establishes standards with which the amendment is to comply, is the proposed rule amendment more stringent than the rule that it is proposing to amend? **No**

Not Applicable

**RS/FA for Stage 2 Disinfection/Disinfection Byproducts Rules Package
Attachment A, Supporting Documentation**

U.S. EPA Stage 2 Disinfectants and Disinfection Byproducts, Final Rule, 71 FR 388, January 4, 2006.

Ohio Revised Code § 6109.03. Purpose of chapter.

Ohio Revised Code § 6109.04. Administration and enforcement of chapter; rules.

**RS/FA for rules 3745-81-12, 3745-81-22, 3745-81-23, 3745-81-24, 3745-81-70 and 3745-81-77
Attachment B, Estimated Cost of Compliance**

Estimated Cost of Compliance for Stage 2 Disinfectants/Disinfection Byproducts Rule (DBPR)

The cost estimate presented here is based on an economic analysis conducted by USEPA as it applies to public water systems in Ohio. The federal economic analysis was published with the final Stage 2 Disinfectants/Disinfection Byproducts Rule (DBPR) on January 4, 2006 in Volume 71, Number 388 of the Federal Register. That cost estimate represented total annualized capital and operational costs to comply with all requirements of the Stage 2 DBPR. These costs include non-treatment costs of rule implementation, Initial Distribution System Evaluations (IDSEs), Stage 2 DBPR monitoring plans, additional routine monitoring, and operational evaluations. Systems required to install treatment to comply with the MCLs will accrue the additional costs of treatment installation as well as operation and maintenance.

Because the requirements associated with the Stage 2 DBPR are distributed among multiple rules, this cost estimate represents costs associated with rules 3745-81-12, 3745-81-22, 3745-81-23, 3745-81-24, 3745-81-70 and 3745-81-77.

Table 1 provides a summary of the federal analysis broken down according to system size and type of source water, i.e. surface water or ground water.

Table 1. USEPA Economic Analysis Summary

System Type, Source Water and Population Served	Number of Systems	Total Cost (in \$ Millions/Year)	Cost per System
Community surface water >10,000	2406	\$ 36.06	\$ 14,987
Community ground water >10,000	1424	\$ 10.46	\$ 7,345
Community surface water <10,000	9397	\$ 10.72	\$ 1,140
Community ground water <10,000	28806	\$ 15.38	\$ 534
Nontransient noncommunity surface water >10,000	6	\$ 0.08	\$ 13,333
Nontransient noncommunity ground water >10,000	3	\$ 0.02	\$ 6,666
Nontransient noncommunity surface water <10,000	771	\$ 0.76	\$ 986
Nontransient noncommunity ground water <10,000	5479	\$ 1.62	\$ 296

Ohio EPA determined how many public water systems in Ohio fall into the above categories and broke the categories down further by type of ownership. This breakdown is presented in Table 2 below.

Table 2. Summary of Affected Ohio Water Systems

System Ownership	Source Water and Population Served			
	Surface Water >10,000	Ground Water >10,000	Surface Water <10,000	Ground Water <10,000
School Districts	0	0	0	128
Counties	11	17	17	46
Townships	1	1	1	7
Municipalities	54	45	74	306
All Systems ¹	66	65	96	1040

¹ Includes government and non-government owned systems

**RS/FA for rules 3745-81-12, 3745-81-22, 3745-81-23, 3745-81-24, 3745-81-70 and 3745-81-77
Attachment B, Estimated Cost of Compliance**

Ohio EPA then applied the USEPA cost estimate to the different categories of water systems identified in Table 2 to arrive at a very approximate cost estimate for Ohio. A summary is provided in Table 3 below.

Table 3. Summary of Costs to Affected Ohio Water Systems

System Ownership	Source Water and Population Served				Totals
	Surface Water >10,000	Ground Water >10,000	Surface Water <10,000	Ground Water <10,000	
School Districts	0	0	0	128 systems X \$296/system = \$37,888	\$37,888
Counties	11 systems X \$14,987/system = \$164,857	17 systems X \$7,345/system = \$124,865	17 systems X \$1,140/system = \$19,380	46 systems X \$534/system = \$24,564	\$333,666
Townships	1 system X \$14,987/system = \$14,987	1 system X \$7,345/system = \$7,345	1 system X \$1,140/system = \$1,140	7 systems X \$534/system = \$3,738	\$27,210
Municipalities	54 systems X \$14,987/system = \$809,298	45 systems X \$7,345/system = \$330,525	74 systems X \$1,140/system = \$84,360	306 systems X \$534/system = \$163,404	\$1,387,587
All systems ¹	66 systems X \$14,987/system = \$989,142	65 systems X \$7,345/system = \$477,425	96 systems X \$1,140/system = \$109,440	1,040 systems X \$534/system = \$555,360	\$2,131,367

¹ Includes government and non-government owned systems

It should be noted that USEPA assigned an uncertainty factor of ± 30 per cent to their cost estimate. The uncertainty is associated with the anticipated number of affected systems, the unit costs estimates for different technologies as they are applied to individual systems, and monitoring costs. The cost per water system can only be considered a numerical average and not an accurate estimate of the actual cost per system. The actual costs per system will vary widely depending on technologies employed by each system and monitoring costs.

Excess Costs for Provisions Exceeding Minimum Federal Equivalent

Two provisions exceed the minimum necessary federal equivalent established in the Stage 2 Disinfectants/Disinfection Byproducts Rule (DBPR). First, all surface water systems will be required to submit copies of their sample monitoring plans to the agency. Excess costs associated with this provision are expected to be minimal, and are limited to the cost of postage for submittal of the plan. Surface water systems typically have more difficulty complying with the maximum contaminant levels for disinfection byproducts. Having a copy of their monitoring plan will enable the agency to better assist the water system in the event of an exceedance.

Second, public water systems will be required to comply with the revised disinfection byproducts requirements up to 3 quarters earlier than required under the federal equivalent, as follows:

Schedule	USEPA Compliance Date	Proposed Ohio EPA Compliance Date
1	April 1, 2012	January 1, 2012 (1 quarter earlier)
2	October 1, 2012	January 1, 2012 (3 quarters earlier)
3	October 1, 2013	January 1, 2013 (3 quarters earlier)
4	October 1, 2013	January 1, 2013 (3 quarters earlier)

**RS/FA for rules 3745-81-12, 3745-81-22, 3745-81-23, 3745-81-24, 3745-81-70 and 3745-81-77
Attachment B, Estimated Cost of Compliance**

Excess costs resulting from these compliance dates are expected to be minimal for most public water systems, and they have had ample time to anticipate and comply with these provisions. However, public water systems may potentially incur excess costs if they exceed a maximum contaminant level (MCL) and are required to issue a public notice to their consumers for an additional 1 to 3 quarters than if the minimum federal equivalent were used. Based on an evaluation of recent data, an additional 48 public water systems may be anticipated to exceed the maximum contaminant level under the Stage 2 rules. Of these, 23 are purchased water systems already in exceedance of the current MCL. Under the current regulations, these systems are required to complete a distribution system optimization plan, but are not required to public notice. Under the Stage 2 rules, these systems will be required to issue a public notice and address the exceedance. The remaining 25 public water systems have recent running annual averages over 80% of the MCL based on a system wide average, and may exceed the MCL when compliance is determined based on a locational running annual average. The cost of issuing public notice for one or more violations per year is established in the cost of compliance for OAC rule 3745-81-32, and has been adapted in Table 4 below for the systems that may be expected to incur these excess costs:

Table 4. Summary of Excess Costs for Issuing Public Notice

Population Served	Number of Systems	Annual Excess Costs per System	Total Excess Costs for Public Notice(s)
PWS serving 25-500	10	\$ 209.23	\$ 2,092.30
PWS serving 501-3,300	19	\$ 495.46	\$ 9,413.74
PWS serving 3,301-10,000	12	\$ 1,540.91	\$ 18,490.92
PWS serving 10,001-100,000	7	\$ 4,104.90	\$ 28,734.30
PWS serving over 100,000	0	\$ 50,285.00	\$ 0.00
Total	48	N/A	\$ 58,731.26

The agency has determined that the proposed compliance dates are appropriate for several reasons. The proposed dates best utilize the resources and technology available to the state to implement and track the rule. Determining compliance (both system-wide running annual averages and locational running annual averages) on different groups of systems poses difficulties for the State. While the federal rule staggered compliance dates, the federal reporting tools are not designed to accommodate this. Ohio does not have the resources to develop other mechanisms for less than 4 percent of impacted systems.

Further, Ohio has required DBP monitoring since at least 2004 for the majority of community water systems. Most water systems are not expected to observe any difference between monitoring requirements of Stage 1 and Stage 2, as approximately 1000 public water systems have been granted a waiver and will be allowed to continue monitoring at the same sample locations, and most systems will continue to monitor at the same frequency.

Beginning compliance on January 1 will allow Ohio EPA to issue only one monitoring schedule each year, resulting in cost savings to the agency and avoiding confusion in the regulated community. Ohio EPA has determined it is more reasonable to structure the rule such that it is less confusing for the majority of water systems rather than accommodating those few systems that may have difficulty complying with the rules.

DDAGW believes water systems in Ohio have had adequate time to address issues with DBPs and can meet the proposed compliance deadlines. For systems anticipating compliance issues, DDAGW prefers to address any additional time to comply with the TTHM and HAA5 MCLs through negotiated compliance schedules, such as bilateral compliance agreements or administrative orders without penalties.