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(1) Agency	6-2. (**** <u>1.4.</u> ***	Sale and the second	NOTOFICENT DEALINTERY	
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Department of Environmental Protection	on .		HENERY CONTRACTOR	
(2) I.D. Number (Governor's Office U	se)		· · · · · · · · · · · · · · · · · · ·	
7-427			IRRC Number: 2736	
(3) Short Title	· · · · · · · · · · · · · · · · · · ·			
Stage 2 Disinfectants and Disinfection	Byproducts Rule (	(Stage 2 DBI	2K)	
(4) PA Code Cite	(5) Agency Con	tacts & Tele	phone Numbers	
25 Pa. Code, Chapter 109	Primary Con	tact: Miche	le Tate, 717-783-8727	
	Secondary C	ontact: Kell	y Heffner, 717-783-8727	
(6) Type of Rulemaking (Check One)		(7) Is a 120-	Day Emergency Certification Attached?	
X       Proposed Rulemaking       X       No        Final Order Adopting Regulation       Yes: By the Attorney General        Final Order, Proposed Rulemaking Omitted       Yes: By the Governor				
(8) Briefly explain the regulation in clear and nontechnical language.				
The proposed amendments will reduce disease incidence associated with the disinfection by products that form when public water systems add disinfectants. The proposed amendments will supplement the Stage 1 DBPR by requiring water systems to meet disinfection byproduct maximum contaminant levels (MCLs) at each monitoring site in the distribution system. The proposal will provide for more consistent, equitable protection from DBPs across the entire distribution system and the reduction of DBP peaks. The amendments will first focus on identifying the higher risk monitoring locations through the Initial Distribution system Evaluation (IDSE) and then addresses reducing exposure and lowering DBP peaks in distribution systems by using a new method to determine MCL compliance (Locational Running Annual Average (LRAA)). The amendments will also define operational evaluation levels.				
The proposed amendments will incorporate the provisions of the <i>Federal Stage 2 Disinfectants and Disinfection Byproducts Rule</i> (Stage 2 DBPR) that was promulgated by the United States Environmental Protection Agency (EPA) on January 4, 2006.				
(9) State the statutory authority for the	regulation and any	y relevant sta	te or federal court decisions.	
The Pennsylvania Safe Drinking Water Administrative Code of 1929, 71 P.S. §	The Pennsylvania Safe Drinking Water Act, 35 P.S. § 721.4(a), and sections 1917-A and 1920-A of the Administrative Code of 1929, 71 P.S. §§ 510-7 and 510-20(b).			
	Page 1	of 8		

(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and 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* Stage 2 DBPR on January 4, 2006. Therefore, Pennsylvania must adopt regulations implementing the federal rules by January 4, 2008. Failure to do so, and without an EPA-granted extension, may result in Pennsylvania losing primacy. DEP has applied for and received an extension to January 4, 2010.

(11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

The public health benefits of disinfection practices are significant and well-recognized. Disinfection, however, poses its own health risks. Epidemiological studies have supported a potential association between bladder cancer and DBP's and possibly with colon and rectal cancers. The new requirements will further minimize or eliminate harmful DBPs in public water systems.

(12) State the public health, safety, environmental or general welfare risks associated with non-regulation.

Although disinfectants such as chlorine, hypochlorites, and chlorine dioxide are effective in controlling many harmful microorganisms, they react with organic and inorganic matter in the water to form DBPs. These DBPs, as well as the original disinfectants, pose health risks at certain levels.

Since the discovery of DBPs in drinking water in 1974, numerous toxicological studies have been conducted that show DBPs to be carcinogenic and/or cause reproductive or developmental effects in laboratory animals. Additionally, exposure to high levels of disinfectants over long periods of time may cause health problems, including blood and kidney damage. While many of these studies have been conducted at high doses, the weight of the evidence indicates that disinfectants and DBPs present a potential public health problem that must be addressed.

(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

The proposed amendments will affect nearly 2,650 public water systems which serve a total population of over 10.5 million Pennsylvanians. These 10.5 million people will benefit from a significant reduction in health risks associated with disinfection practices, such as bladder cancer and kidney damage.

EPA estimates that full implementation of the proposed amendments will reduce the incidence of bladder cancer cases by up to 581 cases per year nationally, with an associated reduction of up to 151 premature deaths.

(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effect as completely as possible and approximate the number of people who will be adversely affected.)

The proposed amendments are not expected to produce any adverse impacts.

(15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

The proposed amendments will affect about 2042 community water systems and about 600 nontransient noncommunity water systems in Pennsylvania.

Each of these water systems will need to comply with various requirements of the amendments.

(16) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who where involved, if applicable.

The federal Stage 2 DBPR reflects a consensus Agreement in Principle of the Stage 2 Microbial and Disinfection Byproduct (M-DBP) Federal Advisory Committee. This committee consisted of organizational members representing EPA, State and local public health and regulatory agencies, local elected officials, Indian tribes, large and small drinking water suppliers, chemical and equipment manufacturers, and public interest groups. The Committee's activities resulted in the collection and evaluation of substantial new information. The Committee signed an Agreement in Principle stating the consensus recommendations of the group that was published by EPA in December, 2000.

The Small Water Systems Technical Assistance Center Advisory Board (TAC) reviewed drafts of the proposal and provided comments and suggestions. A thirty-day public comment period will also be scheduled.

(17) 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.

The proposed amendments will result in increased costs to public water systems. The EPA has estimated that system costs will range from approximately \$55 million to \$101 million annually (at a 3 percent discount rate), with a mean estimate of approximately \$77 million per year. This translates to nearly \$3.39 million for Pennsylvania public water systems. The costs include non-treatment costs of rule implementation, IDSE, Stage 2 DBPR monitoring plans, additional routine monitoring, and operational evaluations. Systems required to install treatment to comply with MCLs will accrue the additional costs of treatment installation as well as O&M.

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required.

The proposed amendments will affect about 2650 public water systems in Pennsylvania. Of these 2,650 systems, about 854 are owned by local governments in the form of water and municipal authorities. The local governments that own these systems will incur an estimated annual cost of about \$1.08 million.

It should be noted that, for the purposes of the table in question (20) on the following page, the local government costs are for compliance with the Stage 2 DBPR provisions. That is, local government is considered in this analysis to be a part of the regulated community, not the regulating community. Therefore, the \$1.08 million estimate provided above is a part of the \$3.39 million estimate provided in the previous question (17).

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting or consulting procedures which may be required.

The EPA has estimated that a total annual cost of about \$1.7 million (federal register vol. 71, No 2, pg. 449) will be borne by the regulating state agencies, nationwide, as a result of this rule. EPA based its estimate on experience implementing previous rules such as Stage 1 DBPR. It is estimated that DEP will bear approximately \$74,800 of this total annual cost.

	Regulatory Analysis Form						
(20) In the table below, provide an estimate of the fiscal savings and cost 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</b>	FY +1	FY +2	FY +3 .	FY +4	FY +5	
	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	
SAVINGS:	\$	\$	\$	\$	\$	\$	
<b>Regulated</b> Community	0	0	0	0	0	0	
Local Government	0	0	0	0	0	0	
State Government	0	0	0	0	0	0	
Total Savings	0	0	0	0	0	0	
COSTS:							
<b>Regulated Community</b>	2,303,840	2,303,840	2,303,840	2,303,840	2,303,840	2,303,840	
Local Government	1,084,160	1,084,160	1,084,160	1,084,160	1,084,160	1,084,160	
State Government	74,800	74,800	74,800	74,800	74,800	74,800	
Total Costs	3,462,800	3,462,800	3,462,800	3,462,800	3,462,800	3,462,800	
<b>REVENUE LOSSES:</b>							
<b>Regulated Community</b>	0	0	0	0	0	0	
Local Government	0	0	0	0	0	0	
State Government	0	. 0	0	0	0	0	
Total Revenue Losses	0	0	0	0	0	0	

(20a) Explain how the cost estimates listed above were derived.

The costs listed above were derived from the nationwide costs compiled and published by the EPA in the Preamble of the *Federal Stage 2 Disinfectants and Disinfection Byproducts Rule* (Federal Register, Vol. 71, No. 2). The Pennsylvania costs are the national costs multiplied by the ratio of the number of Pennsylvania systems (2,650) to the number of nationwide systems  $(60,220)^1$ . That is,

The ratio of PA systems to nationwide systems is 2,650 / 60,220 = 0.044

Estimated nationwide regulated community  $cost^2 = $77,000,000$ 

Estimated annual cost to Pennsylvania water systems = \$77,000,000 x 0.044 = \$3,388,000

Percentage of Pennsylvania systems that are "Local Government" water and municipal authorities = 32% (from the Safe Drinking Water Program's PADWIS data system)

# Note: "Local Government" in this analysis is the regulated community, not regulating agencies.

Estimated annual cost to Pennsylvania systems that are local government authorities =  $$3,388,000 \times 0.32 = $1,084,160$ Estimated annual cost to Pennsylvania systems that are not local government = \$3,388,000 - \$1,084,160 = \$2,303,840Estimated annual nationwide state agencies cost<sup>3</sup> = \$1,700,000Estimated DEP annual cost to administer the Stage 2 DBPR =  $$1,700,000 \times 0.044 = $74,800$ 

1 – Federal Register, Vol. 71, No. 2, pg. 472

2 - Federal Register, Vol. 71, No. 2, pg. 449

3 - Federal Register, Vol. 71, No. 2, pg. 449

(20b) Provide the past three year expenditure history for programs affected by the regulation.

		• • • • • • • • • • • • • • • • • • •		•
Program	FY-3	FY-2	FY-1	Current FY
	(2005 – 2006)	(2006 – 2007)	(2007 – 2008)	(2008 – 2009)
Environmental Protection Operations (#160-10381)	\$87,897,000	\$89,847,000	\$98,582,000	\$102,149,000
Environmental Program Management (#161-10382)	\$37,049,000	\$36,868,000	\$39,909,000	\$41,800,000

(21) Using the cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.

The proposed amendments are not expected to produce any adverse effects. The EPA has estimated that the nation may realize a total annual benefit of up to \$3.5 billion as a result of avoiding up to 581 cases of bladder cancer per year<sup>4</sup>. In Pennsylvania, this translates into a total annual benefit of up to \$144 million in avoiding up to 23.9 cases of bladder cancer per year. This benefit was derived from multiplying the national benefit by the ratio of DBP-exposed Pennsylvanians to DBP-exposed U.S. citizens.

That is, # Pennsylvanians potentially exposed to DBPs = 10,455,296# U.S. citizens exposed to DBPs<sup>5</sup> = 254,000,000ratio = 10,455,296/254,000,000 = 0.0411

> nationwide annual benefit<sup>6</sup> = \$3,500,000,000Pennsylvania annual benefit =  $$3,500,000,000 \ge 0.0411 = $144,069,039$

# nationwide annual bladder cancer cases<sup>7</sup> = 581
# Pennsylvania annual bladder cancer cases = 581 x 0.0411 = 23.9

4,6,7 – Federal Register, Vol. 71, No. 2, pg. 448

5 - Federal Register, Vol. 63, No. 241, pg. 69438, Table IV-7

(22) Describe the nonregulatory alternatives considered and the costs associated with those alternatives. Provide the reasons for their dismissal.

No nonregulatory alternatives were considered. This is a federal rule that must be either complied with, or adopted, by the individual states.

(23) Describe alternative regulatory schemes considered and the costs associated with those schemes. Provide the reasons for their dismissal.

No alternative regulatory schemes were considered. This is a federal rule that must be either complied with, or adopted, by the individual states.

(24) 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 regulation.

The proposed amendments contain no provisions that are more stringent than the federal D/DBP rule.

(25) How does the regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

The *federal* Stage 2 DBPR will need to be either complied with, or adopted, by all of the other 49 states. Because of this, the proposed amendments will not put Pennsylvania at a competitive disadvantage with any other state.

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

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

(27) Will any public hearings or informational meetings be scheduled? Please provide the dates, times, and locations, if available.

No public hearings or informational meetings are scheduled for these proposed amendments.

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(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

The proposed amendments will require that water systems conduct the IDSE and submit the report and monitoring plan to the Department. This initial implementation part of the amendments will be completed prior to Department receiving primacy. EPA is handling most of the early implementation activities and water suppliers are forwarding all the monitoring results to EPA. The Department will assume the responsibility of reviewing and approving the report and monitoring plans. Water systems which treat with conventional filtration will also need to monitor and report total organic carbon, both in the source water and in the treated water.

It is anticipated that this additional monitoring and reporting will be easily facilitated by our current data reporting forms and that no additional data forms or paperwork will be necessary.

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

The proposed amendments should have no effects on one particular group relative to another since it will apply to most of Pennsylvania's population. 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.

(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

The proposed amendments are targeted for promulgation in January 2010. The amendments' components must be complied with by as early as April 2012. Various permits and approvals resulting from the amendments will be obtained in accordance with the procedures and schedules of both the amendments and currently existing regulations.

(31) Provide the schedule for continual review of the regulation.

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

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By:

# FACE SHEET FOR FILING DOCUMENTS WITH THE LEGISLATIVE REFERENCE BUREAU

# (Pursuant to Commonwealth Documents Law)

Copy below is hereby approved as to form and legality. Attorney General

(Deput) Attorney General)

NOV 1 9 2008

DATE OF APPROVAL

Check if applicable Copy not approved. Objections attached. Copy below is hereby certified to be true and correct copy of a document issued, prescribed or promulgated by:

DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL QUALITY BOARD

(AGENCY)

DOCUMENT/FISCAL NOTE NO.\_\_\_\_7-427\_\_\_

DATE OF ADOPTION August 19, 2008

fours RY

TITLE JOSEPH R. POWERS ACTING CHAIRMAN

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

# RECEIVED

2008 NOV 24 PM 2: 53

INDEPENDENT REGULATORY REVIEW COMMISSIO

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nler DATE OF

(Deputy General Counsel) (Chief Counsel - Independent Ageney (Strike inapplicable title)

Use Check if applicable. No Attorney General Approval or objection within 30 days after submission.

# NOTICE OF PROPOSED RULEMAKING

DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL QUALITY BOARD

Stage 2 Disinfectants and Disinfection Byproducts Rule

25 Pa. Code, Chapter 109

# Notice of Proposed Rulemaking Department of Environmental Protection Environmental Quality Board 25 Pa. Code, Chapter 109 Safe Drinking Water (Stage 2 Disinfectants and Disinfection Byproducts Rule)

#### **Preamble**

The Environmental Quality Board (Board) proposes to amend 25 Pa. Code, Chapter 109 (relating to Safe Drinking Water). The proposed amendments will supplement the Stage 1 Disinfectants and Disinfection Byproduct Rule by requiring water systems to meet disinfection byproduct maximum contaminant levels (MCLs) at each monitoring site in the distribution system. The amendments will first focus on identifying the higher risk monitoring locations through the Initial Distribution System Evaluation (IDSE) and then addresses reducing exposure and lowering DBP peaks in distribution systems by using a new method to determine MCL compliance (Locational Running Annual Average (LRAA)).

The proposed amendments will reduce the potential risks of cancer and reproductive and developmental health effects associated with disinfectant byproducts (DBPs) by reducing peak and average levels of DBPs in drinking water supplies.

The amendments will apply to community water systems (CWSs) and nontransient noncommunity water systems (NTNCWSs) that add a primary or residual disinfectant other than ultraviolet light (UV) or deliver water that has been treated with a primary or residual disinfectant other than UV.

The proposal was adopted by the Board at its meeting of August 19, 2008.

#### A. Effective Date

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

# B. Contact Persons

For further information, contact Ronald Furlan, Chief, Division of Planning and Permits, P.O. Box 8774, Rachel Carson State Office Building, Harrisburg, PA 17105-8774, (717) 787-8184 or Marylou Barton, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This proposal is available electronically through the DEP web site (http://www.depweb.state.pa.us).

# C. Statutory Authority

The proposed rulemaking is being made under the authority of Section 4 of the Pennsylvania Safe Drinking Water Act (35 P.S. § 721.4), which grants the Board the authority to adopt rules and regulations governing the provision of drinking water to the public, and Sections 1917-A and 1920-A of the Administrative Code of 1929 (71 P.S. §§ 510-7 and 510-20).

# D. Background and Purpose

The public health benefits of disinfection are significant and well-recognized. However, these very disinfection practices pose health risks of their own. Although disinfectants such as chlorine, hypochlorites, and chlorine dioxide are effective in controlling many harmful microorganisms, they react with organic and inorganic matter in the water to form disinfection byproducts (DBPs), which pose health risks at certain levels.

The first DBPs discovered in public drinking water were halogenated methanes in 1974. As a result, the United States Environmental Protection Agency (EPA) promulgated a maximum contaminant level (MCL) for the composite sum of four individual DBP species: chloroform, bromodichloromethane, dibromochloromethane, and bromoform. This composite sum was termed "Total Trihalomethanes" (TTHMs) and had an MCL of 0.1 mg/L that was applied only to community water systems serving at least 10,000 people.

Since the discovery of TTHMs in drinking water in 1974, other DBPs have been identified and studied for their health effects. Many of these studies have shown DBPs to be carcinogenic and/or to cause reproductive or developmental effects in laboratory animals. Studies have also shown that high levels of the disinfectants themselves may cause health problems over long periods of time, including damage to both the blood and the kidneys. While many of these studies have been conducted at high doses, the weight of the evidence indicates that DBPs present a potential public health problem that must be addressed.

In 1992, the EPA initiated a rulemaking process to address public health concerns associated with disinfectants, DBPs, and microbial pathogens. As part of this rulemaking process, EPA established a Regulatory Negotiation (Reg/Neg) Committee, which included representatives of state and local health and regulatory agencies, public water systems, elected officials, consumer groups and environmental groups.

EPA's most significant concern in developing regulations for disinfectants and DBPs was the need to ensure that adequate treatment be maintained for controlling risks from microbial pathogens. One of the major goals addressed in the rulemaking process was to develop an approach that would reduce the level of exposure from disinfectants and DBPs without undermining the control of microbial pathogens. The intention was to ensure that drinking water is microbiologically safe at the limits set for disinfectants and DBPs and that these chemicals do not pose an unacceptable health risk at these limits. Thus, the Reg/Neg Committee also considered a range of microbial issues and agreed that EPA should also propose a companion microbial rule, the *Interim Enhanced Surface Water Treatment Rule* (IESWTR).

Following months of intensive discussions and technical analysis, the Reg/Neg Committee recommended the development of three sets of rules: a two-stage rule to address disinfectants and DBPs (D/DBPs), the *Interim Enhanced Surface Water Rule (IESWTR)*, and an *Information Collection Rule* (ICR). The approach used in developing these proposals considered the constraints of simultaneously treating water to control microbial contaminants, disinfectants, and DBPs. The Reg/Neg Committee agreed that the schedule for the IESWTR should be linked to the schedule of the first stage of the D/DBPs rule to assure simultaneous compliance and a balanced risk-risk based implementation. The Reg/Neg Committee also agreed that additional information on health risk, occurrence, treatment technologies, and analytical methods needed to be developed in order to better understand the risk-risk tradeoff, and how to accomplish an overall reduction in health risks to both pathogens and D/DBPs. Finally the Reg/Neg Committee agreed that to develop a reasonable set of rules and to understand more fully the limitations of the current Surface Water Treatment Rule, additional field data were critical. Thus, a key component of the regulation negotiation agreement was the promulgation of the ICR.

The *Federal Disinfectants and Disinfection Byproducts Rule* (D/DBPR) (40 CFR Parts 9, 141, and 142), which was promulgated on December 16, 1998, was developed based on the outcome of this rulemaking process, as well as a wide range of technical comments from stakeholders and members of the public. Pennsylvania adopted the Stage 1 DBPR on July 21, 2001.

The Stage 1 DBPR regulated treatment practices at public water systems in order to eliminate or minimize disinfectant levels and disinfection byproducts that may cause harmful health effects. The Stage 1 DBPR applied to all community and nontransient noncommunity water systems that use a chemical disinfectant or oxidant, as well as to all transient noncommunity water systems that use chlorine dioxide. The Stage 1 DBPR established maximum residual disinfectant levels (MRDLs) for free chlorine, combined chlorine, and chlorine dioxide. MCLs were also established for TTHM, five haloacetic acids (HAA5), bromate (calculated as running annual average (RAA)) and chlorite based on daily and monthly sampling. The MCL for TTHMs was lowered from 0.1 mg/L to 0.08 mg/L and applied to all community and nontransient noncommunity water systems, regardless of the population that is served. The Stage 1 DBPR also regulated pre-filtration treatment techniques for public water systems that use conventional filtration in order to reduce source water Total Organic Carbon (TOC), which serves as a precursor to disinfection byproducts.

The EPA promulgated the federal Stage 2 DBPR on January 4, 2006. Congress required EPA to promulgate the Stage 2 DBPR as part of the 1996 Safe Drinking Water Act (SDWA) Amendments. The Stage 2 DBPR augments the Stage 1 DBPR. The goal of the Stage 2 DBPR is to target the highest risk systems for changes beyond those required for Stage 1 DBPR. The new requirements will provide for more consistent, equitable protection from DBPs across the entire distribution system and the reduction of DBP peaks. New risk-targeting provisions require systems to first identify their risk level; then, only those systems with the greatest risk will need to make operational or treatment changes. The Stage 2 DBPR will first focus on identifying the higher risk monitoring locations through the IDSE and then addresses reducing exposure and lowering DBP peaks in distribution systems by using a new method to determine MCL compliance (LRAA). The rule will also define operational evaluation levels.

As in Stage 1 DBPR, the Stage 2 DBPR will focus on monitoring for and reducing concentrations of two classes of DBPs: total trihalomethanes (TTHM) and haloacetic acids (HAA5). These two groups of DBPs act as indicators for the various byproducts that are present in water disinfected with chlorine or chloromine. This means that concentrations of TTHM and HAA5 are monitored for compliance, but their presence in drinking water is representative of many other chlorination DBPs that may also occur in the water; thus, a reduction in TTHM and HAA5 generally indicates an overall reduction of DBPs.

The Board proposes to incorporate the provisions of the federal Stage 2 DBPR into the Pennsylvania Safe Drinking Water Regulations (25 Pa. Code Chapter 109).

The draft proposed amendments were submitted for review to the Small Water Systems Technical Assistance Center Advisory Board (TAC) for review and discussion on November 15, 2007. The TAC Board noted that the revisions are required for the Department to receive primacy and are not more stringent than the federal rule. The TAC Board approved the proposed revisions in a letter dated December 12, 2007. The TAC comment letter is attached with this document.

# E. Summary of Regulatory Requirements

The proposed amendments reflect, and are no more stringent than the new federal Stage 2 DBPR requirements.

#### 1. § 109.1 Definitions.

This section was amended in order to add the following EPA definitions: combined distribution systems, dual sample set, locational running annual average, running annual average and wholesale systems. The definition of finished water was also amended. These amendments reflect the new definitions of the federal Stage 2 DBPR found in 40 CFR § 141.2.

2. § 109.301(12) Monitoring requirements for disinfection byproducts and disinfection byproduct precursors.

This paragraph was revised to incorporate EPA's new monitoring requirements for the Stage 2 DBPR. This amendment reflects the federal requirements found in 40 CFR § 141.132(a), (b), & (d) and 40 CFR § 141.620 to 623.

3. § 109.301(12)(i) TTHM and HAA5 Stage 1 DBP Rule.

A new sub clause was added to incorporate EPA's minor changes to Stage 1 DBPR which did not specify a time frame or sampling frequency for taking TOC source water samples. The Stage 2 DBPR requires systems to take TOC samples every 30 days at a location prior to treatment. These samples must be averaged quarterly for the most recent 4 quarters. Once a system has qualified for reduced monitoring it may reduce source water TOC monitoring to one sample every 90 days. This amendment reflects the federal requirement found in 40 CFR § 141.132(b)(1)(iii).

# 4. § 109.301(12)(ii) TTHM and HAA5 Stage 2 DBP Rule.

This new subparagraph was added to incorporate the monitoring requirements of the Stage 2 DBPR. The subparagraph establishes monitoring and other requirements for achieving compliance with the maximum contaminant levels based on locational running annual averages (LRAA) for TTHM and HAA5 and for achieving compliance with the maximum residual disinfectant residuals for chlorine and chloramines for certain consecutive systems. The amendment reflects the federal requirements in 40 CFR § 141.620 to 623.

5. § 109.301(12)(ii)(A) Applicability and schedule

A new clause was added to incorporate EPA's schedule for Stage 2 DBPR. The amendment reflects the federal requirements in 40 CFR § 141.620.

6. § 109.301(12)(ii)(B) Routine monitoring

A new clause was added to incorporate EPA's routine monitoring requirements for Stage 2 DBPR. The amendment reflects the federal requirements in 40 CFR § 141.621.

7. § 109.301(12)(ii)(C) Reduced monitoring

A new clause was added to incorporate EPA's reduced monitoring requirements for Stage 2 DBPR. The amendment reflects the federal requirements in 40 CFR § 141.623.

8. § 109.301(12)(ii)(D) Increased monitoring

A new clause was added to incorporate EPA's conditions requiring increased monitoring. The amendment reflects the federal requirements in 40 CFR § 141.625.

9. § 109.301(12)(ii)(E) General monitoring and compliance requirements

A new clause was added to incorporate EPA's general monitoring and compliance requirements. The amendment reflects the federal requirements in 40 CFR § 141.620(d)(1&2), 141.620(c)(7) and 141.620(e).

10. § 109.301(12)(iv) Bromate

A new sub clause was added to incorporate EPA's minor changes to Stage 1 DBPR. Under the Stage 1 DBPR, systems that use ozone are required to monitor water in the distribution system for bromate whose MCL is 0.010 mg/L running annual average. Under the Stage 2 DBPR, the criterion for reduced bromate monitoring is a bromate running annual average less than or equal to 0.0025 mg/L. The amendment reflects the federal requirements in 40 CFR § 141.132(b)(3)(ii)(A) and (B).

11. § 109.701(g) Monitoring plans for disinfectants, disinfection byproducts and disinfection byproduct precursors.

This paragraph was revised to incorporate EPA's new monitoring plans for disinfectants, disinfection byproducts and disinfection byproduct precursors requirements under Stage 2 DBPR. This amendment reflects the federal requirements found in 40 CFR § 141.620 to 621.

12. § 109.701(g)(1)(iii)

This new sub clause was added to incorporate EPA's new monitoring plan requirements. This amendment reflects federal requirements found in 40 CFR § 141.33(f).

13. § 109.701 (g)(2)(i) IDSE Requirements.

This sub clause was added to incorporate by reference EPA's IDSE requirements. The amendment reflects federal requirements found in 40 CFR § 141.620 to 621.

14. § 109.701(g)(2)(ii) Subchapter G monitoring plan

This sub clause was added to incorporate EPA's monitoring plan requirements under the Stage 2 DBPR. The amendment reflects federal requirements found in 40 CFR § 141.622.

15. § 109.701(g)(2)(iii) Operational evaluation level.

This sub clause was added to incorporate EPA's new operational evaluation level requirements. The amendment reflects federal requirements found in 40 CFR § 141.626

TTHM and HAA5 MCL compliance is based on an LRAA, therefore a system may have individual DBP results significantly higher than the MCL from time to time while remaining in compliance. This situation is a result of the fact that high concentrations are averaged with lower concentrations at a given location. While this situation does not constitute an MCL violation, it might indicate a trend that could lead to an MCL violation in future quarters.

The operational evaluation level is an LRAA threshold, meant to help systems identify if they are in danger of exceeding the MCL in the following monitoring quarter. The process is useful in that it alerts the system to the potential of an MCL violation if DBP levels remain at their current level and encourages them to consider what operational changes may be necessary to reduce DBP levels.

The operational evaluation level at any location is the sum of the two previous quarters' TTHM or HAA5 results plus the current quarter's TTHM or HAA5 result, divided by four to determine an average. If the operational evaluation level for TTHM exceeds 0.080 mg/L or the operational evaluation level for HAA5 exceeds 0.060 mg/L at any monitoring location, an exceedance of the operational evaluation level has occurred.

If this happens, the system must conduct an operational evaluation and submit a written report of the evaluation to the Department no later than 90 days after the system is notified of the analytical result that caused the exceedance.

# 16. § 109.1003(a)(1)(viii) Monitoring requirements.

This subparagraph was revised to incorporate EPA's TTHM and HAA5 bromate monitoring requirements for bottled water systems. This amendment reflects the federal requirements found in 40 CFR § 141.132(b)(1)(iii).

17 § 109.1003(a)(1)(x)(B) Monitoring requirements.

This sub clause was revised to incorporate EPA's bromate reduced monitoring requirements for bottled water systems. This amendment reflects the federal requirements found in 40 CFR § 141.132(b)(3)(ii).

# F. Benefits, Costs and Compliance

# **Benefits**

The public health benefits of disinfection practices are significant and well-recognized. Disinfection, however, poses its own health risks. The proposed amendments will improve public health by increasing level of protection from exposure to DBP's through providing more consistent, equitable protection from DBPs across the entire distribution systems and the reduction of DBP peaks.

The proposed amendments will affect all community water systems (almost 2,042) and nontransient noncommunity water systems (almost 600) serving about 10.5 million Pennsylvanians. These 10.5 million people will benefit from a reduction in health risks associated with disinfection practices, such as bladder cancer and kidney damage.

The EPA has estimated that the nation may realize a total annual benefit of up to \$3.5 billion as a result of avoiding up to 581 cases of bladder cancer per year. In Pennsylvania, this translates into a total annual benefit of up to \$144 million in avoiding up to 24 cases of bladder cancer per year.

# **Compliance Costs**

The EPA has estimated that mean annual cost of approximately \$77 million will be borne by the regulated community, nationwide, as a result of this rule. It is estimated that Pennsylvania water systems will bear nearly \$3.39 million of this total annual cost.

The \$3.39 million estimate will include non-treatment costs of rule implementation, IDSE, Stage 2 DBPR monitoring plans, additional routine monitoring, reporting, recordkeeping and operational evaluations. Systems required to install treatment to comply with MCLs will accrue the additional costs of treatment installation as well as O&M.

# **Compliance Assistance Plan**

The Safe Drinking Water Program utilizes the Commonwealth's PENNVEST Program in order to offer financial assistance to eligible public water systems. This assistance is in the form

of a low-interest loan, with some augmenting grant funds for hardship cases. Eligibility is based upon factors such as public health impact, compliance necessity, and project/operational affordability.

The Safe Drinking Water Program has established a network of regional and central office training staff that is responsive to identifiable training needs. The target audience in need of training may be either program staff or the regulated community.

In addition to this network of training staff, the Bureau of Water Standards and Facility Regulation have staff dedicated to providing both training and outreach support services to public water system operators. The DEP Internet site also contains the *Drinking Water & Wastewater Treatment System Operator Information Center* Internet site, which provides a bulletin board of timely, useful information for treatment plant operators.

## **Paperwork Requirements**

The proposed amendments will involve monitoring activities, which include conducting the IDSE, Stage 2 DBPR monitoring plans, additional routine monitoring and operational evaluations. Water systems which treat with conventional filtration will also need to monitor and report total organic carbon, both in the source water and in the treated water.

It is anticipated that this additional monitoring and reporting will be easily facilitated by the addition of one or two new data reporting forms and that little additional paperwork will be necessary.

#### G. Sunset Review

These regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

#### H. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on November 24, 2008, the Department submitted a copy of these proposed amendments to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed regulations within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria that have not been met. The Regulatory Review Act specifies detailed

procedures for review of these issues by the Department, the General Assembly and the Governor prior to final publication of the regulations.

# I. Public Comments

<u>Written Comments</u> - Interested persons are invited to submit comments, suggestions, or objection regarding the proposed regulation to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 16<sup>th</sup> Floor, 400 Market Street, Harrisburg, PA 17105-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions, or objections must be received by the Board by January 5, 2009. Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by January 5, 2009. The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulations will be considered.

<u>Electronic Comments</u> - Comments may be submitted electronically to the Board at <u>RegComments@state.pa.us</u> and must also be received by the Board by January 5, 2009. A subject heading of the proposal and a return name and address must be included in each transmission. If an acknowledgement of electronic comments is not received by the sender within two working days, the comments should be retransmitted to ensure receipt.

BY:

JOHN HANGER Acting Chairman Environmental Quality Board

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# ANNEX A

# TITLE 25. ENVIRONMENTAL PROTECTION • Subpart C. PROTECTION OF NATURAL RESOURCES ARTICLE II. WATER RESOURCES CHAPTER 109. SAFE DRINKING WATER

#### Subchapter A. GENERAL PROVISIONS

§ 109.1. Definitions.

<u>Combined distribution system -- The interconnected distribution system consisting of the</u> <u>distribution systems of wholesale systems and of the public water systems that obtain finished</u> <u>water from another public water system.</u>

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**DBP** – **Disinfection Byproduct** 

Dual sample set - A set of two samples collected at the same time and same location, with one sample analyzed for TTHM and the other sample analyzed for HAA5. Dual sample sets are collected for the purposes of conducting an IDSE and determining compliance with the TTHM and HAA5 MCLs under Subchapter G (relating to system management responsibilities).

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[Finished water – Water that has been treated in compliance with the treatment technique requirements established in this chapter by a permitted public water system and is ready for consumption by the public.]

<u>Finished water - Water that is introduced into the distribution system of a public water system</u> and is intended for distribution and consumption without further treatment, except as necessary to maintain water quality in the distribution system (for example, booster disinfection or addition of corrosion control chemicals).

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**IDSE** – Initial Distribution System Evaluation.

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<u>LRAA – Locational running annual average:</u> The average, computed quarterly, of quarterly arithmetic averages of all analytical results for samples taken at a particular monitoring location during the most recent 4 calendar quarters.

# RAA – Running annual average: The average, computed quarterly, of quarterly arithmetic averages of all analytical results for samples taken during the most recent 4 calendar quarters.

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Wholesale system - A public water system that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another public water system. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

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# Subchapter C. MONITORING REQUIREMENTS

#### § 109.301. General monitoring requirements.

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(8) Monitoring requirements for public water systems that obtain finished water from another public water system.

- (i) Consecutive water suppliers shall monitor for compliance with the MCL for microbiological contaminants at the frequency established by the EPA and incorporated by reference in this chapter.
- (ii) Community consecutive water suppliers shall[:]
  - [(A) Monitor for compliance with the MCL for TTHMs established under 40 CFR141.12 (relating to maximum contaminant levels for total trihalomethanes) in accordance with 40 CFR 141.30 (relating to total trihalomethanes sampling, analytical and other requirements) if the system does one of the following:
    - (I) Serves more than 10,000 persons,
    - (II) Obtains finished water from another public water system serving more than 10,000 persons.]

[(B) M] <u>m</u>onitor the distribution system for compliance with the MCL for asbestos at the frequency indicated in paragraph (7)(i), when the Department determines that the system's distribution system contains asbestos cement pipe and optimum corrosion control measures have not been implemented.

# (12) Monitoring requirements for disinfection byproducts and disinfection byproduct precursors. Community water systems and nontransient noncommunity water systems that use a chemical disinfectant or oxidant shall monitor for disinfection byproducts and disinfection byproduct precursors in accordance with this paragraph. Community water systems and nontransient noncommunity water systems that obtain finished water from another public water system that uses a chemical disinfectant or oxidant to treat the finished water shall monitor for TTHMs and HAA5 in accordance with this paragraph. Systems that use either surface water or GUDI sources and that serve at least 10,000 persons shall begin monitoring by January 1, 2002. Systems that use either surface water or GUDI sources and that serve fewer than 10,000 persons, or systems that use groundwater sources, shall begin monitoring by January 1, 2004. Systems monitoring for disinfection byproducts and disinfection byproduct precursors shall take all samples during normal operating conditions. Systems monitoring for disinfection byproducts and disinfection byproduct precursors shall use only data collected under this chapter to qualify for reduced monitoring. Compliance with the MCLs and monitoring requirements for TTHMs, HAA5, chlorite (where applicable) and bromate (where applicable) shall be determined in accordance with 40 CFR 141.132 and 141.133 (relating to monitoring requirements; and compliance requirements) which are incorporated herein by reference.

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(i) TTHMs and HAA5 Stage 1 DBP Rule

(B) Reduced monitoring. Systems shall monitor for TTHMs and HAA5 for at least 1 year prior to qualifying for reduced monitoring. Systems serving at least 500 persons and that use either surface water or GUDI sources shall monitor source water TOC monthly for at least 1 year prior to qualifying for reduced monitoring. The Department retains the right to require a system that meets the requirements of this clause to resume routine monitoring.

(I) For systems serving at least 500 persons that use either surface water or GUDI sources and that have a source water TOC running annual average that is no greater than 0.040 mg/L and an HAA5 running annual average that is no greater than 0.030 mg/L, the required monitoring is reduced according to items (-a-) and (-b-). Systems serving at least 10,000 persons shall resume routine monitoring as prescribed in clause (A) if the TTHM running annual average exceeds 0.060 mg/L or the HAA5 running annual average exceeds 0.060 mg/L or the HAA5 running annual average exceeds 0.060 mg/L or 0.9,999 persons shall resume routine monitoring as prescribed in clause (A) if the TTHM running annual average exceeds 0.060 mg/L or 0.9,999 persons shall resume routine monitoring as prescribed in clause (A) if the annual TTHM average exceeds 0.060 mg/L or the annual HAA5 average exceeds 0.045 mg/L. Systems serving at least 500 persons that must resume routine monitoring shall resume routine monitoring in the quarter immediately following the quarter in which the system exceeded the specified TTHM or HAA5 criteria.

(-c-) Beginning April 1, 2008, systems not monitoring under the provisions of subparagraph (ii) shall take monthly TOC samples every 30 days at a location prior to any treatment, to qualify for reduced monitoring for

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TTHM and HAA5 under this sub paragraph. In addition to meeting other criteria for reduced monitoring in this section, the source water TOC running annual average must be less than 4.0 mg/L (based on the most recent 4 quarters of monitoring) on a continuing basis at each treatment plant to reduce or remain on reduced monitoring for TTHM and HAA5. Once qualified for reduced monitoring for TTHM and HAA5. Once qualified for reduced monitoring for TTHM and HAA5. Section, a system may reduce source water TOC monitoring to quarterly TOC samples taken every 90 days at a location prior to any treatment.

(II) For systems that use only groundwater sources not included under subclause (I), the required monitoring is reduced according to the following:

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(-b-) For systems serving fewer than 10,000 persons that have an annual TTHM average that is no greater than 0.040 mg/L and an annual HAA5 average that is no greater than 0.030 mg/L for 2 consecutive years or an annual TTHM average that is no greater than 0.020 mg/L and an annual HAA5 average that is no greater than 0.015 mg/L for 1 year, the required monitoring is reduced to one sample per 3-year cycle per treatment plant. The sample shall be taken at a location that represents a maximum residence time during the month of warmest water temperature. The 3-year cycle shall begin on January 1 following the quarter in which the system qualifies for reduced monitoring. If the TTHM **annual** average exceeds 0.060 mg/L or the HAA5 **annual** average exceeds 0.045 mg/L the system shall resume routine monitoring as prescribed in clause (A), except that systems that exceed either a TTHM or HAA5 MCL shall increase monitoring to at least one sample per quarter in which the system exceeds the TTHM or HAA5 MCL.

# (ii) TTHMs and HAA5 Stage 2 DBP Rule.

#### (A) Applicability and schedule.

- I. <u>Community water systems and nontransient noncommunity water systems using a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light shall monitor for compliance with the MCLs based on the LRAA for TTHMs and HAA5. A consecutive system or wholesale system shall comply at the same time as the system with the earliest compliance date in the combined distribution system. Systems shall comply with the requirements of this subparagraph as follows:</u>
  - (-a-) Systems serving 100,000 or more people begin April 1, 2012.
  - (-b-) Systems serving from 50,000 to 99,999 people begin October 1, 2012.
  - (-c-) Systems serving from 10,000 to 49,999 people begin October 1, 2013.
  - (-d-) Systems serving less than 10,000 people:

- (-1-) <u>Begin October 1, 2013, if no Cryptosporidium monitoring is required</u> <u>under § 109.1201-1204<sup>\*</sup>.</u>
- (-2-) <u>Begin October 1, 2014, if Cryptosporidium monitoring is required</u> <u>under § 109.1201-1204<sup>\*</sup>.</u>
- II. For the purpose of the schedule under this subparagraph, the Department may determine that the combined distribution system does not include certain consecutive systems based on factors such as receiving water from a wholesale system only on an emergency basis or receiving only a small percentage and small volume of water from a wholesale system. The Department may also determine that the combined distribution system does not include certain wholesale systems based on factors such as delivering water to a consecutive system only on an emergency basis or delivering only a small percentage and small volume of water to a consecutive system.

# (B) Routine monitoring.

- I. A system that submitted an IDSE report shall begin monitoring at the locations and months recommended in the IDSE report unless the Department notifies the system that other locations or additional locations are required. A system that submitted a 40/30 certification, or qualified for a very small system waiver or a nontransient noncommunity water system serving less than 10,000, shall monitor at the locations and dates identified in its monitoring plan following the schedule in § 109.701(g)(2)(ii) (relating to reporting and recordkeeping).
- II. A system required to conduct quarterly monitoring shall begin monitoring in the first full calendar quarter that includes the compliance date specified in clause (A). A system required to conduct monitoring at frequencies less than quarterly shall begin monitoring in the calendar month recommended in the IDSE report in accordance with 40 CFR 141.601 and 141.602 (relating to standard monitoring and system specific studies) as incorporated by reference or the calendar month identified in the Subchapter G (relating to system management responsibilities) monitoring plan relating to § 109.701(g)(2)(ii) no later than 12 months after the compliance date under clause (A).
- III. Monitoring shall be conducted at no fewer than the number of locations identified in the table under subclauses IV and V. All systems shall monitor during the month of highest DBP concentrations. Systems on quarterly monitoring shall take dual sample sets every 90 days at each monitoring location, except for community water systems using surface water or GUDI sources serving 500-3,300. Systems on annual monitoring and community water systems using surface water or GUDI sources serving 500-3,300 are required to take individual TTHM and HAA5 samples (instead of a dual sample set) at the locations with the highest TTHM and HAA5 concentrations, respectively. Only one location with a dual sample set per monitoring period is needed if the

<sup>&</sup>lt;sup>t</sup> These sections are being added by the LT2 package that is also being proposed today.

<sup>\*</sup> These sections are being added by the LT2 package that is also being proposed today.

highest TTHM and HAA5 concentrations occur at the same location (and month, if monitored annually).

IV. <u>Community water systems and nontransient noncommunity water systems using</u> surface water or GUDI sources shall monitor as follows:

Population size	Monitoring frequencies	<b>Distribution</b> system
•		monitoring location total
		per monitoring period

< 500	Annually	2
500 - 3,300	Quarterly	2
3,301 – 9,999	Quarterly	. 2
10,000 - 49,999	Quarterly	4
50,000 - 249,999	Quarterly	8
250,000 - 999,999	Quarterly	12
1,000,000 - 4,999,999	Quarterly	16
<u>≥ 5,000,000</u>	Quarterly	20

V. <u>Community water systems and nontransient noncommunity water systems</u> using ground water sources shall monitor as follows:

Population size	Monitoring frequencies	<b>Distribution system</b>
		monitoring location total
		per monitoring period

< 500 Annually		2
500 - 9,999	Annually	2
10,000 - 99,999	Quarterly	4
100,000 - 499,999	Quarterly	6
≥500,000	Quarterly	8

- VI. An undisinfected system that begins using a disinfectant other than UV light after the dates under 40 CFR 141.600 (relating to general requirements) as incorporated by reference for complying with the IDSE requirements, shall consult with the Department to identify compliance monitoring locations. The system shall develop a monitoring plan under §109.701(g)(2)(ii) that includes those monitoring locations.
- VII. Systems shall use analytical techniques adopted by the EPA under the Federal act for TTHM and HAA5 analyses. Laboratories that have received accreditation by the Department shall conduct analyses.

(C) Reduced monitoring.

I. Systems may reduce monitoring to the level specified in the table under subclauses II & III if, after at least 4 consecutive quarters, the LRAA is equal to or less than 0.040 mg/L for TTHM and equal to or less than 0.030 mg/L for HAA5 at all monitoring locations. Only data collected under the provisions of subparagraph (i) and (ii) may be used to qualify for reduced monitoring. Systems with surface water or GUDI sources shall also take monthly TOC samples every 30 days at a location prior to any treatment, to qualify for reduced monitoring for TTHM and HAA5 under this clause. In addition to meeting other criteria for reduced monitoring in this clause, the source water TOC running annual average (based on the most recent 4 quarters of monitoring) must be equal to or less than 4.0 mg/ L on continuing basis at each treatment plant to reduce monitoring for TTHM and HAA5. Once qualified for reduced monitoring for TTHM and HAA5 under this clause, a system may reduce source water TOC monitoring to quarterly TOC samples taken every 90 days at a location prior to any treatment.

II. <u>Community water systems and nontransient noncommunity water systems using</u> surface water or GUDI sources may reduce monitoring as follows:

Population size	Monitoring frequencies	Distribution system
		<u>monitoring location total</u> per monitoring period
< 500	Monitoring may not b	e reduced
500 -3,300	Annually	1 TTHM and 1 HAA5 sample:
		1 at the location and during the quarter with the highest TTHM single measurement, 1 at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter.
3,301 - 9,999	Annually	2 dual sample sets: 1 at the
		location and during the quarter with the highest TTHM single measurement, 1 at the location and during the quarter with the highest HAA5

single measurement.

LRAAs.

2 dual sample sets at the

locations with the highest TTHM and the highest HAA5

4 dual sample sets at the

locations with two highest

**Ouarterly** 

**Ouarterly** 

10.000 - 49,999

50,000-249,999

		<u>TTHM and two highest HAA5</u> <u>LRAAs.</u>
250,000-999,999	Quarterly	6 dual sample sets at the
		locations with the three highest
		TTHM and the three highest
		HAA5 LRAAs.
<u>1,000,000–4,999,999</u>	Quarterly	8 dual sample sets at the
		locations with the 4 highest
		<b>TTHM and 4 highest HAA5</b>
•		LRAAs.
<u>≥5,000,000</u>	Quarterly	10 dual sample sets at the
		locations with the five highest
		<b>TTHM and five highest HAA5</b>
		LRAAs.

# III. <u>Community water systems and nontransient noncommunity water systems using</u> ground water sources may reduce monitoring as follows:

Population size	Monitoring frequencies	Distribution system
		monitoring location total
		per monitoring period
<500	Every third year	<b>1 TTHM and 1 HAA5 sample:</b>
		<b>1</b> at the location and during the
		quarter with the highest
		<u>TTHM single measurement; 1</u>
		at the location and during
• •		<u>quarter with highest HAA5</u>
•		single measurement; 1 dual
		sample set per year if the
		highest TTHM and HAA5
		measurements occurred at the
		same location and quarter.
500-9,999	Annually	1 TTHM and 1 HAA5 sample:
		1 at the location and during the
		quarter with highest TTHM
		single measurement, 1 at the
		location during the quarter
		with the highest HAA5 single
		measurement; 1 dual sample
		set per year if the highest
		TTHM and HAA5
		measurements occurred at the
•••		same location and quarter
<u>10,000-99,999</u>	Annually	2 dual sample sets: 1 at the
		location and during the

n National Contraction of the State National Contraction of the State	ین بر میں میں بر	• •	•	<u>quarter with the highest</u> <u>TTHM single measurement, 1</u> <u>at the location and during the</u> <u>quarter with the highest HAA5</u> <u>single measurement.</u>
<u>100,000-499,999</u>	Quarterly			2 dual sample sets at the
				locations with the highest
				LRAAs
<u>&gt;500,000</u>	Quarterly			4 dual sample sets at the
			• .	locations with the two highest
				TTHM and two highest HAA5
				LRAAs.

- IV. Systems on reduced quarterly monitoring may remain on reduced monitoring as long as the TTHM LRAA is equal to or less than 0.040 mg/L and the HAA5 LRAA is equal to or less than 0.030 mg/L at each monitoring location. Systems on reduced annual or less frequent monitoring may remain on reduced monitoring as long as each TTHM sample result is equal to or less than 0.060 mg/L and each HAA5 sample result is equal to or less than 0.045 mg/L. In addition, the source water TOC running annual average (based on the most recent 4 quarters of monitoring) from samples collected every 90 days at a location prior to any treatment must be equal to or less than 4.0 mg/L at each treatment plant treating surface water or GUDI sources.
- V. If the LRAA based on quarterly monitoring at any monitoring location exceeds either 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 or if the annual (or less frequent) sample at any location exceeds either 0.060 mg/L for TTHM or 0.045 mg/L for HAA5, or if the source water annual average TOC level, before any treatment, is greater than 4.0 mg/L at any treatment plant treating surface water or GUDI sources, the system shall resume routine monitoring under clause (B) or begin increased monitoring if subclause (D)(I) applies.
- VI. <u>The Department retains the right to require a system that meets the</u> requirements of this clause to resume routine monitoring.

(D) Increased monitoring.

- I. Systems that are required to monitor at a particular location annually or less frequently than annually under clause (B) or (C) shall increase monitoring to dual sample sets once per quarter (taken every 90 days) at all locations if any single TTHM sample result is greater than 0.080 mg/L or any single HAA5 sample result is greater than 0.060 mg/L at any location.
- II. A system may return to routine monitoring once it has conducted increased monitoring for at least 4 consecutive quarters and the LRAA for every monitoring location is equal to or less than 0.060 mg/L for TTHM and is equal to or less than 0.045 mg/L for HAA5.

- III. Systems on increased monitoring under subparagraph (i) shall remain on increased monitoring until they qualify for a return to routine monitoring under subclause (II). Systems shall conduct increased monitoring under subclause (I) at the monitoring locations in the monitoring plan developed under §109.701(g)(2)(ii) beginning at the date identified in clause (A) for compliance with this subparagraph and remain on increased monitoring until they qualify for a return to routine monitoring under subclause (II).
- IV. A system may remain on reduced monitoring after the dates identified in clause (A) for compliance with this subparagraph only if it qualified for a 40/30 certification under 40 CFR 141.603 (relating to 40/30 certification) as incorporated by reference or has received a very small system waiver under 40 CFR 141.603 as incorporated by reference, plus meets the reduced monitoring criteria in clause (C), and has not changed or added monitoring locations from those used for compliance monitoring in subparagraph (i). If a system's monitoring locations under this subparagraph differ from monitoring locations under subparagraph (i), the system may not remain on reduced monitoring after the dates identified in clause (A) for compliance with this subparagraph.

(E) General monitoring and compliance requirements.

- I. <u>A system required to monitor quarterly shall calculate LRAAs for TTHM and HAA5 using monitoring results collected under this subparagraph and determine that each LRAA does not exceed the MCL. A system that fails to complete 4 consecutive quarters of monitoring, shall calculate compliance with the MCL based on the average of the available data from the most recent 4 quarters. A system that takes more than one sample per quarter at a monitoring location shall average all samples taken in the quarter at that location to determine a quarterly average to be used in the LRAA calculation.</u>
- II. <u>A system required to monitor yearly or less frequently shall determine that each</u> sample result is less than the MCL. If any single sample result exceeds the MCL, the system shall comply with the requirements of clause (D). If no sample result exceeds the MCL, the sample result for each monitoring location is considered the LRAA for that monitoring location.
- III. A system required to conduct quarterly monitoring, shall make compliance calculations at the end of the 4<sup>th</sup> calendar quarter that follows the compliance date and at the end of each subsequent quarter, or earlier if the LRAA calculated based on fewer than 4 quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters. A system required to conduct monitoring at a frequency that is less than quarterly shall make compliance calculations beginning with the first compliance sample taken after the compliance date.
- IV. A system is in violation of the MCL when the LRAA at any location exceeds the MCL for TTHM or HAA5, calculated based on 4 consecutive quarters of monitoring, or the LRAA calculated based on fewer than 4 quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters. A system is in violation of the monitoring requirements for each

# quarter that a monitoring result would be used in calculating an LRAA if it fails to monitor.

[(ii)] <u>(iii)</u> \*\*

[(iii)] (iv) Bromate. Community water systems and nontransient noncommunity water systems that use ozone for disinfection or oxidation shall monitor for bromate.

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- (A) *Routine monitoring*. Systems shall take one sample per month for each treatment plant that uses ozone. Systems shall take the monthly sample at the entrance to the distribution system while the ozonation system is operating under normal conditions.
- (B) *Reduced monitoring*.
  - Until March 31, 2009, [For] systems that have an average source water bromide concentration that is less than 0.05 mg/L based upon representative monthly bromide measurements for 1 year, the required monitoring is reduced from monthly to quarterly. Systems on reduced monitoring shall continue to take monthly samples for source water bromide. If the running annual average source water bromide concentration, computed quarterly, equals or exceeds 0.05 mg/L based upon representative monthly measurements, the system shall revert to routine monitoring as prescribed by clause (A).
  - II. Beginning April 1, 2009, a system required to analyze for bromate may reduce monitoring from monthly to quarterly, if the system's running annual average bromate concentration computed quarterly is less than or equal to 0.0025 mg/L based on monthly measurements as prescribed in clause (A) for the most recent 4 quarters. Systems qualifying for reduced bromate monitoring under subclause (I) may remain on reduced monitoring as long as the running annual average of quarterly bromate samples is less than or equal to 0.0025 mg/L. If the running annual average bromate concentration is greater than 0.0025 mg/L, the system shall resume routine monitoring as prescribed under clause (A).

[(iv)] <u>(v)</u> \*\*\*

# Subchapter G. SYSTEM MANAGEMENT RESPONSIBILITIES

#### §109.701 Reporting and recordkeeping

(a) Reporting requirements for public water systems.

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(8) *Reporting requirements for disinfectant residuals*. <u>In addition to the reporting</u> <u>requirements specified in paragraph (1)</u>, [P]public water systems shall report MRDL monitoring data as follows:

- (i) [For s]Systems monitoring for chlorine dioxide under §109.301(13)[:] shall report the number of days chlorine dioxide was used at each entry point during the last month.
  - [(A) The dates, results, and locations of the samples that were taken during the previous month.
  - (B)Whether the MRDL was exceeded.
  - (C) Whether the MRDL was exceeded during any 2-consecutive daily samples and whether the resulting violation was acute or non-acute.]
- (ii) [For s]Systems monitoring for either chlorine or chloramines under §109.301(13)[:] shall report the arithmetic average of all distribution samples taken in the last month.
  - [(A) The number of samples taken during each month of the previous quarter.
  - (B) The monthly arithmetic average of all samples taken in each month for the last 12 months.
  - (C) The arithmetic average of all monthly averages for the last 12 months.

(D) Whether the MRDL was exceeded.]

- [(9)*Reporting requirements for disinfection byproducts.* 
  - (i) Systems monitoring for TTHMs and HAA5 under §109.301(12) shall report the following:
    - (A) Systems monitoring on a quarterly or more frequent basis shall report the following:
      - (I) The number of samples taken during the last quarter.
      - (II) The date, location and result of each sample taken during the last quarter.
      - (III) The arithmetic average of all samples taken in the last quarter.
      - (IV) The annual arithmetic average of the quarterly arithmetic averages for the last 4 quarters.
      - (V) Whether the annual arithmetic average exceeds the MCL for either TTHM or HAA5.
    - (B) Systems monitoring less than quarterly, but no less than annually shall report the following:
      - (I) The number of samples taken during the last year.
      - (II) The date, location and result of each sample taken during the last monitoring period.
      - (III) The arithmetic average of all samples taken in the last year.

- (IV) Whether the annual arithmetic average exceeds the MCL for either TTHM or HAA5.
- (C) Systems monitoring less than annually shall report the following:
  - (I) The date, location and result of the last sample taken.
  - (II) Whether the sample exceeds the MCL for either TTHM or HAA5.
- (ii) Systems monitoring for chlorite under §109.301(12) shall report the following:
  - (A) The number of samples taken during the last month.
  - (B) The date, location and result of each entry point and distribution sample taken during the last month.
  - (C) The arithmetic average of each three-sample set of distribution samples taken during the last month.
  - (D) Whether the monthly arithmetic average exceeds the MCL.

(iii) Systems monitoring for bromate under §109.301(12) shall report the following:

- (A) The number of samples taken during the last quarter.
- (B) The date, location and result of each sample taken during the last quarter.
- (C) The arithmetic average of the monthly arithmetic averages of all samples taken in the last year.
- (D) Whether the annual arithmetic average exceeds the MCL.]

[(10)] <u>(9)</u> \*\*\*

(d) *Record maintenance*. The public water supplier shall retain on the premises of the public water system or at a convenient location near the premises the following:

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(1) Records of bacteriological analyses <u>and turbidity analysis</u> which shall be kept for at least 5 years, and records of chemical analyses which shall be kept for at least 12 years. Actual laboratory reports may be kept, or data may be transferred to tabular summaries, if the following information is included:

(g) Monitoring plans for disinfectants, disinfection byproducts and disinfection byproduct precursors.

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(1) Stage 1 DBPR. Systems required to monitor for disinfection byproducts <u>under</u> <u>§109.301(12)(i)</u> or disinfection byproduct precursors under § 109.301(12)(v) or disinfectant residuals under §109.301(13) shall develop and implement a monitoring plan. The system shall maintain the plan and make it available for inspection by the Department and the general public no later than 30 days following the applicable compliance dates. All systems that use either surface water or GUDI sources shall submit a copy of the monitoring plan to the Department no later than 30 days prior to the date of the first report required under this subchapter. The Department may also require the plan to be submitted by any other system, regardless of size or source water type. After review, the Department may require changes in any of the plan components.

[(1)] (i) The plan [shall] **<u>must</u>** include the following components:

- [(i)] <u>(A)</u> \*\*\* [(ii)] <u>(B)</u> \*\*\*
- [(iii)] (C) \*\*\*
- [(iv)] (D) \*\*\*
- [(2)] (ii) \*\*\*
- (iii) Copies of Stage 1 DBP Rule monitoring plans developed under this clause shall be kept for the same period of time as the Stage 1 DBP Rule records of analyses are required to be kept under paragraph (d)(1).
- (2) <u>Stage 2 DBPR.</u> Systems required to monitor for disinfection byproducts under §109.301(12)(ii) shall comply with the following:
  - (i) IDSE Requirements. The IDSE requirements established by the EPA under the National Primary Drinking Water Regulations in 40 CFR 141.600 – 141.605 (relating to initial distribution system evaluations) are incorporated by reference except as otherwise established by this chapter.

(ii) Subchapter G monitoring plan.

(A) A public water system shall develop and implement a monitoring plan to be kept on file for Department and public review. The monitoring plan must contain the elements in subclauses (I) through (IV) and be completed no later than the date systems conduct their initial monitoring under this subpart.

(I) Monitoring locations,

(II) Monitoring dates,

(III) Compliance calculation procedures,

- (IV) Monitoring plans for any other systems in the combined distribution system if the Department has reduced monitoring requirements under the Department authority.
- (B) Public water systems not required to submit an IDSE report under either 40 <u>CFR 141.601 or 141.602 (relating to standard monitoring and system specific</u> <u>studies</u>) as incorporated by reference, and do not have sufficient §109.301(12)(i) <u>monitoring locations to identify the required number of compliance monitoring</u> locations, shall identify additional locations by alternating selection of locations

representing high TTHM levels and high HAA5 levels until the required number of compliance monitoring locations have been identified. The system shall also provide the rationale for identifying the locations as having high levels of TTHM or HAA5. Systems that have more monitoring locations than required for compliance monitoring shall identify which locations will be used for subchapter G compliance monitoring by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of Subchapter G compliance monitoring locations have been identified.

- (C) A public water system shall submit a copy of its monitoring plan to the Department prior to the date for initial monitoring specified in §109.301(12)(ii), unless the system submits to the Department an IDSE report containing all the information required by clause (A).
- (D) A public water system may revise its monitoring plan to reflect changes in treatment, distribution system operations and layout (including new service areas), or other factors that may affect TTHM or HAA5 formation, or for Department-approved reasons, after consultation with the Department regarding the need for changes and the appropriateness of changes. A system that changes monitoring locations, shall replace existing compliance monitoring locations with the lowest LRAA with new locations that reflect the current distribution system locations with expected high TTHM or HAA5 levels. The Department may also require modifications in the system's monitoring plan. A system using surface water or GUDI sources and serving more than 3,300 people, shall submit a copy of its modified monitoring plan to the Department prior to the date the system is required to comply with the revised monitoring plan.

#### (iii) Operational evaluation levels.

- (A) The operational evaluation level for TTHM and HAA5 is the sum of the two previous quarterly results plus twice the current quarter's result, divided by 4. Each quarter, public water systems shall calculate the TTHM and HAA5 operation evaluation levels for each monitoring location.
- (B) If the TTHM operational evaluation level exceeds 0.080 mg/L, or the HAA5 operational evaluation level exceeds 0.060 mg/L at any monitoring location, the system shall conduct an operational evaluation to identify the cause of the exceedence and submit a written report of the evaluation to the Department no later than 90 days after being notified of the analytical result that causes the system to exceed the operational evaluation level. The written report must be made available to the public upon request.
- (C) The operational evaluation must include an examination of system treatment and distribution operational practices, including storage tank operations, excess storage capacity, distribution system flushing, changes in sources or source water quality, and treatment changes or problems that may contribute to TTHM and HAA5 formation and what steps could be considered to minimize future exceedances.

- (1) A system may request and the Department may allow a system to limit the scope of evaluation if the system is able to identify the cause of the operational evaluation level exceedance.
- (II) The request to limit the scope of the evaluation does not extend the schedule in subclause (I) of this clause for submitting the written report. The Department must approve this limited scope of evaluation in writing and systems shall keep that approval with the completed report.
- (iv) Reporting and recordkeeping requirements
  - (A) For each monitoring location, public water systems shall report to the Department within 10 days of the end of any quarter in which monitoring is required any TTHM operational evaluation level that exceeded 0.080 mg/L and any HAA5 operational evaluation level that exceeded 0.060 mg/L during the quarter and the location, date, and the TTHM and HAA5 calculated operation evaluation level.
  - (B) Copies of Stage 2 DBP Rule monitoring plans developed under this clause shall be kept for the same period of time as the Stage 2 DBP Rule records of analyses are required to be kept under paragraph (d)(1).

# Subchapter J. BOTTLED WATER AND VENDED WATER SYSTEMS, RETAIL WATER FACILITIES AND BULK WATER HAULING SYSTEMS

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#### §109.1003. Monitoring requirements.

(a) *General monitoring requirements*. Bottled water and vended water systems, retail water facilities and bulk water hauling systems shall monitor for compliance with the MCLs and MRDLs in accordance with §109.301 (relating to general monitoring requirements) and shall comply with §109.302 (relating to special monitoring requirements). The monitoring requirements shall be applied as follows, except that systems which have installed treatment to comply with a primary MCL shall conduct quarterly operational monitoring for the contaminant which the facility is designed to remove:

(1) Bottled water systems, retail water facilities and bulk water hauling systems, for each entry point shall:

\*\*\*\*\*

# (viii) (A) TTHM and HAA5 Stage 1 DBP Rule. \*\*\*

[(A)] (I) Routine monitoring. Beginning January 1, 2004, monitor annually for TTHMs and HAA5 if the system uses a chemical disinfectant or oxidant, or obtains finished water from another public water system that uses a chemical disinfectant or oxidant to treat the [finished] water. Bottled water systems are not required to monitor for TTHMs and HAA5 if the system does not use a chlorine-based disinfectant or oxidant and does not obtain finished

water from another public water system that uses a chlorine-based disinfectant or oxidant to treat the [finished] water.

#### [(B)] (II) Reduced monitoring. \*\*\*

[(1)] <u>-a-</u> Systems that use groundwater sources shall reduce monitoring to 1 sample per 3-year cycle per entry point if the annual TTHM average is no greater <u>than</u> 0.040 mg/L and the annual HAA5 average is no greater than 0.030 mg/L for 2 consecutive years or the annual TTHM average is no greater than 0.020 mg/L and the annual HAA5 average is no greater than 0.020 mg/L and the annual HAA5 average is no greater than 0.020 mg/L and the annual HAA5 average is no greater than 0.015 mg/L for 1 year. The sample shall be taken during the month of warmest water temperature. The 3-year cycle shall begin on January 1 following the quarter in which the system qualifies for reduced monitoring.

[(II)] <u>-b-</u> Systems that use groundwater sources that qualify for reduced monitoring shall remain on reduced monitoring if the TTHM <u>annual</u> average is no greater than 0.060 mg/L and the HAA5 <u>annual</u> average is no greater than 0.045 mg/L. Systems that exceed these levels shall resume routine monitoring as prescribed in [clause (A)] <u>subclause (I)</u>, except that systems that exceed either a TTHM or HAA5 MCL shall increase monitoring to at least 1 sample per quarter per entry point beginning in the quarter immediately following the quarter in which the system exceeds the TTHM or HAA5 MCL.

(B) TTHM and HAA5 Stage 2 DBP Rule. Beginning October 1, 2013, monitor annually for TTHMs and HAA5 if the system uses a chemical disinfectant or oxidant to treat the water, or obtains finished water from another public water system that uses a chemical disinfectant or oxidant to treat the water as follows:

(I) *Routine Monitoring*. Systems shall take at least one dual sample set per year per entry point during the month of warmest water temperature.

(II) Increased Monitoring. If any sample results exceed either a TTHM or HAA5 MCL, the system shall take at least one dual sample set per quarter per entry point. The system shall return to the sampling frequency of one dual sample set per year per entry point if, after at least 1 year of monitoring, each TTHM sample result is no greater than 0.060 mg/L and each HAA5 sample result is no greater than 0.045 mg/L.

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(x) Beginning January 1, 2004, monitor monthly for bromate if the system uses ozone for disinfection or oxidation.

(A) Routine monitoring. \*\*\*

(B) *Reduced monitoring*.

(I) Until March 31, 2009, [S] systems shall reduce monitoring for bromate from monthly to quarterly if the average source water bromide concentration is less than 0.05 mg/L based upon representative monthly bromide measurements for 1 year. Systems on reduced monitoring shall continue monthly source water bromide monitoring. If the running annual average source water bromide concentration, computed quarterly, is equal to or exceeds 0.05 mg/L, the system shall revert to routine monitoring as prescribed by clause (A).

(II) Beginning April 1, 2009, a system required to analyze for bromate may reduce monitoring from monthly to quarterly, if each sample result is less than or equal to 0.0025 mg/L based on monthly measurements as prescribed in clause (A) for the most recent 12 months. Systems qualifying for reduced bromate monitoring under subclause (I) may remain on reduced monitoring as long as each sample result from the previous 12 months is less than or equal to 0.0025 mg/L. If any sample result exceeds 0.0025 mg/L, the system shall resume routine monitoring as prescribed under clause (A).



Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building P.O. Box 2063 Harrisburg, PA 17105-2063 November 24, 2008

**Policy Office** 

717-783-8727

Kim Kaufman, Executive Director Independent Regulatory Review Commission 333 Market Street, 14<sup>th</sup> Floor Harrisburg, PA 17101

Re: Proposed Rulemaking: Stage 2 Disinfectants and Disinfection Byproducts Rule (25 Pa. Code, Chapter 109) (#7-427); and

Proposed Rulemaking: Long Term 2 Enhanced Surface Water Treatment Rule (25 Pa. Code, Chapter 109) (#7-426)

Dear Mr. Kaufman:

Enclosed are copies of two proposed regulations for review and comment by the Independent Regulatory Review Commission pursuant to Section 5(a) of the Regulatory Review Act. The proposals are scheduled for publication in the *Pennsylvania Bulletin* on December 6, 2008, with a 30-day public comment period, respectively. The Environmental Quality Board (EQB) adopted these proposals on August 19, 2008, with provision for a 30-day public comment period for each rulemaking.

The Stage 2 Disinfectants and Disinfection Byproducts Proposed Rulemaking will amend the Commonwealth's Safe Drinking Water regulations at 25 Pa Code, Chapter 109 to incorporate federal provisions concerning disinfection byproducts (DBPs). While DBPs disinfect water by controlling harmful microorganisms, they can react with organic and inorganic matter in the water to form byproducts that post health risks at certain levels. This rulemaking will augment the Stage 1 DBP Rule that was promulgated by the Commonwealth in 2001 by targeting the highest risk monitoring sites where customers are exposed to high levels of DBPs. EPA promulgated the federal Stage 2 DBP rule on January 4, 2006. The amendments will apply to community water systems and nontransient noncommunity water systems that add a primary or residual disinfectant other than ultraviolet light (UV) or deliver water that has been treated with a primary or residual disinfectant other than UV.

The proposed amendments were submitted for review to the Small Water Systems Technical Assistance Center Advisory Board (TAC) for review and discussion on November 15, 2007. The TAC Board supports the proposed revisions and notes that the revisions contained in the rulemaking are necessary for the Department to receive primacy for this aspect of the Drinking Water Program and are no more stringent than federal requirements.

The proposed Long Term 2 Enhanced Surface Water Treatment Rulemaking will amend the Department's Safe Drinking Water regulations at 25 Pa Code, Chapter 109 by incorporating

Kim Kaufman, Executive Director

requirements contained in the Federal Long Term 2 Enhanced Surface Water Treatment Rule (LT2) which was promulgated by the U.S. EPA on January 5, 2006. The rulemaking applies to public water systems supplied by a surface water source and public water systems supplied by a ground water source under the direct influence of surface water (GUDI) and were developed to further protect public health against Cryptosporidium and other microbial pathogens in drinking water. In Pennsylvania, approximately 355 public water systems will be impacted by the proposed amendments.

On November 13, 2007, the TAC Board reviewed the proposed rulemaking. Although the Board is supportive of the revisions to the regulations, the Board provided written comments to the Department which outline a number of concerns. Those concerns, which are identified in the Premable of the rulemaking, were addressed by the Department and amendments were made to the rulemaking, as necessary, to directly incorporate TAC's suggestions.

The Department will provide the Commission with the assistance required to facilitate a thorough review of these proposals. Section 5(g) of the Regulatory Review Act provides that the Commission may, within 30 days of the close of the comment period, convey to the agency its comments, recommendations and objections to the proposed regulation. The Department will consider any comments, recommendation or suggestions made by the Commission, as well as the Committees and public commentators, prior to final adoption of the regulation.

Please contact me at 717-783-8727 if you have any questions or need additional information.

Sincerely,

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Michele L. Tate Regulatory Coordinator

Enclosures

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0120-FM-PY0011 8/2006 **COMMONWEALTH OF PENNSYLVANIA** DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF POLICY TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO PN 2: 53 THE REGULATORY REVIEW ACT 2008 NOV 24 PN 2: 53 REGULAIVI I.D. NUMBER: 7-427 SUBJECT: Stage 2 Disinfectants and Disinfection Byproducts Rule AGENCY: DEPARTMENT OF ENVIRONMENTAL PROTECTION **TYPE OF REGULATION** X **Proposed Regulation** Π **Final Regulation** Final Regulation with Notice of Proposed Rulemaking Omitted 120-day Emergency Certification of the Attorney General Π 120-day Emergency Certification of the Governor **Delivery of Tolled Regulation** П a. D With Revisions b. 🗍 Without Revisions FILING OF REGULATION DATE SIGNATURE DESIGNATION Majority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY Minority Chair, HOUSE COMMITTEE ON **ENVIRONMENTAL RESOURCES & ENERGY** Maiority Chair. SENATE COMMITTEE ON 11/2/10 **ENVIRONMENTAL RESOURCES & ENERGY** Minority Chair, SENATE COMMITTEE ON **ENVIRONMENTAL RESOURCES & ENERGY** INDEPENDENT REGULATORY REVIEW COMMISSION ATTORNEY GENERAL (for Final Omitted only) 11-24-08 LEGISLATIVE REFERENCE BUREAU (for Proposed only)

