Annex A
TITLE 25. ENVIRONMENTAL PROTECTION
PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION
Subpart C. PROTECTION OF NATURAL RESOURCES
ARTICLE II. WATER RESOURCES
CHAPTER 109. SAFE DRINKING WATER
Subchapter A. GENERAL PROVISIONS

§ 109.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

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Nontransient noncommunity water system—A noncommunity water system that regularly serves at least 25 of the same persons over 6 months per year.

***PDWEP*—Guidelines for Public Drinking Water Equipment Performance issued by NSF.**

Person—An individual, partnership, association, company, corporation, municipality, municipal authority, political subdivision**,** or an agency of Federal or State government. The term includes the officers, employees and agents of a partnership, association, company, corporation, municipality, municipal authority, political subdivision, or an agency of Federal or State government.

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Source—The place from which water for a public water system originates or is derived, including, but not limited to, a well, spring, stream, reservoir, pond, lake or interconnection.

***Source water assessment*—An evaluation documented in writing of the contamination potential of a drinking water source used by a public water system which includes identifying the contributing area to the water source, an inventory of potential contaminant sources and a determination of the susceptibility of the water source to contamination.**

***Source water protection area*—A surface water intake protection area or a wellhead protection area, or both.**

***Source water protection program*—A surface water intake protection program or a wellhead protection program, or both.**

Spent filter backwash water—A stream containing particles dislodged from filter media when the filter is backwashed to clean the filter.

Substantial modification—A change in a public water system that may affect the quantity or quality of water served to the public or which may be prejudicial to the public health or safety and includes the addition of new sources; the expansion of existing facilities; changes in treatment processes; addition, removal, renovation or substitution of equipment or facilities; and interconnections.

Surface water—Water open to the atmosphere or subject to surface runoff. The term does not include finished water.

***Surface water intake protection area*—The surface and subsurface area surrounding a surface-water intake supplying a public water system through which contaminants are reasonably likely to move toward and reach the water source. A surface water intake protection area must consist of up to three zones:**

(i) *Zone A.* A 1/4-mile wide area inland from the edge of a waterway or surface water body and from an area 1/4-mile downstream of the intake to a 5-hour time-of-travel upstream.

(ii) *Zone B.* A 2-mile wide area inland from the edge of a waterway or surface water body and extending upstream to the 25-hour time-of-travel.

(iii) *Zone C.* For drainage basins greater than or equal to 100 square miles, the remainder of the upstream basin. Zone B and Zone C, if present, comprise the contributing area for the water source.

***Surface water intake protection program*—A comprehensive program designed to protect each surface water source used by a public water system from contamination.**

System—

(i) A group of facilities used to provide water for human consumption including facilities used for collection, treatment, storage and distribution. The facilities shall constitute a system if they are adjacent or geographically proximate to each other and meet at least one of the following criteria:

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Wellhead protection area—The surface and subsurface area surrounding a water well, well field, spring or infiltration gallery supplying a public water system, through which contaminants are reasonably likely to move toward and reach the water source. A wellhead protection area **[shall consist of the following] must consist of up to three** zones:

(i) *Zone I*. The protective zone immediately surrounding a well, spring or infiltration gallery which shall be a 100-to-400-foot radius depending on site-specific source and aquifer characteristics.

(ii) *Zone II*. The zone encompassing the portion of the aquifer through which water is diverted to a well or flows to a spring or infiltration gallery. Zone II shall be a **[1/2 mile] 1/2-mile** radius around the source unless a more detailed delineation is approved.

(iii) *Zone III*. **[The zone beyond Zone II that contributes surface water and groundwater to Zones I and II.] As hydrogeologic conditions warrant, the zone beyond Zone II that provides groundwater recharge to Zones I and II. Zone II and Zone III, if present, comprise the contributing area for the water source.**

Wellhead protection program—A comprehensive program designed to protect **[a] each** well, spring or infiltration gallery used by a public water system from contamination.

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 public water systems.

§ 109.5. Organization of chapter.

(a) This subchapter and **[Subchapter H]** **Subchapters H and N** (relating to laboratory certification**; and drinking water fees**) apply to all public water systems.

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Subchapter B. MCLs, MRDLs OR TREATMENT TECHNIQUE REQUIREMENTS

§ 109.202. State MCLs, MRDLs and treatment technique requirements.

* * * * *

(c) *Treatment technique requirements for pathogenic bacteria, viruses and protozoan cysts*. A public water system shall provide adequate treatment to reliably protect users from the adverse health effects of microbiological contaminants, including pathogenic bacteria, viruses and protozoan cysts. The number and type of treatment barriers and the efficacy of treatment provided shall be commensurate with the type, degree and likelihood of contamination in the source water.

(1) A public water supplier shall provide, as a minimum, continuous filtration and disinfection for surface water and GUDI sources. The treatment technique must provide at least 99.9% removal and inactivation of *Giardia lamblia* cysts, and at least 99.99% removal and inactivation of enteric viruses. Beginning January 1, 2002, public water suppliers serving 10,000 or more people shall provide at least 99% removal of *Cryptosporidium* oocysts. Beginning January 1, 2005, public water suppliers serving fewer than 10,000 people shall provide at least 99% removal of *Cryptosporidium* oocysts. The Department, depending on source water quality conditions, may require additional treatment as necessary to meet the requirements of this chapter and to protect the public health.

(i) The filtration process shall meet the following performance requirements:

(A) *Conventional or direct filtration.*

* * * * *

(IV) Beginning January 1, 2005, for public water systems serving fewer than 10,000 persons, the filtered water turbidity shall meet the following criteria:

(-a-) Be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month under § 109.301(1).

(-b-) Be less than or equal to 1 NTU at all times, measured under § 109.301(1).

~~(V) Beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of adoption of this proposed rulemaking.), for all public water systems, the filtered water turbidity must meet the following criteria:~~

~~(-a-) Be less than or equal to 0.30 NTU in at least 95% of the measurements taken each month under § 109.301(1).~~

~~(-b-) Be less than or equal to 1.0 NTU at all times measured under § 109.301(1).~~

Commented [DL1]: Delete and revisit after EPA completes the 6-year review and makes a determination about SWTR TT requirements.

(B) *Slow sand or diatomaceous earth filtration.*

(I) The filtered water turbidity shall be less than or equal to 1.0 NTU in 95% of the measurements taken each month under § 109.301(1).

(II) The filtered water turbidity shall be less than or equal to 2.0 NTU at all times, measured under § 109.301(1).

(C) *Membrane filtration.*

(I) Beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), for all public water systems, the filtered water turbidity must be less than or equal to 0.15 NTU in at least 95% of the measurements taken each month under § 109.301(1).

(II) Beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), for all public water systems, the filtered water turbidity must be less than or equal to 1~~.0~~ NTU at all times, measured under § 109.301(1).

[(C)] (D) *Other filtration technologies.* The same performance criteria as those given for conventional filtration and direct filtration in clause (A) shall be achieved unless the Department specifies more stringent performance criteria based upon onsite studies, including pilot plant studies, where appropriate.

(ii) The combined total effect of disinfection processes utilized in a filtration plant shall achieve at least a 90% inactivation of Giardia cysts and a 99.9% inactivation of viruses, as determined by CTs and measurement methods established by the EPA. The residual disinfectant concentration in the water delivered to the distribution system prior to the first customer may not be less than .2 mg/L for more than 4 hours, as demonstrated by measurement taken under § 109.301(1). Failure to maintain this level that extends beyond 4 hours constitutes a breakdown in treatment. A system that experiences a breakdown in treatment shall, under § 109.701(a)(3) (relating to reporting and recordkeeping), notify the Department within 1 hour after the water system learns of the violation or the situation, and shall provide public notice in accordance with § 109.408 (relating to Tier 1 public notice—categories, timing and delivery of notice).

(iii) For an unfiltered surface water source permitted for use prior to March 25, 1989, the public water supplier shall:

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(B) Provide continuous filtration and disinfection in accordance with this paragraph according to the following schedule:

(I) By December 31, 1991, for a public water system that, prior to March 25, 1989, had a waterborne disease outbreak or Giardia contamination in its surface water source.

(II) Within 48 months after the discovery of one of the following conditions, or by December 31, 1995, whichever is earlier, for a public water system that experiences the condition after March 25, 1989.

(-a-) A waterborne disease outbreak.

(-b-) Giardia contamination in its surface water source.

(-c-) A violation of the microbiological MCL, the turbidity MCL or the monitoring or reporting requirements for the microbiological MCL.

(-d-) A violation of the source microbiological or turbidity monitoring requirements under **[§ 109.301(2)(i)(A) and (B)]** **§ 109.301(2)(i)** or the related reporting requirements.

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§ 109.204. Disinfection profiling and benchmarking.

(a) The disinfection profiling and benchmarking requirements, established by the EPA under the National Primary Drinking Water Regulations in 40 CFR 141.172, 141.530—141.536, 141.540—141.544, 141.570(c) and (d) **[and],** 141.708 **[—]** **and** 141.709 are incorporated by reference except as otherwise established by this chapter.

(b) Public water suppliers that did not conduct TTHM and HAA5 monitoring under this section because they served fewer than 10,000 persons when the monitoring was required, but serve 10,000 or more persons before January 1, 2005, shall comply with this section. These suppliers shall also establish a disinfection benchmark **[and consult with the Department for approval]**. **[A supplier that decides to make a significant change to its disinfection practice, as described in this section, shall consult with the Department before making such a change.]**

(c) The public water supplier shall conduct disinfection profiling in accordance with the procedures and methods in the most current edition of the *Disinfection Profiling and Benchmarking Guidance Manual* published by the EPA. The results of the disinfection profiling and the benchmark, including raw data and analysis, shall be retained indefinitely on the water system premises or at a convenient location near the premises. Public water suppliers serving 10,000 or more persons and required to conduct disinfection profiling shall submit the disinfection profiling data and the benchmark data to the Department by June 1, 2001, in a format acceptable to the Department. Public water suppliers serving 500 to 9,999 persons shall submit the disinfection profiling data and the benchmark to the Department by October 1, 2004. Public water suppliers serving less than 500 persons shall submit the disinfection profiling data and the benchmark to the Department by April 1, 2005, in a format acceptable to the Department.

(d) A public water supplier that obtains a permit or permit modification for filtration treatment for a surface water or GUDI source after _____ (*Editor's Note*: The blank refers to the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), shall submit

documentation with the permit application relative to operational parameters which will be used to maintain *Giardia lamblia* inactivation throughout the expected range of operating conditions.

(e) A public water supplier using surface water or GUDI sources shall consult with the Department before making a significant change to its disinfection practice or operating treatment processes in a manner that may result in an inactivation level that is lower than the level needed to meet the *Giardia lamblia* inactivation requirements specified in § 109.202(c)(1)(ii) (relating to State MCLs, MRDLs and treatment technique requirements). As part of the consultation, the water supplier shall submit the following information to the Department:

(1) A completed disinfection profile and disinfection benchmark for *Giardia lamblia* and viruses.

(2) A description of the proposed change.

(3) An analysis of how the proposed change will affect the current level of disinfection.

Subchapter C. MONITORING REQUIREMENTS

§ 109.301. General monitoring requirements.

Public water suppliers shall monitor for compliance with MCLs, MRDLs and treatment technique requirements in accordance with the requirements established by the EPA under the National Primary Drinking Water Regulations, 40 CFR Part 141 (relating to National primary drinking water regulations), except as otherwise established by this chapter unless increased monitoring is required by the Department under § 109.302 (relating to special monitoring requirements). Alternative monitoring requirements may be established by the Department and may be implemented in lieu of monitoring requirements for a particular National Primary Drinking Water Regulation if the alternative monitoring requirements are in conformance with the Federal act and regulations. The monitoring requirements shall be applied as follows:

(1) *Performance monitoring for filtration and disinfection.* A public water supplier providing filtration and disinfection of surface water or GUDI sources shall conduct the performance monitoring requirements established by the EPA under the National Primary Drinking Water Regulations, unless increased monitoring is required by the Department under § 109.302.

(i) Except as provided under **[subparagraphs (ii) and (iii)]** **subparagraph (ii),** a public water supplier:

(A) Shall determine and record the turbidity level of representative samples of the system's filtered water as follows **until_____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.)**:

(I) For systems that operate continuously, at least once every 4 hours that the system is in operation, except as provided in clause (B).

(II) For systems that do not operate continuously, at start-up, at least once every 4 hours that the system is in operation, and also prior to shutting down the plant, except as provided in clause (B).

(B) May substitute continuous turbidity monitoring and recording for grab sample monitoring and manual recording **until _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.),** if it validates the continuous measurement for accuracy on a regular basis using a procedure specified by the manufacturer. At a minimum, calibration with an EPA-approved primary standard shall be conducted at least quarterly. For systems using slow sand filtration or filtration treatment other than conventional filtration, direct filtration or diatomaceous earth filtration, the Department may reduce the sampling frequency to once per day.

(C) Shall continuously monitor the turbidity level of the combined filter effluent beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), using an analytical method specified in 40 CFR 141.74(a) (relating to analytical and monitoring requirements) and record the results at least every 15 minutes while the plant is operating. For systems that do not operate continuously, the turbidity level shall also be measured and recorded at start-up and immediately prior to shutting down the plant.

[(C)] (D) Shall continuously monitor and record the residual disinfectant concentration of the water being supplied to the distribution system and record both the lowest value for each day and the number of periods each day when the value is less than .2 mg/L for more than 4 hours. If a public water system's continuous monitoring or recording equipment fails, the public water supplier may, upon notification of the Department under § 109.701(a)(3) (relating to reporting and recordkeeping), substitute grab sampling or manual recording every 4 hours in lieu of continuous monitoring. Grab sampling or manual recording may not be substituted for continuous monitoring or recording for longer than 5 days after the equipment fails.

[(D)] (E) Shall measure and record the residual disinfectant concentration at representative points in the distribution system no less frequently than the frequency required for total coliform sampling for compliance with the MCL for microbiological contaminants.

[(ii) For a public water supplier serving 3,300 or fewer people, the Department may reduce the residual disinfectant concentration monitoring for the water being supplied to the distribution system to a minimum of 2 hours between samples at the grab sampling frequencies prescribed as follows if the historical performance and operation of the system indicate the system can meet the residual disinfectant concentration at all times:

***System Size* (*People*)**	***Samples/Day***
<500	**1**
500—1,000	**2**
1,001—2,500	**3**
2,501—3,300	**4**

If the Department reduces the monitoring, the supplier shall nevertheless collect and analyze another residual disinfectant measurement as soon as possible, but no longer than 4 hours from any measurement which is less than .2 mg/L.

(iii) For] (ii) Until _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), for a public water supplier serving fewer

than 500 people, the Department may reduce the filtered water turbidity monitoring to one grab sample per day, if the historical performance and operation of the system indicate effective turbidity removal is maintained under the range of conditions expected to occur in the system's source water.

[(iv)] **(iii)** A public water supplier providing conventional filtration treatment or direct filtration and serving 10,000 or more people and using surface water or GUDI sources shall, beginning January 1, 2002, conduct continuous monitoring of turbidity for each individual filter using an approved method under the EPA regulation in 40 CFR 141.74(a) **[(relating to analytical and monitoring requirements)]** and record the results at least every 15 minutes. Beginning January 1, 2005, public water suppliers providing conventional or direct filtration and serving fewer than 10,000 people and using surface water or GUDI sources shall conduct continuous monitoring of turbidity for each individual filter using an approved method under the EPA regulation in 40 CFR 141.74(a) and record the results at least every 15 minutes. **Beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), a public water supplier using surface water or GUDI sources and providing filtration treatment other than conventional or direct filtration shall conduct continuous monitoring of turbidity for each individual filter using an approved method under 40 CFR 141.74(a) and record the results at least every 15 minutes.**

[(A) The water supplier shall calibrate turbidimeters using the procedure specified by the manufacturer. At a minimum, calibration with an EPA-approved primary standard shall be conducted at least quarterly.

(B) If there is failure in the continuous turbidity monitoring or recording equipment, or both, the system shall conduct grab sampling or manual recording, or both, every 4 hours in lieu of continuous monitoring or recording.

(C) A public water supplier serving 10,000 or more persons has a maximum of 5 working days following the failure of the equipment to repair or replace the equipment before a violation is incurred.

(D) A public water supplier serving fewer than 10,000 persons has a maximum of 14 days following the failure of the equipment to repair or replace the equipment before a violation is incurred.]

(iv) In addition to the requirements of subparagraphs (i)—(iii), a public water supplier shall conduct grab sampling or manual recording, or both, every 4 hours in lieu of continuous monitoring or recording if there is a failure in the continuous monitoring or recording equipment, or both. The public water supplier shall notify the Department within 24 hours of the equipment failure. Grab sampling or manual recording may not be substituted for continuous monitoring for longer than 5 working days after the equipment fails. The Department will consider case-by-case extensions of the time frame to comply if the water supplier provides written documentation that it was unable to repair or replace the malfunctioning equipment within 5 working days due to circumstances beyond its control.

(2) *Performance monitoring for unfiltered surface water and GUDI.* A public water supplier using unfiltered surface water or GUDI sources shall conduct the following source water and performance monitoring requirements on an interim basis until filtration is provided, unless increased monitoring is required by the Department under § 109.302:

(i) Except as provided under subparagraphs (ii) and (iii), a public water supplier:

(A) Shall perform fecal coliform or total coliform density determinations on samples of the source water immediately prior to disinfection. Regardless of source water turbidity, the minimum frequency of sampling for fecal or total coliform determination may be no less than the following:

System Size (*People*)	*Samples/Week*
<500	1
500—3,299	2
3,300—10,000	3
10,001—25,000	4
25,001 or more	5

(B) Shall measure the turbidity of a representative grab sample of the source water immediately prior to disinfection as follows **until _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.)**:

(I) For systems that operate continuously, at least once every 4 hours that the system is in operation, except as provided in clause (C).

(II) For systems that do not operate continuously, at start-up, at least once every 4 hours that the system is in operation, and also prior to shutting down the plant, except as provided in clause (C).

(C) May substitute continuous turbidity monitoring for grab sample monitoring **until _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.),** if it validates the continuous measurement for accuracy on a regular basis using a procedure specified by the manufacturer. At a minimum, calibration with an EPA-approved primary standard shall be conducted at least quarterly.

(D) Shall continuously monitor and record the turbidity of the source water immediately prior to disinfection beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), using an analytical method specified in 40 CFR 141.74(a) and record the results at least every 15 minutes while the source is operating. If there is a failure in the continuous turbidity monitoring or recording equipment, or both, the supplier shall conduct grab sampling or manual recording, or both, every 4 hours in lieu of continuous monitoring or recording. The public water supplier shall notify the Department within 24 hours of the equipment failure. Grab sampling or manual recording may not be substituted for continuous monitoring for longer than 5 working days after the equipment fails. The Department will consider case-by-case extensions of the time frame to comply if the water supplier provides written documentation that it was unable to repair or replace the malfunctioning equipment within 5 working days due to circumstances beyond its control.

[(D)] (E) Shall continuously monitor and record the residual disinfectant concentration required under § 109.202(c)(1)(iii) (relating to State MCLs, MRDLs and treatment technique requirements) of the water being supplied to the distribution system and record the lowest value for each day. If a public water system's continuous monitoring or recording equipment fails, the public water supplier may, upon notification of the Department under § 109.701(a)(3), substitute grab sampling or manual recording, or

both, every 4 hours in lieu of continuous monitoring. Grab sampling or manual recording may not be substituted for continuous monitoring for longer than 5 days after the equipment fails.

[(E)] (F) Shall measure the residual disinfectant concentration at representative points in the distribution system no less frequently than the frequency required for total coliform sampling for compliance with the MCL for microbiological contaminants.

(ii) **[For] Until _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), for** a public water supplier serving 3,300 or fewer people, the Department may reduce the residual disinfectant concentration monitoring for the water being supplied to the distribution system to a minimum of 2 hours between samples at the grab sampling frequencies prescribed as follows if the historical performance and operation of the system indicate the system can meet the residual disinfectant concentration at all times:

System Size (People)	*Samples/Day*
<500	1
500—1,000	2
1,001—2,500	3
2,501—3,300	4

If the Department reduces the monitoring, the supplier shall nevertheless collect and analyze another residual disinfectant measurement as soon as possible, but no longer than 4 hours from any measurement which is less than the residual disinfectant concentration approved under § 109.202(c)(1)(iii).

(iii) **[For] Until _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), for** a public water supplier serving fewer than 500 people, the Department may reduce the source water turbidity monitoring to one grab sample per day, if the historical performance and operation of the system indicate effective disinfection is maintained under the range of conditions expected to occur in the system's source water.

* * * * *

(11) *Monitoring requirements for entry points that do not provide water continuously.*

~~(i)~~ Entry points from which water is not provided during every quarter of the year shall monitor in accordance with paragraphs (5)—(7) **and (14)**, except that monitoring is not required during a quarter when water is not provided to the public, unless special monitoring is required by the Department under § 109.302.

~~**(ii) At a minimum, all entry points shall provide water to the public on an annual basis to ensure all sources and entry points are included in routine compliance monitoring.**~~

(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 TTHM 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 TTHM, 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.

* * * * *

(15) *MONITORING REQUIREMENTS FOR RESERVE ENTRY POINTS AND ENTRY POINTS SUPPLIED BY ONE OR MORE RESERVE SOURCES.* BEGINNING _____, (*EDITOR'S NOTE:* THE BLANK REFERS TO 1 YEAR AFTER THE EFFECTIVE DATE OF THIS FINAL-FORM RULEMAKING.), A WATER SUPPLIER USING RESERVE SOURCES OR ENTRY POINTS AS SPECIFIED IN THE COMPREHENSIVE MONITORING PLAN IN § 109.717(A) SHALL:

(I) MONITOR RESERVE ENTRY POINTS AT THE INITIAL FREQUENCIES SPECIFIED IN PARAGRAPHS (5) – (7) AND (14).

(II) MONITOR PERMANENT ENTRY POINTS AT THE INITIAL FREQUENCIES SPECIFIED IN PARAGRAPHS (5) – (7) AND (14) WHILE THE ENTRY POINT IS RECEIVING WATER FROM A RESERVE SOURCE.

(III) CONDUCT SPECIAL MONITORING AS REQUIRED BY THE DEPARTMENT UNDER § 109.302.

§ 109.302. Special monitoring requirements.

(a) The Department may require a public water supplier to conduct monitoring in addition to that required by § 109.301 (relating to general monitoring requirements) if the Department has reason to believe the public water system is not in compliance with the **action level,** MCL, MRDL or treatment technique requirement for the contaminant.

* * * * *

§ 109.303. Sampling requirements.

(a) **[The samples taken to determine a public water system's compliance with MCLs or MRDLs or to determine compliance with monitoring requirements shall be taken at the locations identified in §§ 109.301 and 109.302 (relating to general monitoring requirements; and special monitoring requirements), or as follows:]** **The samples taken to determine a public water system's compliance with MCLs, MRDLs or treatment technique requirements or to determine compliance with monitoring requirements shall be taken at the locations identified in §§ 109.301, 109.302, 109.1003, 109.1103, 109.1202 and 109.1303 and as follows:**

* * * * *

(4) Samples for determining compliance with MCLs for organic contaminants listed by the EPA under 40 CFR 141.61 (relating to maximum contaminant levels for organic contaminants) **[and],** inorganic contaminants listed by the EPA under 40 CFR 141.62 (relating to maximum contaminant levels (MCLs) for inorganic contaminants)**, radionuclide contaminants listed by the EPA under 40 CFR 141.66 (relating to maximum contaminant levels for radionuclides)** and with the special monitoring requirements for unregulated contaminants under § 109.302(f) **(relating to special monitoring requirements)** shall be taken at each entry point to the distribution system **which is representative of each source** after an application of treatment during periods of normal operating conditions. **[If a system draws water from more than one source and the sources are combined prior to distribution, the system shall sample at the entry point where the water is representative of combined sources being used during normal operating conditions.] If a system draws water from more than one source and the sources are combined prior to distribution, the system shall sample at the entry point during periods of normal operating conditions when water is representative of all sources being used. ~~If sources are blended at a consistent ratio prior to the entry point, a blended sample may be taken to determine compliance. If sources are not blended at a consistent ratio or if sources are alternated prior to the entry point, more than one sample shall be taken to ensure that the samples are representative of all sources.~~**

* * * * *

(h) Samples taken to determine compliance with beta particle and photon radioactivity under 40 CFR 141.66(d) may be composited as follows:

(1) Monitoring for gross beta-particle activity may be based on the analysis of a composite of 3 monthly samples.

(2) Monitoring for strontium-90 and tritium may be based on the analysis of a composite of 4 consecutive quarterly samples.

(i) Samples taken to determine compliance with this chapter shall be taken in accordance with a written comprehensive monitoring plan as specified in § 109.717 ~~(relating to comprehensive monitoring plan)~~. These plans are subject to Department review and revision.

§ 109.304. Analytical requirements.

* * * * *

(c) For the purpose of determining compliance with the monitoring and analytical requirements established under this subchapter and Subchapters K, L and M (relating to lead and copper; long-term 2 enhanced surface water treatment rule; and additional requirements for groundwater sources), the Department will consider only samples analyzed by a laboratory accredited by the Department, except that measurements for turbidity, fluoridation operation, residual disinfectant concentration, temperature, pH, alkalinity, orthophosphates, silica, calcium, conductivity, daily chlorite**[,]** and magnesium hardness may be performed by a person meeting one of the following requirements:

(1) A person meeting the requirements of § 109.704 (relating to operator certification).

(2) A person using a standard operating procedure as provided under authority of the Water and Wastewater Systems Operators' Certification Act (63 P.S. §§ 1001—1015.1) **and the regulations promulgated thereunder**.

(3) An environmental laboratory meeting the requirements of Chapter 252 (relating to environmental laboratory accreditation).

(d) A system shall have *Cryptosporidium* samples analyzed by a laboratory that is approved under the EPA's Laboratory Quality Assurance Evaluation Program for Analysis of *Cryptosporidium* in Water or a laboratory that has been accredited for *Cryptosporidium* analysis by an equivalent Department laboratory accreditation program.

(e) A water supplier shall calibrate all turbidimeters used for compliance monitoring using the procedure specified by the manufacturer. At a minimum, calibration with an EPA-approved primary standard shall be conducted at least every 90 days. The Department may extend this 90-day calibration frequency if the calibration due date coincides with a holiday or weekend, or during a water system emergency which prevents timely calibration.

§ 109.305. **[Fees]** **(Reserved)**.

[(a) ***Data management fees.*** **Community water systems shall submit the following data management fees to the Department by December 31, 1995:**

System Size **(*population served*)**	***Fee***
<100	**$ 120**
100—1,000	**$ 120**
1,001—3,300	**$ 240**
3,301—10,000	**$ 360**
10,001—50,000	**$ 600**
>50,000	**$1,200**

(b) ***Waivers.*** **A request for a waiver from the monitoring requirements in § § 109.301 and 109.302 (relating to general monitoring requirements; and special monitoring requirements) shall be accompanied by the appropriate fee as follow:**

System Size **(*population served*)**	***Fee***
<100	**$ 100**
100—1,000	**$ 200**
1,001—3,300	**$ 400**
3,301—10,000	**$ 500**
10,001—50,000	**$1,000**
>50,000	**$2,000**

Fees will be based on system size, taking into consideration the following conditions:

(1) For systems with one or more sources all in the same contribution area—for groundwater systems, the contribution area is the surface area overlying the portion of the aquifer through

which water is diverted to a well or flows to a spring or infiltration gallery—the fee will be as indicated in this subsection.

(2) For systems with a single wellfield—one contribution area—the fee will be as indicated in this subsection.

(3) For systems with sources in two or more contribution areas, the fee will be as indicated in this subsection plus 1/2 of the system size fee as indicated in this subsection for each additional contribution area in which a source is located.]

Subchapter D. PUBLIC NOTIFICATION

§ 109.416. CCR requirements.

This section applies only to community water systems and establishes the minimum requirements for the content of the annual CCR that each system **[must]** **shall** deliver to its customers. This report **[shall]** **must** contain information on the quality of the water delivered by the system and characterize the risks, if any, from exposure to contaminants detected in the drinking water in an accurate and understandable manner.

* * * * *

(4) **[*Report delivery and recordkeeping.*]** Each community water system shall do the following:

(i) Mail or otherwise directly deliver to each customer **[and to the Department one copy of the annual CCR no later than the date the water system is required to distribute the CCR to its customers]** **one copy of the annual CCR no later than the date specified in paragraph (2)**.

(ii) Mail a paper copy of the annual CCR to the Department no later than the date the water system is required to distribute the CCR to its customers.

[(ii)] **(iii)** Make a good faith effort to reach consumers who do not get water bills. The Department will determine "good faith" based on those methods identified in 40 CFR 141.155(b) (relating to **report** delivery **[requirements]** **and recordkeeping**), which are incorporated by reference.

[(iii)] **(iv)** Submit in writing to the Department no later than 3 months after the delivery of the annual CCR:

(A) A certification that the annual CCR has been distributed to customers and that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the Department.

(B) A description of what was done to meet the good faith effort requirement described in subparagraph **[(ii)]** **(iii)**.

[(iv)] **(v)** If another State agency or commission also regulates the community water system, submit a copy of the system's annual CCR to the other agency or commission upon the specific request of that agency or commission no later than the date the water system is required to distribute the CCR to its

customers. Each State agency or commission shall determine the way it requests a copy of the system's CCR. Those agencies or commissions may include, but are not limited to, the following:

(A) The Pennsylvania Public Utility Commission and the Office of Consumer Advocate in the Office of the Attorney General, for water systems that are public utilities regulated under 66 Pa.C.S. (relating to Public Utility Code).

(B) The Department of **[Public Welfare]** **Human Services,** for self-contained community water systems serving personal care or other group housing facilities.

(C) The Department of Health, for self-contained community water systems serving skilled healthcare facilities.

[(v)] **(vi)** Make copies of its annual CCR available to the public on request.

[(vi)] **(vii)** If a community water system serves 100,000 or more people, post its current year's report to a publicly accessible site on the Internet.

[(vii)] **(viii)** Retain copies of each annual CCR and the related information required in paragraph (3) on the premises of the system or at a convenient location near the premises for no less than 3 years after the date of its delivery to customers.

Subchapter E. PERMIT REQUIREMENTS

§ 109.503. Public water system construction permits.

(a) *Permit application requirements.* An application for a public water system construction permit shall be submitted in writing on forms provided by the Department and shall be accompanied by plans, specifications, engineer's report, water quality analyses and other data, information or documentation reasonably necessary to enable the Department to determine compliance with the act and this chapter. The Department will make available to the applicant the *Public Water Supply Manual*, available from the Bureau of **[Water Standards and Facility Regulation]** **Safe Drinking Water**, Post Office Box **[8774]** **8467**, Harrisburg, Pennsylvania 17105 which contains acceptable design standards and technical guidance. Water quality analyses shall be conducted by a laboratory accredited under this chapter.

(1) *General requirements.* An application must include:

* * * * *

(iii) *Information describing new sources.* **Information describing new sources must include the items specified in clauses (A)—(F). The information specified in clauses (C) and (D) may not be more than 2 years old from the date the permit application is submitted unless the Department approves the use of data more than 2 years old.** The Department may accept approval of an out-of-State source by the agency having jurisdiction over drinking water in that state if the supplier submits adequate proof of the approval and the agency's standards are at least as stringent as this chapter. **[Information describing sources must include:**

(A) A comprehensive sanitary survey of the physical surroundings of each new source of raw water and its proximity to potential sources of contamination. For surface water, this information shall include a description of the watershed topography and land uses within the watershed. For systems using wells, springs or infiltration galleries, this information shall include a hydrogeological report prepared and signed by a professional geologist who has complied with the requirements of the Engineer, Land Surveyor and Geologist Registration Law (63 P.S. §§ 148—158.2) describing the geology of the area including the source aquifers, overlying formations, hydrogeologic boundaries, aquifer porosity estimates, water table contour or potentiometric surface maps depicting prepumping conditions and other information deemed necessary to evaluate the hydraulic characteristics of the aquifer and demonstrate the suitability of the proposed source. At the discretion of the Department, these requirements may be altered for a proposed well, wellfield, spring or infiltration gallery that will be pumping less than or yielding less than 100,000 gallons per day.

(B) An evaluation of the quality of the raw water from each new source. This clause does not apply when the new source is finished water obtained from an existing permitted community water system unless the Department provides written notice that an evaluation is required. The evaluation must include analysis of the following:

(I) VOCs for which MCLs have been established by the EPA under the National Primary Drinking Water Regulations in 40 CFR 141.61(a) (relating to maximum contaminant levels for organic contaminants). Vinyl chloride monitoring is required only if one or more of the two-carbon organic compounds specified under § 109.301(5)(i) (relating to general monitoring requirements) are detected. Samples for VOCs shall be collected in accordance with § 109.303(d) (relating to sampling requirements).

(II) Except for asbestos, IOCs for which MCLs have been established by the EPA under the National Primary Drinking Water Regulations in 40 CFR 141.62 (relating to maximum contaminant levels for inorganic contaminants). The new source shall be monitored for asbestos if the Department has reason to believe the source water is vulnerable to asbestos contamination.

(III) Lead.

(IV) Copper.

(V) Total coliform concentration and, if total coliform-positive, analyze for the presence of *E. coli*.

(VI) SOCs.

(-a-) Except for SOCs that have been granted a Statewide waiver, SOCs for which MCLs have been established by the EPA under the National Primary Drinking Water Regulations in 40 CFR 141.61(c).

(-b-) Dioxin where there is a source of dioxin contamination within 1,000 feet of a groundwater source or within 1 mile upstream of a surface water source.

(-c-) Polychlorinated biphenyls (PCBs) where there is a source of PCB contamination within 1,000 feet of a groundwater source or within 1 mile upstream of a surface water source.

(VII) Gross Alpha (α), radium-226, radium-228, uranium and Gross Beta (ß).

(VIII) Aluminum, chloride, color, foaming agents, iron, manganese, pH, silver, sulfate, total dissolved solids and zinc for which MCLs have been established by the EPA under the National Secondary Drinking Water Regulations in 40 CFR 143.3 (relating to secondary maximum containment levels).

(IX) Alkalinity.

(X) Hardness.

(XI) Temperature.

(XII) For surface water or GUDI sources, *E. coli* or *Cryptosporidium*, or both, as specified in § 109.1202 (relating to monitoring requirements).

(XIII) Other contaminants that the Department determines necessary to evaluate the potability of the source.]

(A) A source water assessment of each new raw water source.

(B) A pre-drilling plan for a new groundwater source prepared and signed by a professional geologist licensed to practice in this Commonwealth. The pre-drilling plan shall be submitted and approved by the Department prior to well construction and conducting an aquifer test. At a minimum, the pre-drilling plan must include preliminary results of the source water assessment, a hydrogeologic description, an aquifer test monitoring plan and the proposed well construction design.

(C) An evaluation of the quantity of the raw water from each new source. Flow data shall be submitted for springs, infiltration galleries or surface water sources. Aquifer test data, including drawdown and recovery data and the derivation of hydraulic conductivity, transmissivity and storage coefficient of the aquifer, shall be submitted for wells. At the discretion of the Department, these requirements may be altered for wells or wellfields pumping less than 100,000 gallons per day. The Department may require **[that other information be submitted]** **additional information** to evaluate the safe **or sustainable** yield of the source. The safe **or sustainable** yield is the amount of water that can be withdrawn from an aquifer without causing an undesired result, such as adverse dewatering of an aquifer, induced potential health threats or impacts upon stream uses.

(D) **[A Department approved delineation of the Zone I wellhead protection area for community water system wells, springs or infiltration galleries.]** **An evaluation of the quality of the raw water from each new source. For groundwater sources, the evaluation shall be conducted at the conclusion of the constant rate aquifer test. This clause does not apply when the new source is finished water obtained from an existing permitted community water system unless the Department provides written notice that an evaluation is required. The evaluation must include analysis of all of the following:**

(I) VOCs for which MCLs have been established by the EPA in 40 CFR 141.61(a) (relating to maximum contaminant levels for organic contaminants). Vinyl chloride monitoring is required only if one or more of the two-carbon organic compounds specified in § 109.301(5)(i) (relating to

general monitoring requirements) are detected. Samples for VOCs shall be collected in accordance with § 109.303(d) (relating to sampling requirements).

(II) IOCs, including asbestos, for which MCLs have been established by the EPA in 40 CFR 141.62 (relating to maximum contaminant levels for inorganic contaminants).

(III) Lead.

(IV) Copper.

(V) Total coliform and *E. coli* concentration.

(VI) SOCs, including dioxin and PCBs, for which MCLs have been established by the EPA in 40 CFR 141.61(c).

(VII) Gross Alpha (α), radium-226, radium-228, uranium and Gross Beta (ß).

(VIII) Aluminum, chloride, color, foaming agents, iron, manganese, pH, silver, sulfate, total dissolved solids and zinc for which MCLs have been established by the EPA in 40 CFR 143.3 (relating to secondary MCLs).

(IX) Alkalinity.

(X) Hardness.

(XI) Temperature.

(XII) For surface water or GUDI sources, *E. coli* or *Cryptosporidium*, or both, as specified in § 109.1202 (relating to monitoring requirements).

(XIII) Turbidity.

(XIV) For groundwater sources, the monitoring specified in § 109.302(f) (relating to special monitoring requirements) if the Department determines that the source is susceptible to surface water influence.

(XV) Other contaminants that the Department determines necessary to evaluate the potability of the source.

(E) A hydrogeologic report for a new groundwater source. For wells, springs or infiltration galleries, this information must include a description of the geology of the area including the source aquifers, overlying formations, hydrogeologic boundaries, aquifer porosity estimates, water table contour or potentiometric surface maps depicting prepumping conditions and other information deemed necessary to evaluate the hydraulic characteristics of the aquifer and demonstrate the suitability of the proposed source and a Department approved delineation of the Zone 1 and Zone II wellhead protection areas. All information included in the source water assessment, in addition to the results of the water quantity and quality evaluations as specified in clauses (C) and (D), must be included in a hydrogeological report prepared and signed by a professional geologist licensed to practice in this Commonwealth.

(F) A description of the watershed topography and land uses within the watershed for a new surface water source.

(iv) *Chapter 102 requirements.* An erosion and sedimentation control plan which meets the requirements contained in Chapter 102 (relating to erosion and sediment control) when earth-moving activities are involved.

* * * * *

(b) *Amendments.* A water supplier operating under a public water system permit shall obtain an amended construction permit before making a substantial modification to the public water system.

(1) A water supplier shall submit an application for an amended construction permit under the application requirements in subsection (a), if the proposed modification constitutes a major change to the public water system. Typical modifications which may be considered major changes are proposed new sources, additions or deletions of treatment techniques or processes, pumping stations and storage reservoirs.

(2) A water supplier shall submit a written request to the Department if the proposed modification constitutes a relatively minor change to the public water system. A request for an amended construction permit under this paragraph shall describe the proposed change in sufficient detail to allow the Department to adequately evaluate the proposal. Typical modifications which may be considered minor changes are changes in treatment chemicals; replacement of tank or reservoir linings or similar materials in contact with the water supply; interconnections; covering of reservoirs; construction of covered storage tanks and standpipes designed to standard specifications; transmission mains; and changes in legal status, such as transfers of ownership, incorporation or mergers. **ADDITIONALLY, REQUESTS TO CHANGE THE PERMITTED AVAILABILITY CATEGORY OF A SOURCE, PURCHASED INTERCONNECT, TREATMENT PLANT OR ENTRY POINT IDENTIFIED IN THE COMPREHENSIVE MONITORING PLAN IN ACCORDANCE WITH § 109.717 MAY BE CONSIDERED A MINOR CHANGE.**

(3) The Department determines whether a particular modification is a substantial modification and requires the construction permit to be amended under paragraph (1) or (2). A substantial modification is a modification which may affect the quality or quantity of water served to the public or may be prejudicial to the public health or safety. The Department's determination of whether the substantial modification is a major or minor change will include consideration of the expected amount of staff time required to review and process the proposal, the magnitude and complexity of the proposed change and the compliance history of the public water system.

(c) *Permit fees.* **An application for a permit from the Department under this subchapter must be accompanied by a fee in the amount specified in Subchapter N (relating to drinking water fees).**

[(1) An application for a permit or a major permit amendment under subsection (a)(1), except for an application for construction or modification of corrosion control treatment facilities under § 109.1105 (relating to permit requirements), shall be accompanied by a check in the amount of $750, payable to the "Commonwealth of Pennsylvania," except a fee is not required for an application submitted by a State regulatory agency, or an application submitted for a public water system serving 100 or fewer individuals. The fees for permitting and related services under §

109.1105 for corrosion control treatment facilities are established under § 109.1108 (relating to fees).

(2) A fee is not required for an application for an emergency permit under § 109.506 (relating to emergency permits) or an amendment under subsection (b)(2).]

(d) *Department's review.*

* * * * *

§ 109.505. Requirements for noncommunity water systems.

(a) A noncommunity water system shall obtain a construction permit under § 109.503 (relating to public water system construction permits) and an operation permit under § 109.504 (relating to public water system operation permits), unless the noncommunity water system satisfies paragraph (1) or (2). The Department retains the right to require a noncommunity water system that meets the requirements of paragraph (1) or (2) to obtain a construction and an operation permit, if, in the judgment of the Department, the noncommunity water system cannot be adequately regulated through standardized specifications and conditions. A noncommunity water system which is released from the obligation to obtain a construction and an operation permit shall comply with the other requirements of this chapter, including design, construction and operation requirements described in Subchapters F and G (relating to design and construction standards; and system management responsibilities).

* * * * *

(2) A noncommunity water system not covered under paragraph (1) is not required to obtain a construction and an operation permit if it satisfies the following specifications and conditions:

(i) The sources of supply for the system are groundwater sources requiring treatment no greater than **[disinfection to]** **hypochlorite or ultraviolet light disinfection to reduce total coliform bacteria concentrations to undetectable levels in the finished water, and otherwise** provide water of a quality that meets the primary MCLs established under Subchapter B (relating to MCLs, MRDLs or treatment technique requirements).

(ii) **[The water supplier files a brief description of the system, including raw source quality data, on forms acceptable to the Department. Amendments to the system description shall be filed when a substantial modification is made to the system. Descriptions of new systems or modifications shall be submitted and approved by the Department prior to construction.]** **The water supplier submits a noncommunity water system application, including raw source water quality data, on forms acceptable to the Department, and receives Department approval of the facilities prior to construction or operation. The water supplier shall also submit a noncommunity water system application to the Department for proposed modifications to the system or a change of ownership, and receive Department approval prior to construction or operation.**

(3) A noncommunity water system which satisfies the requirements of paragraphs (1) and (2) shall provide the Department with the following information describing new sources, including an evaluation of the quality of the raw water from each new source. Water quality analyses shall be conducted by a laboratory certified under this chapter. This paragraph does not apply when the new source is finished water obtained from an existing permitted community water system or an existing permitted or approved

noncommunity water system unless the Department provides written notice that one or more of the provisions of this paragraph apply.

* * * * *

(ii) For nontransient noncommunity water systems, the evaluation must include the information required under **[§ 109.503(a)(1)(iii)(B)]** **§ 109.503(a)(1)(iii)(D)**.

* * * * *

(*Editor's Note*: The following section is proposed to be added and printed in regular type to enhance readability.)

§ 109.511. General permits.

(a) The Department may issue a general permit, instead of issuing a construction and operation permit under this subchapter, for a specific category of modifications if all of the following conditions are met:

(1) The modifications in the category are the same or substantially similar in nature.

(2) The modifications in the category are not prejudicial to the public health and can be adequately regulated utilizing standardized specifications and conditions.

(3) The modifications in the category will comply with the design and construction standards under Subchapter F (relating to design and construction standards).

(b) The Department may suspend, revoke, modify, reissue or terminate coverage under a general permit issued under this chapter for noncompliance with a condition of the permit, or upon a finding of a condition prejudicial to the public health.

(c) Issuance of a general permit does not exempt a person from compliance with this chapter.

Subchapter F. DESIGN AND CONSTRUCTION STANDARDS

§ 109.602. Acceptable design.

(a) A public water system shall be designed to provide an adequate and reliable quantity and quality of water to the public. The design must ensure that the system will, upon completion, be capable of providing water that complies with the primary and secondary MCLs, MRDLs and treatment techniques established in Subchapters B, **K,** L and M **[(relating to MCLs, MRDLs or treatment technique requirements; long-term 2 enhanced surface water treatment rule; and additional requirements for groundwater sources)]** except as further provided in this section.

* * * * *

(e) Point-of-use devices which are treatment devices applied to a single tap are not an acceptable treatment method for complying with an MCL**, MRDL** or treatment technique requirement.

(f) A public water system that provides filtration of surface water or GUDI sources must be equipped with alarm capabilities that meet the requirements of subsection (i) by _____ (*Editor's Note:* The blank refers to ~~12 months~~1 YEAR after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.).

(g) A public water system that provides filtration of surface water or GUDI sources and that is not staffed continuously while the plant is operating must be equipped with alarm and shutdown capabilities that meet the requirements of subsection (i) by _____ (*Editor's Note:* The blank refers to ~~12 months~~1 YEAR after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.).

(h) In addition to public water systems covered under subsection (f) or (g), the Department may require a public water system to meet the requirements of subsection (i), according to a schedule set forth in a permit or order issued by the Department.

(i) Alarm and shutdown capabilities must conform to all of the following:

(1) Be set forth in the water system's operation and maintenance plan and set at a level no less stringent than the level needed for the facility to continuously maintain compliance with applicable MCLs, MRDLs and treatment technique requirements.

(2) Be established for the following parameters, at a minimum:

(i) Individual filter effluent turbidity and combined filter effluent turbidity for filter plants treating surface water or GUDI sources.

(ii) Entry point disinfectant residual.

(iii) Clearwell water levels.

~~(iv) Any other operational parameter determined by the Department as necessary for the system to maintain compliance.~~

Commented [DL2]: Public comments – too broad.

(3) Be capable of notifying the available operator on duty of events triggering an alarm or plant shutdown.

§ 109.606. Chemicals, materials and equipment.

(a) Chemicals **[or],** materials **or equipment** which may come in contact with the water or affect the quality of the water may not be used unless the chemicals **[or],** materials **or equipment** are acceptable to the Department.

(b) Chemicals used by a public water supplier which may come in contact with or affect the quality of the water and which are certified for conformance with ANSI/NSF Standard 60 (Drinking Water Treatment Chemicals—Health Effects—National Sanitation Foundation) or meet the food grade standards of the *United States Pharmacopeia* are deemed acceptable to the Department.

(c) Materials **or equipment** used in the construction or modification of a public water system**,** including waterline extensions**, mechanical devices and drinking water treatment equipment,** which may come

into contact with or affect the quality of the water and which are certified for conformance with ANSI/NSF Standard 61 (Drinking Water System Components—Health Effects—National Sanitation Foundation) are deemed acceptable to the Department.

(d) Drinking water treatment equipment used in the construction or modification of a public water system that may come into contact with or affects the quality of the water and that is certified for inactivation, reduction or removal performance in conformance with PDWEP is deemed acceptable to the Department.

[(d)] (e) Acceptable certification under subsection (b) **[or (c)], (c) or (d)** related to ANSI/NSF Standards 60 and 61 **or PDWEP** includes that performed by NSF International or other certification organization acceptable to the Department. To be acceptable to the Department, a certification organization shall be accredited by ANSI as a third party certification organization and meet the following requirements. The organization shall:

(1) Demonstrate it is independent of manufacturers using the certification organization's services.

(2) Require that a registered mark or seal be placed upon each product certified under ANSI/NSF Standard 60 or 61 **or PDWEP**, as applicable.

(3) Maintain an ongoing quality assurance and quality control program that includes, at a minimum, the following:

(i) Periodic announced and unannounced factory follow-ups and audits at sufficient frequency and in sufficient detail to assure the product evaluated is the same as the product being manufactured.

(ii) Maintenance of or accessibility to a laboratory certified by the Department meeting the minimum laboratory certification criteria for drinking water analysis.

(iii) Maintenance of staff toxicologists or accessibility to toxicologists to perform the toxicological review and evaluation portions of the product assessments.

(iv) Maintenance of procedures for notification and recall of the use of the registered mark or seal for previously certified products which do not meet the certification requirements of ANSI/NSF Standards 60 and 61 **or PDWEP**.

(v) For equipment that is claimed to remove or reduce a specific contaminant, the name of the organization that meets the accreditation standards of the American National Standards Institute and that has certified the device to verify its inactivation, reduction or removal performance for that contaminant, the name of the testing protocol or standard used to test the device, a statement from the testing laboratory giving the date of the test, a summary of the results and the date, if any, by which the device shall be retested for verification of the removal or reduction performance to remain effective.

(4) Require appropriate product reevaluation depending upon the results of the factory follow-ups and audits and changes in the standards themselves.

(5) Perform certification evaluations for any manufacturer or applicant.

(6) Evaluate and certify an appropriately broad range of products—additives, direct additives or indirect additives.

(7) Maintain and publish a listing of certified products and distribute the listing to State regulatory agencies and others, as appropriate, at least annually.

[(e)] **(f)** Facilities or equipment, including, but not limited to, pipes, pumping facilities and storage tanks, previously or currently used for the treatment, storage or transportation of wastewater, petroleum products or other nonfood products, except for facilities or equipment used to store or transport chemicals used in treating drinking water, may not be used for the treatment, transportation or storage of drinking water.

§ 109.612. POE devices.

* * * * *

(b) POE devices **and components** used by a public water supplier shall be tested and certified by the NSF or other certification organization acceptable to the Department against ANSI/NSF standards established for drinking water treatment devices. To be acceptable to the Department a certification organization other than NSF shall have a program at least as stringent as the NSF program and meet the requirements under **[§ 109.606(d)]** **§ 109.606(e)** (relating to chemicals, materials and equipment) as applicable to ANSI/NSF standards for drinking water treatment devices.

* * * * *

Subchapter G. SYSTEM MANAGEMENT RESPONSIBILITIES

§ 109.701. Reporting and recordkeeping.

(a) *Reporting requirements for public water systems.* Public water systems shall comply with the following requirements:

* * * * *

(2) *Monthly reporting requirements for performance monitoring.*

(i) The test results of performance monitoring required under § 109.301(1) (relating to general monitoring requirements) for public water suppliers providing filtration and disinfection of surface water or GUDI sources must include the following at a minimum:

(A) For **the combined filter effluent** turbidity performance monitoring:

* * * * *

(VII) Instead of subclauses (III) and (IV), beginning January 1, 2002, for public water systems that serve 10,000 or more people and use other filtration technologies:

(-a-) The number of filtered water turbidity measurements that are less than or equal to 0.3 NTU or a more stringent turbidity performance level requirement that is based upon onsite studies and is specified by the Department.

(-b-) The date, time and values of any filtered water turbidity measurements exceeding 1 NTU or a more stringent turbidity performance level requirement that is based upon onsite studies and is specified by the Department.

(VIII) ~~Instead of subclauses (III)—(VII), beginning~~ BEGINNING _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), the number of filtered water turbidity measurements that are ~~less than or equal to~~greater than ~~all of the following:~~

~~(-a-) 0.30 NTU for conventional or direct filtration technologies.~~

~~(-b-) 1.0 NTU for slow sand or diatomaceous earth filtration technologies.~~

~~(-c-)~~ 0.15 NTU for membrane filtration technologies.

~~(-d-) 0.30 NTU for other filtration technologies unless a more stringent turbidity performance level requirement is specified by the Department.~~

(IX) ~~Instead of subclauses (III)—(VII), beginning~~ BEGINNING _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), the date, time and values of any filtered water turbidity measurements exceeding ~~all of the following:~~

~~(-a-)~~ 1~~.0~~ NTU for ~~conventional, direct or~~ membrane filtration technologies.

~~(-b-) 2.0 NTU for slow sand or diatomaceous earth filtration technologies.~~

~~(-c-) 1.0 NTU for other filtration technologies unless a more stringent turbidity performance level requirement is specified by the Department.~~

(B) For performance monitoring of the residual disinfectant concentration of the water being supplied to the distribution system:

* * * * *

(ii) The test results of performance monitoring required under § 109.301(2) for public water suppliers using unfiltered surface water or GUDI sources **[shall] must** include the following, at a minimum:

(A) For turbidity performance monitoring:

(I) The date, time and value of each sample that exceeds 1.0 NTU.

(II) The date, time and highest turbidity value, if the turbidity does not exceed 1.0 NTU in a sample.

(III) Instead of subclauses (I) and (II), beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.):

(-a-) The number of source water turbidity measurements taken each month.

(-b-) For measurements in which the source water turbidity is greater than 1.0 NTU, the date, time and value for each occurrence that the turbidity exceeds 1.0 NTU and the subsequent date, time and value that the turbidity is less than or equal to 1.0 NTU.

(-c-) The date, time and highest turbidity value for each day the source water turbidity remains less than or equal to 1.0 NTU.

(B) For performance monitoring of the residual disinfectant concentration of the water being supplied to the distribution system:

* * * * *

(3) *One-hour reporting requirements*. A public water supplier shall report the circumstances to the Department within 1 hour of discovery for the following violations or situations:

(i) A primary MCL or an MRDL has been exceeded or a treatment technique requirement has been violated under Subchapter B, K, L or M.

(ii) A sample result requires the collection of check samples under § 109.301.

(iii) Circumstances exist which may adversely affect the quality or quantity of drinking water including, but not limited to:

(A) The occurrence of a waterborne disease outbreak.

(B) A failure **[or],** significant interruption **or breakdown** in key water treatment processes.

(C) A **[natural]** disaster that disrupts the water supply or distribution system.

* * * * *

(9) *Level 1 and Level 2 assessments.* A public water supplier shall:

(i) Submit an assessment form completed in accordance with § 109.705(b) (relating to system evaluations and assessments) to the Department within 30 days after the system learns that it has exceeded a trigger under § 109.202(c)(4).

(ii) Submit a revised assessment form in accordance with § 109.705(b) within 30 days of notification from the Department that revisions are necessary.

(10) *Reporting requirements for disinfection byproducts.* In addition to the reporting requirements specified in paragraph (1), public water systems monitoring for disinfection byproducts under § 109.301(12) shall report the individual constituents for total trihalomethanes and haloacetic acids.

[(10)] **(11)** *Noncompliance report.* Except where a different reporting period is specified in this chapter, the water supplier shall report to the Department within 48 hours the failure to comply with any National Primary Drinking Water Regulation, including the failure to comply with any monitoring requirement set forth in this chapter.

* * * * *

(e) *Reporting requirements for public water systems required to perform individual filter monitoring under § 109.301*(*1*)(*iv*).

(1) Public water systems required to perform individual filter monitoring shall report that they have conducted individual filter monitoring within 10 days following the end of each month that the system serves water to the public.

(2) Public water systems required to perform individual monitoring **under § 109.301(1)(iii)** shall report individual filter turbidity results if individual filter turbidity measurements demonstrate that one or more of the following conditions exist:

(i) An individual filter has a measured turbidity level greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart.

(ii) An individual filter has a measured turbidity level of greater than 0.5 NTU in two consecutive measurements taken 15 minutes apart at the end of the first 4 hours of continuous filter operation after the filter has been backwashed or otherwise taken offline.

(iii) An individual filter has a measured turbidity level greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of 3-consecutive months.

(iv) An individual filter has a measured turbidity level greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of 2-consecutive months.

~~**(v) Instead of subparagraph (i), beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of adoption of this proposed rulemaking.), an individual filter has a measured turbidity level greater than 0.30 NTU for conventional, direct or other filtration technologies, 0.15 NTU for membrane filtration technologies or 1.0 NTU for slow sand or diatomaceous earth filtration technologies in two consecutive measurements taken 15 minutes apart.**~~

~~**(vi) Instead of subparagraph (ii), beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of adoption of this proposed rulemaking.), an individual filter has a measured turbidity level of greater than 0.30 NTU for conventional, direct or other filtration technologies, 0.15 NTU for membrane filtration technologies or 1.0 NTU for slow sand or diatomaceous earth filtration technologies in two consecutive measurements taken 15 minutes apart at the end of the first 4 hours of continuous filter operation after the filter has been backwashed or otherwise taken offline.**~~

~~**(vii) Instead of subparagraph (iii), beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of adoption of this proposed rulemaking.), an individual filter has a measured turbidity level greater than 0.30 NTU for conventional, direct or other filtration**~~

~~technologies, 0.15 NTU for membrane filtration technologies or 1.0 NTU for slow sand or diatomaceous earth filtration technologies in two consecutive measurements taken 15 minutes apart at any time in each of 3 consecutive months.~~

~~(viii) Instead of subparagraph (iv), beginning _____ (*Editor's Note:* The blank refers to 1 year after the effective date of adoption of this proposed rulemaking.), an individual filter has a measured turbidity level greater than 1.0 NTU for conventional, direct, membrane or other filtration technologies, or 2.0 NTU for slow sand or diatomaceous earth filtration technologies in two consecutive measurements taken 15 minutes apart at any time in each of 2 consecutive months.~~

(3) Individual filter turbidity monitoring reported as required under paragraph (2) **[shall]** **must** include the following at a minimum:

* * * * *

(M) *ADDITIONAL REPORTING REQUIREMENTS FOR SYSTEMS UTILIZING RESERVE SOURCES OR ENTRY POINTS OR BOTH.*

(1) SYSTEMS MUST PROVIDE A REPORT EACH QUARTER CERTIFYING THE NUMBER OF DAYS THAT A RESERVE FACILITY WAS USED DURING THE PREVIOUS QUARTER AND ESTIMATING THE EXPECTED TIMEFRAME THE RESERVE FACILITY WILL REMAIN IN OPERATION.

(2) SYSTEMS MUST PROVIDE NOTIFICATION TO THE DEPARTMENT WITHIN TEN DAYS AFTER A RESERVE FACILITY IS NO LONGER IN USE.

§ 109.702. Operation and maintenance plan.

(a) A community water supplier shall develop an operation and maintenance plan for the community water system. The operation and maintenance plan must generally conform to the guidelines contained in the Department's *Public Water Supply Manual* and **must** contain at least the following information:

* * * * *

(13) An interconnect, valve **[and blowoff], blowoff, alarm and shutdown, and auxiliary power equipment** exercise and testing program.

* * * * *

§ 109.703. Facilities operation.

(a) Public water system facilities approved by written permit from the Department shall be operated in a manner consistent with the terms and conditions of the permit to achieve the level of treatment for which the facilities were designed.

(b) For surface water or GUDI sources, a public water supplier using filtration shall comply with the following requirements:

(1) **[By July 1, 1990, suppliers using conventional or direct filtration shall, after filter backwash, and before putting the backwashed filter back on line, filter-to-waste until the filter bed effluent turbidity is less than 0.5 NTU at the normal production flow rate.]** **Water suppliers using conventional or direct filtration shall, prior to returning a filter to service, filter-to-waste for one full filter volume and until the filter bed effluent turbidity is less than 0.3~~0~~ NTU at the normal production flow rate. Water suppliers may implement filter-to-waste for a period of time less than one full filter bed volume if an alternate operating technique is properly utilized to minimize the postbackwash turbidity spike to less than 0.15 NTU. Alternate techniques may include extended terminal subfluidization backwash, permitted addition of coagulant during the backwash or a post-backwash offline filter resting period. Water suppliers implementing alternate techniques shall keep records to document consistent and proper utilization of the technique.**

(2) **[Beginning May 16, 1992, a]** **A water** supplier using slow sand filtration shall, following sanding, scraping or resanding of slow sand filters, filter-to-waste until one of the following occurs:

(i) The filter bed effluent turbidity is less than 1.0 NTU at the normal production flow rate.

(ii) A reduction in turbidity is achieved when the source water turbidity is less than 1.0 NTU.

(3) **[Beginning May 16, 1992, a]** **A water** supplier using diatomaceous earth filtration shall, following backwashing and recoating of diatomaceous earth filters, filter-to-waste until one of the following occurs:

(i) The filter bed effluent turbidity is less than 1.0 NTU at the normal production flow rate.

(ii) A reduction in turbidity is achieved when the source water turbidity is less than 1.0 NTU.

(4) For a conventional or direct filtration facility permitted prior to March 25, 1989, without filter-to-waste capability, the Department, upon the supplier's request, may allow the supplier to utilize other operating techniques which minimize the initial increased turbidity peak when a filter is initially placed back into service after backwashing. The technique, which may include filter settling periods, ramping open the effluent valve or use of a coagulant in the backwash water, shall be justified by a filter performance study approved by the Department.

(5) **[Except for public water systems covered under § 109.301(1)(iv) (relating to general monitoring requirements), a system with conventional or direct filtration facilities permitted prior to March 25, 1989, without individual filter bed turbidity monitoring capabilities shall conduct an annual filter bed evaluation program, acceptable to the Department, which includes an evaluation of filter media, valves, surface sweep and sampling of filter turbidities over one entire filter run; and shall submit to the Department, with the Annual Water Supply Report, a study that demonstrates that the water supplier's filter-to-waste or alternate approved operating procedures are meeting the operating conditions under paragraph (1) or (4).]** **A system with filtration facilities shall implement a filter bed evaluation program, acceptable to the Department, which includes an evaluation of filter media, filter bed expansion, valves, surface sweep and sampling of filter turbidities over one entire filter run. The results of the evaluation shall be maintained on file and submitted to the Department upon request.**

(c) A public water supplier required to install alarm or shutdown capabilities, or both, under § 109.602 (relating to acceptable design) shall comply with the following:

(1) Test the alarm and shutdown capabilities at least quarterly and document the results in the plant's operational log. To avoid unnecessary disruptions in treatment, simulated testing of shutdown capabilities is acceptable.

(2) For any failures of alarm or shutdown equipment:

(i) Ensure the plant is adequately staffed until the equipment is operational.

(ii) Notify the Department as soon as possible of any failure that cannot be corrected within 24 hours.

(iii) Restore the equipment to operation within 5 working days of the failure unless a longer period of time is approved by the Department.

§ 109.704. Operator certification.

(a) Community and nontransient noncommunity water systems shall have personnel certified under the Water and Wastewater Systems Operators' Certification Act (63 P.S. §§ 1001—1015.1) **and the regulations promulgated thereunder** to operate and maintain a public water system.

(b) Transient noncommunity water systems shall have competent personnel qualified to operate and maintain the system's facilities.

§ 109.705. System evaluations and assessments.

(a) A community water supplier shall conduct an evaluation of the water system at least annually. The evaluation shall include the following activities:

(1) **[Watershed surveillance consisting of an]** **An** inspection of portions of the **[drainage area or wellhead]** **source water** protection area necessary to identify and evaluate actual and **[probable]** **potential** sources of contamination.

(i) An inspection of a **[wellhead]** **source water** protection area shall include a review of available information pertaining to possible sources of contamination such as underground storage tanks, onlot disposal systems and other activities that may have an adverse impact on water quality or quantity.

(ii) Specific hydrogeological studies of sources of contamination are not necessary unless required under § 109.4, § 109.602 or § 109.603 (relating to general requirements; acceptable design; and source quality and quantity) or other rules of the Department.

(iii) Revisions to the source water assessment if the inspection identified changes to actual or potential sources of contamination.

(2) Evaluation of **[source protection,]** intake structures and transmission facilities.

(3) Treatment facilities inspection consisting of an evaluation of the effectiveness of the operation and maintenance procedures and the condition and operability of permitted facilities.

(4) Evaluation of finished water storage facilities and the distribution system.

(5) Pressure surveys consisting of a measurement of pressures at representative points in the distribution system, which shall include new water line extensions. Surveys shall be made during periods of maximum and minimum usage. Records of these surveys shall show the date and time of the beginning and end of the test and the location at which the test was made.

(6) The results of the annual system evaluation must be documented and made available to the Department upon request.

(b) A public water system shall conduct Level 1 and 2 assessments required under § 109.202(c)(4) (relating to State MCLs, MRDLs and treatment technique requirements). The public water system shall also comply with any expedited actions or additional actions required by the Department in the case of an *E. coli* MCL violation.

* * * * *

(9) At any time during the assessment or corrective action phase, either the public water system or the Department may request a consultation with the other party to determine the appropriate actions to be taken. The public water system may consult with the Department on all relevant information that may impact its ability to comply with a requirement of this subsection.

[(c) The following apply to significant deficiencies identified at public water systems supplied by a surface water source and public water systems supplied by a groundwater source under the direct influence of surface water:

(1) For sanitary surveys performed by the Department, a system shall respond in writing to significant deficiencies identified in sanitary survey reports no later than 45 days after receipt of the report, indicating how and on what schedule the system will address significant deficiencies noted in the survey.

(2) A system shall correct significant deficiencies identified in sanitary survey reports according to the schedule approved by the Department, or if there is no approved schedule, according to the schedule reported under paragraph (1) if the deficiencies are within the control of the system.

(d) Significant deficiencies identified by the Department at public water systems using groundwater shall comply with § 109.1302(c) (relating to treatment technique requirements).]

§ 109.706. System **[distribution]** map.

(a) **[The community]** **A public** water supplier shall prepare and maintain on file a detailed map of the water **[system's transmission and distribution facilities]** **system**. **A copy of the map shall be submitted to the Department upon request.**

(b) **[A noncommunity water supplier shall submit a detailed map of the water system's transmission and distribution facilities at the request of the Department.]** **At a minimum the map must include all of the following:**

(1) Source and treatment plant locations.

(2) Size and location of storage facilities.

(3) Pump station locations.

(4) Size, location and construction material of pipes.

(5) Pressure zones.

(6) Interconnections with other public water systems.

(7) Monitoring locations.

(c) **[The map shall include information sufficient to allow the Department to analyze the distribution system and determine quantity, pressure and direction of flow from the sources to the customers, and shall include the type and size of pipes within the distribution system. The map shall be updated at least annually.]** **The map shall be reviewed by the water supplier at least annually and updated as necessary. Water suppliers may meet this requirement by maintaining a calibrated hydraulic model instead of paper maps.**

§ 109.708. **[Planned service interruptions]** **System service and auxiliary power**.

(a) ***System service.*** **No later than the dates specified in paragraphs (1)—(3), a community water supplier shall ensure operation of the sources, treatment and pumping facilities necessary to ensure that safe and potable water is continuously supplied to users in accordance with subsection (b) or (c), or both. A continuous supply of safe and potable water is one that meets all applicable MCLs, MRDLs and treatment techniques specified in § 109.202 (relating to State MCLs, MRDLs and treatment technique requirements) and is sufficent to maintain system pressure specified in § 109.607 (relating to pressures) throughout the distribution system.**

(1) By _____ (*Editor's Note:* The blank refers to 12 months after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), for systems serving 3,300 or fewer persons.

(2) By _____ (*Editor's Note:* The blank refers to 24 months after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), for systems serving 3,301—10,000 persons.

(3) By _____ (*Editor's Note:* The blank refers to 36 months after the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), for systems serving greater than 10,000 persons.

(b) ***Auxiliary power.*** **System service must be provided through one or more of the following methods:**

(1) Connection to at least two independent power feeds from separate substations.

(i) The power feeds may not be located in the same conduit or supported from the same utility pole.

(ii) If overhead power feeds are used, the power feeds may not cross or be located in an area where a single plausible occurrence (for example, a fallen tree) could disrupt both power feeds.

(2) Onsite auxiliary power sources (that is, generators or engines).

(c) *Alternate provisions*. The Department may approve alternate provisions, such as finished water storage capacity or interconnections with another public water system, to meet the requirements of subsection (a).

(d) *Planned service interruptions.* The public water supplier shall give reasonable notice to the affected customers prior to a planned service interruption affecting quantity or quality of the water delivered to the customer. If the interruption is scheduled to exceed 8 hours and affect 15 or more service connections the water supplier shall also notify the Department.

§ 109.713. **[Wellhead] Source water** protection program.

(a) For water suppliers seeking to obtain Department approval for a **[wellhead] source water** protection program, the **[wellhead] source water** protection program shall**, at a minimum,** consist of **all of** the following **elements**:

(1) A steering committee composed of the necessary representatives, including, but not limited to, the water supplier, local government officials from the affected jurisdictions and potentially affected industry, to designate responsibilities for the planning and implementation of **[wellhead] source water** protection activities.

(2) Public participation and education activities to promote awareness and encourage local support of **[wellhead] source water** protection activities.

(3) **[Zone II and Zone III wellhead protection area delineation performed in accordance with methodology provided by the Department. Methods applicable to that hydrogeologic setting shall be utilized and site-specific hydraulic and hydrogeologic information shall include, but is not limited to, pumping rate or yield, aquifer properties, water table or potentiometric surface configuration and hydrogeologic mapping.] A map depicting the source water protection areas that were delineated in accordance with the methodology provided by the Department.**

(4) **[Identification of existing and potential sources of contamination within each wellhead protection area.] A source water assessment for each source. If a source water assessment has not been previously conducted, identification of the source's susceptibility to potential and existing sources of contamination within each source's contributing area conducted in accordance with the methodology provided by the Department.**

(5) Development and implementation of **[wellhead] source water** protection area management approaches to protect the water supply source from activities that may contaminate the source. These approaches may include, but are not limited to, one or more of the following actions:

(i) Purchase of the **[wellhead] source water** protection area by the water system.

(ii) Adoption of municipal ordinances or regulations controlling, limiting or prohibiting future potential sources of contamination within the **[wellhead] source water** protection area.

(iii) Adoption of municipal ordinances or regulations establishing design and performance standards for potential sources of contamination within the **[wellhead] source water** protection area.

(iv) Transfer of development rights within the **[wellhead] source water** protection area to land outside of the **[wellhead] source water** protection area.

(v) **[A] For groundwater sources, a** groundwater monitoring network that serves as an early warning system.

(vi) Public education programs.

(vii) Other methods approved by the Department which will ensure an adequate degree of protection for the source.

(6) Contingency planning for the provision of alternate water supplies in the event of contamination of a **[well, spring or infiltration gallery] source** and emergency responses to incidents that may impact water supply source quality.

(7) **[New water supply source siting provisions to ensure the protection of new wells, springs or infiltration galleries.] Provisions to ensure the protection of sites identified for development as new water sources.**

(b) Water suppliers with an approved source water protection program shall review and update the program on an annual basis to ensure it is accurate and reflects current activities, and shall complete and submit the current version of the Department-provided annual update form.

(*Editor's Note*: Sections 109.716 and 109.717 are proposed to be added and printed in regular type to enhance readability.)

§ 109.716. Significant deficiencies.

The following apply to significant deficiencies identified by the Department:

(1) Within 30 days of receiving written notification, the public water supplier shall consult with the Department regarding appropriate corrective actions unless the Department directs the system to implement a specific corrective action.

(2) The public water supplier shall respond in writing to significant deficiencies no later than 45 days after receipt of written notification from the Department, indicating how and on what schedule the system will address significant deficiencies.

(3) Corrective actions shall be completed in accordance with applicable Department plan review processes or other Department guidance or direction, if any, including Department-specified interim measures.

(4) The public water supplier shall correct significant deficiencies identified within 120 days of receiving written notification from the Department, or earlier if directed by the Department, or according to the schedule approved by the Department.

(5) If the Department specifies interim measures for protection of the public health pending Department approval of the corrective action plan and schedule or pending completion of the corrective action plan, the public water supplier shall comply with these interim measures as well as with any schedule specified by the Department.

(6) The public water supplier shall request and obtain approval, in writing, from the Department for any subsequent modifications to a Department-approved corrective action plan and schedule.

§ 109.717. Comprehensive monitoring plan.

(a) BY _____ (*EDITOR'S NOTE:* THE BLANK REFERS TO 1 YEAR AFTER THE EFFECTIVE DATE OF THIS FINAL-FORM RULEMAKING.), ~~A~~ A community or nontransient noncommunity water supplier shall develop a comprehensive monitoring plan to assure that all sources, PURCHASED INTERCONNECTIONS, and entry points are included in ~~routine~~ compliance monitoring at the entry points and within the distribution system. The plan must contain at least all of the following:

(1) A list of all sources, PURCHASED INTERCONNECTIONS, ~~and~~ associated treatment plants and entry points PERMITTED UNDER THIS CHAPTER. ~~This list must also include purchased interconnections.~~THE AVAILABILITY OF EACH SOURCE, TREATMENT PLANT, AND ENTRY POINT SHALL BE DESIGNATED AS EITHER PERMANENT OR RESERVE. THE AVAILABILITY OF EACH PURCHASED INTERCONNECTION SHALL BE DESIGNATED AS EITHER PERMANENT OR EMERGENCY. PERMANENT, RESERVE AND EMERGENCY AVAILABILITY CATEGORIES ARE AS FOLLOWS:

(i) PERMANENT—A SOURCE, TREATMENT PLANT, ENTRY POINT OR PURCHASED INTERCONNECTION PERMITTED UNDER THIS CHAPTER THAT IS USED ON A REGULAR BASIS. PERMANENT FACILITIES SHALL BE INCLUDED IN ROUTINE COMPLIANCE MONITORING. PERMANENT ENTRY POINTS RECEIVING WATER FROM A RESERVE SOURCE SHALL BE MONITORED IN ACCORDANCE WITH § 109.301(15).

(ii) RESERVE—A SOURCE, TREATMENT PLANT OR ENTRY POINT PERMITTED UNDER THIS CHAPTER WHICH IS NOT USED ON A REGULAR BASIS, BUT REMAINS ON STANDBY TO AUGMENT OR SUPPLEMENT PERMANENT FACILITIES. RESERVE FACILITIES MAY NOT BE USED WITHOUT PRIOR WRITTEN APPROVAL FROM THE DEPARTMENT. DEPARTMENT APPROVAL WILL BE CONTINGENT ON THE FOLLOWING, AT A MINIMUM:

(I) COMPLETION OF SOURCE WATER MONITORING IN ACCORDANCE WITH § 109.503(a)(1)(iii)(D)(I)-(XI), (XIII) AND (XV) (RELATING TO PUBLIC WATER SYSTEM CONSTRUCTION PERMITS) PRIOR TO USE. THE DEPARTMENT WILL CONSIDER PREVIOUS SOURCE WATER MONITORING RESULTS FOR SAMPLES THAT WERE COLLECTED WITHIN THE MOST RECENT 3 YEARS. COMPLIANCE MONITORING IN

ACCORDANCE WITH § 109.301(15) FOR RESERVE ENTRY POINTS SHALL CONTINUE SO LONG AS THE RESERVE FACILITY IS IN USE.

(II) DOCUMENTATION THAT SOURCE WATER MONITORING SPECIFIED IN § 109.503(a)(1)(iii)(D)(XII) AND (XIV) HAS BEEN COMPLETED.

(III) A DETERMINATION AND CERTIFICATION BY THE WATER SUPPLIER, AFTER REVIEWING MONITORING DATA OBTAINED IN ACCORDANCE WITH CLAUSE (A) THAT USE OF THE RESERVE FACILITY WILL NOT ADVERSELY IMPACT TREATMENT EFFICACY AND THAT AN ADEQUATE TREATMENT STRATEGY IS IN PLACE SUCH THAT THE FINISHED WATER WILL COMPLY WITH ALL APPLICABLE DRINKING WATER STANDARDS.

(iii) EMERGENCY—A PURCHASED INTERCONNECTION PERMITTED UNDER THIS CHAPTER WHICH IS USED DURING TEMPORARY EMERGENCY SITUATIONS.

(2) A schematic of all sources and associated treatment plants and entry points, purchased interconnections and the relative locations of the points of entry into the distribution system.

(3) For each entry point, a description of ~~system operations~~NORMAL OPERATING CONDITIONS, including whether the entry point provides water continuously, whether each source CONTRIBUTING TO THE ENTRY POINT provides water continuously, AND whether sources are alternated or blended ~~and on what cycle or blending ratio, and whether the blending ratio is consistent~~. FOR ALTERNATED SOURCES, INCLUDE THE OPERATION SCHEDULE FOR EACH SOURCE. FOR BLENDED SOURCES, INCLUDE A DESCRIPTION OF THE RANGE OF BLENDING RATIOS.

(4) A description of how all PERMANENT sources and entry points are included in routine compliance monitoring.

(b) The plan must include the sample siting plans and monitoring plans required under other sections of this chapter, including the total coliform sample siting plan required under § 109.701(a)(5) (relating to reporting and recordkeeping), the monitoring plan for disinfectants, DBPs and DBP precursors required under § 109.701(g), the lead and copper sample site location plan required under § 109.1107(a)(1) (relating to system management responsibilities) and the source water sampling plan required under § 109.1202(h) (relating to monitoring requirements).

(c) The water supplier shall review and update the plan at least annually and as necessary to reflect changes to facilities or operations. The date of each update must be recorded on the plan.

(d) BY _____ (*EDITOR'S NOTE:* THE BLANK REFERS TO 1 YEAR AND 1 MONTH AFTER THE EFFECTIVE DATE OF THIS FINAL-FORM RULEMAKING.), ~~The~~ THE water supplier shall submit the initial plan TO THE DEPARTMENT. The water supplier shall review the plan annually and submit an updated plan to the Department, if revisions are made. These plans are subject to Department review and revision.

Subchapter H. LABORATORY CERTIFICATION

§ 109.810. Reporting and notification requirements.

* * * * *

(b) A laboratory accredited under Chapter 252 shall whenever the results of test measurements or analyses performed by the laboratory under this chapter indicate an MCL, MRDL or a treatment technique performance requirement under § 109.202 (relating to State MCLs, MRDLs and treatment technique requirements) is exceeded, or **[an action level under]** **any individual tap sample result exceeds the action level value specified in** § 109.1102(a) (relating to action levels and treatment technique requirements) **[is exceeded]**, or a sample result requires the collection of check or confirmation samples under § 109.301 (relating to general monitoring requirements), or any check sample collected under § 109.301(3) is total coliform-positive, or a sample collected by a seasonal system as part of a Department-approved start-up procedure under § 109.301(3)(i)(c) is total coliform-positive, or a sample collected under Subchapter M (relating to additional requirements for groundwater sources) is *E. coli*-positive:

* * * * *

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

§ 109.1003. Monitoring requirements.

* * * * *

(b) *Sampling requirements.*

* * * * *

(3) **[Public water suppliers shall assure that samples for laboratory analysis are properly collected and preserved, are collected in proper containers, do not exceed maximum holding times between collection and analysis and are handled in accordance with guidelines governing quality control which may be established by the Department. A public water supplier who utilizes a certified laboratory for sample collection as well as analysis satisfies the requirements of this subsection.]** **Sampling and analysis shall be performed in accordance with analytical techniques adopted by the EPA under the Federal act or methods approved by the Department.**

* * * * *

§ 109.1005. Permit requirements.

* * * * *

(c) *Special permit by rule requirement for bottled water systems.* A person owning or operating a bottled water system in this Commonwealth permitted under this chapter shall obtain an amended permit before making substantial modifications to the processing and bottling facilities unless the bottled water system satisfies the conditions in paragraphs (1)—(5). The permit-by-rule does not apply to the collection

facilities. The Department retains the right to require a bottled water system that meets the requirements of paragraphs (1)—(5) to obtain a permit, if, in the judgment of the Department, the bottled water system cannot be adequately regulated through the standardized specifications and conditions. A bottled water system which is released from the obligation to obtain a permit shall comply with the other requirements of this subchapter, including design, construction and operation requirements. The following are the conditions for a permit-by-rule:

* * * * *

(5) A bottled water system operating under this subsection shall file descriptions of substantial modifications made to the system to the Department within 30 days of operation of the modification. The description **[shall]** **must** include documentation that the modification meets the following requirements as applicable:

(i) Compliance with the product water-contact materials and treatment chemical additives toxicological requirements of § 109.606 (relating to chemicals, materials and equipment) or alternatively, the Food and Drug Administration standards in 21 CFR Part 129.

(ii) Validated treatment technologies for the reduction of contaminants. Validated treatment technologies are those that have been permitted by the Department under this chapter at the bottled water system operating under the permit by rule or certified to an applicable ANSI/NSF standard by NSF or other certification organization acceptable to the Department or verified under the EPA Environmental Technology Verification Program. To be acceptable to the Department, a certification organization other than NSF shall be accredited by ANSI as a third-party certification organization and meet the requirements under **[§ 109.606(d)]** **§ 109.606(e)** as applicable to the appropriate ANSI/NSF standard for the treatment technology.

* * * * *

(e) *Permit applications.* An application for a public water system permit for a bottled water or vended water system, retail water facility or bulk water hauling system shall be submitted in writing on forms provided by the Department and shall be accompanied by plans, specifications, engineer's report, water quality analyses and other data, information or documentation reasonably necessary to enable the Department to determine compliance with the act and this chapter. The Department will make available to the applicant the *Public Water Supply Manual*, available from the Bureau of **[Water Standards and Facility Regulation]** **Safe Drinking Water**, Post Office Box 8467, Harrisburg, Pennsylvania 17105-8467 which contains acceptable design standards and technical guidance. Water quality analyses shall be conducted by a laboratory certified under this chapter. An application for a public water system permit for a bottled water or vended water system, retail water facility or bulk water hauling system **[shall]** **must** include:

* * * * *

(i) *Permit fees.* **An application for a permit from the Department under this subchapter must be accompanied by a fee in the amount specified in Subchapter N (relating to drinking water fees).**

[(1) An application for a new permit or major permit amendment under subsection (f)(1) for a bottled water or vended water system, retail water facility or bulk water hauling system shall be

accompanied by a check in the amount of $750 payable to the "Commonwealth of Pennsylvania," except that:

(i) An application from an out-of-State bottled water system submitting proof of out-of-State approval under subsection (e)(6) shall be accompanied by a fee of $100.

(ii) An application from a bottled water system, retail water facility or bulk water hauling system purchasing finished water, as its sole source of water, from a public water system operating under a permit issued under this chapter, and a vended water system permitted by rule, shall submit a fee of $300.

(2) A fee is not required for an emergency permit under subsection (g) or a minor permit amendment under subsection (f)(2).]

Subchapter K. LEAD AND COPPER

§ 109.1105. Permit requirements.

(a) *General permit requirements.* A person may not construct, substantially modify or operate corrosion control treatment facilities to comply with this subchapter without having obtained the appropriate permit approvals under Subchapter E (relating to permit requirements) and this section.

(b) *Construction permits and permit amendments.* The water supplier shall submit an application for a public water system construction permit for a newly-created system or an amended construction permit for a currently-permitted system for corrosion control treatment facilities by the applicable deadline established in § 109.1102(b)(2) (relating to action levels and treatment technique requirements), unless the system complies with paragraph (1) or (2) or otherwise qualifies for a minor permit amendment under § 109.503(b) (relating to public water system construction permits). The permit application must comply with § 109.503 and contain the applicable information specified therein. The application must include recommended water quality parameter performance requirements for optimal corrosion control treatment as specified in § 109.1102(b)(5) and other data, information or documentation necessary to enable the Department to consider the application for a permit for construction of the facilities.

(1) *Community water system minor permit amendments.* **[The] Until _____ (*Editor's Note:* The blank refers to the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), a** community water supplier may submit a written request for an amended construction permit to the Department if the system satisfies the conditions under subparagraphs (i)—(iv). A request for an amended construction permit under this paragraph **[shall] must** describe the proposed change in sufficient detail to allow the Department to adequately evaluate the proposal.

(i) The system is a small water system.

(ii) The sources of supply for the system are not surface water sources.

(iii) Except for corrosion control treatment, the sources require treatment no greater than disinfection to provide water of a quality that meets the MCLs and treatment technique requirements established under Subchapter B (relating to MCLs, MRDLs or treatment technique requirements).

(iv) The proposed corrosion control treatment is limited to alkalinity or pH adjustment, or both.

(2) *Nontransient noncommunity water system permits.* **[The] Until _____ (*Editor's Note:* The blank refers to the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), a** nontransient noncommunity water supplier is not required to obtain a construction permit or permit amendment under subsection (b) if the system satisfies the following specifications and conditions:

(i) The system is a small water system.

(ii) The sources of supply for the system are not surface water sources.

(iii) Except for corrosion control treatment, the sources require treatment no greater than disinfection to provide water of a quality that meets the MCLs and treatment technique requirements established under Subchapter B.

(iv) The proposed corrosion control treatment is limited to alkalinity or pH adjustment, or both.

(v) The water supplier files a brief description of the proposed treatment, including recommended water quality parameter performance requirements for optimal corrosion control treatment as specified in § 109.1102(b)(5), on forms acceptable to the Department. Descriptions of modifications shall be submitted and approved by the Department prior to construction.

(3) Beginning _____ (*Editor's Note:* The blank refers to the effective date of ~~adoption of~~ this ~~proposed~~ FINAL-FORM rulemaking.), community water systems and nontransient noncommunity water systems required to install optimal corrosion control treatment in accordance with § 109.1102(b) shall obtain a construction and operations permit.

(c) *Operation permits.* Except for nontransient noncommunity water systems complying with subsection (b)(2), the water supplier shall obtain an operation permit or amended operation permit following completion of construction and prior to initiation of operation of corrosion control treatment facilities. The permit will be issued in accordance with § 109.504 (relating to public water system operation permits). The Department will not issue an operation permit under this subchapter unless the water system complies with the operation and maintenance plan requirements under § 109.1107(b) (relating to system management responsibilities) and the operator certification requirements under § 109.1107(c). The water supplier for a community water system or nontransient noncommunity water system shall submit a request for Department designation of optimal corrosion control treatment performance requirements in accordance with § 109.1102(b)(2) and the Department will issue an amended operation permit designating the performance requirements as specified in § 109.1102(b)(5).

§ 109.1107. System management responsibilities.

(a) *Reporting and recordkeeping.* Systems shall comply with the following requirements and otherwise comply with § 109.701 (relating to reporting and recordkeeping):

* * * * *

(2) *Reporting of monitoring results.* The water supplier shall assure that the results of analyses conducted in accordance with § 109.1103 are reported to the Department within the first 10 days following the end of each applicable monitoring period as stipulated by § 109.1103. Additional

monitoring results beyond that required under § 109.1103 shall be kept on record by the water supplier and presented or submitted to the Department upon request.

(i) *Lead and copper tap monitoring results.* The following minimum information is required when reporting lead and copper tap monitoring results to the Department.

(A) The name, address and public water system identification number (PWSID) of the public water system from which the samples are taken.

(B) The contaminant ID.

(C) The parameter name.

(D) The sample period.

(E) The sample type.

[(F) The number of samples required and the number of samples taken.

(G)] (F) The analytical methods used.

[(H)] (G) The results of analyses conducted in accordance with this subchapter for lead and copper tap monitoring.

[(I)] (H) The sample location.

[(J) The 90th percentile result.

(K) Whether an action level has been exceeded.

(L)] (I) The name, address and identification number of the certified laboratory performing the analysis.

* * * * *

§ 109.1108. Fees.

[A system receiving permitting and related services from the Department under § 109.1105 (relating to permit requirements) for corrosion control treatment facilities shall pay the applicable fees in this section by a check in the amount specified in this section to the "Commonwealth of Pennsylvania."

(1) An application for a construction permit or major permit amendment under § 109.1105(b) shall be accompanied by payment for the applicable fee as follows:

System size	***Fee***
Small	**$250**
Medium	**$500**
Large	**$1,750**

(2) A system not required to submit an application for a construction permit or major permit amendment under § 109.1105(b) shall submit payment for the applicable fee with its request for Department designation of optimal corrosion control treatment performance requirements in accordance with § 109.1102(b)(2) (relating to action levels and treatment technique requirements):

System size	*Fee*
Small	**$125**
Medium	**$375**
Large	**$1,250]**

An application for the review of a corrosion control treatment feasibility study under § 109.1102(b)(3) (relating to action levels and treatment technique requirements), a permit from the Department under this subchapter or a Department designation of optimal corrosion control treatment performance requirements in accordance with § 109.1102(b)(2)(ii) must be accompanied by a fee in the amount specified in Subchapter N (relating to drinking water fees).

Subchapter L. LONG-TERM 2 ENHANCED SURFACE WATER TREATMENT RULE

§ 109.1202. Monitoring requirements.

* * * * *

(i) *Source water sample collection period.* Systems shall collect samples within 2 days before or 2 days after the dates indicated in their sampling schedule (that is, within a 5 day period around the schedule date) unless one of the conditions of **PARAGRAPHS ~~subsection (b)~~** (1) or (2) applies.

Commented [HD3]: This is an existing and incorrect cross-reference that was only recently noticed. Subsection (b) does not have a paragraph 1 or 2 and the intent of the exception is if the conditions if (i)(1) or (i)(2) apply.

(1) *Extreme sample collection conditions.* If an extreme condition or situation exists that may pose danger to the sample collector, or that cannot be avoided and causes the system to be unable to sample in the scheduled 5-day period, the system shall sample as close to the scheduled date as is feasible unless the Department approves an alternative sampling date. The system shall submit an explanation for the delayed sampling date to the Department concurrent with the shipment of the sample to the laboratory.

* * * * *

(l) **[*Chemical treatment prior to sampling location.*]** ***Source water sample locations for plants with chemical treatment.*** Systems shall collect source water samples prior to chemical treatment, such as coagulants, oxidants and disinfectants.

* * * * *

(n) **[*Bank filtration.*]** ***Source water sample locations for systems with bank filtration.***

(1) Systems that receive *Cryptosporidium* treatment credit for bank filtration to meet existing treatment technique requirements of § 109.202(c) (relating to State MCLs, MRDLs and treatment technique

requirements), as applicable, shall collect source water samples in the surface water prior to bank filtration.

* * * * *

(o) **[*Multiple sources.*]** ***Source water sample locations for systems with multiple sources.*** Systems with plants that use multiple water sources, including multiple surface water sources and blended surface water and groundwater sources, shall collect samples as specified in paragraph (1) or (2). The use of multiple sources during monitoring **[must]** **shall** be consistent with routine operational practice. Sources not adequately evaluated during the monitoring period will be considered new sources and the requirements under subsection (f) will apply. Systems may begin monitoring a new source as soon as a sampling schedule and plan have been approved by the Department.

* * * * *

§ 109.1203. Bin classification and treatment technique requirements.

* * * * *

(f) *Treatment and management options for filtered systems, microbial toolbox.*

(1) Filtered systems shall use one or more of the treatment and management options listed in § 109.1204 (relating to requirements for microbial toolbox components), termed the microbial toolbox, to comply with the additional *Cryptosporidium* treatment required in subsection (e).

(2) Systems using sources classified in Bin 3 and Bin 4 shall achieve at least 1-log of the additional *Cryptosporidium* treatment required under § 109.1204(a) using either one or a combination of the following: bag filters, bank filtration, cartridge filters, chlorine dioxide, membranes, ozone or UV, as described in **[§ 109.1204(b), (c) and (n)—(q) (relating to requirements for microbial toolbox components)]** **§ 109.1204**.

(g) *Failure to meet treatment credit.* Failure by a system in any month to achieve treatment credit by meeting criteria in **[§ 109.1204(b), (c) and (n)—(q)]** **§ 109.1204** for microbial toolbox options that is at least equal to the level of treatment required in subsection (e) is a violation of the treatment technique requirement.

* * * * *

§ 109.1204. Requirements for microbial toolbox components.

* * * * *

(h) *Individual filter performance.* Systems using conventional filtration treatment or direct filtration treatment will receive 0.5-log *Cryptosporidium* treatment credit, which can be in addition to the 0.5-log credit under subsection (g), during any month the system meets the criteria in this subsection. Compliance with these criteria must be based on individual filter turbidity monitoring as described in **[§ 109.301(1)(iv)]** **§ 109.301(1)(ii)** (relating to general monitoring requirements), as applicable.

* * * * *

§ 109.1206. Reporting and recordkeeping requirements.

* * * * *

(e) *Source water reporting data elements*. Systems shall report the applicable information in paragraphs (1) and (2) for the source water monitoring required under § 109.1202.

(1) *Cryptosporidium data elements*. Systems shall report data elements in subparagraphs (i)—**[(vii)] (viii)** for each *Cryptosporidium* analysis. Systems shall report, in a form acceptable to the Department, data elements in subparagraphs **[(viii)—(x)] (ix)—(xi)** as applicable.

* * * * *

(vii) Number of oocysts occurred.

(viii) The concentration of oocysts per liter.

[(viii)] (ix) For matrix spike samples, systems shall also report the sample volume spiked and estimated number of oocysts spiked. These data are not required for field samples.

[(ix)] (x) For samples in which less than 10 L is filtered or less than 100% of the sample volume is examined, systems shall also report the number of filters used and the packed pellet volume.

[(x)] (xi) For samples in which less than 100% of sample volume is examined, systems shall also report the volume of resuspended concentrate and volume of this resuspension processed through immunomagnetic separation.

* * * * *

Subchapter M. ADDITIONAL REQUIREMENTS FOR GROUNDWATER SOURCES

§ 109.1302. Treatment technique requirements.

* * * * *

(c) *Groundwater systems with* **[*significant deficiencies or*]** *source water E. coli contamination* ***or significant deficiencies***.

(1) A groundwater system with **[a significant deficiency or]** an *E. coli*-positive groundwater source sample collected under § 109.505(a)(3), § 109.1303(a) or § 109.1304(a) (relating to requirements for noncommunity water systems; triggered monitoring requirements for groundwater sources; and assessment source water monitoring) **[shall correct all significant deficiencies and, if directed by the Department,]** shall implement one or more of the following corrective actions:

(i) Provide an alternative source of water.

(ii) Eliminate the source of contamination.

(iii) Submit information required under § 109.1306 and provide treatment that reliably achieves at least 4-log treatment of viruses before the first customer for the groundwater source or sources and comply with compliance monitoring requirements under § 109.1305.

(2) A groundwater system with a significant deficiency or an *E. coli*-positive groundwater source sample collected under § 109.1303(a) or § 109.1304(a) will receive one of the following forms of notification:

(i) Written notice from the Department of a significant deficiency.

(ii) Notification from a laboratory under § 109.810(b) (relating to reporting and notification requirements) that a groundwater source sample collected under § 109.1303(a) or § 109.1304(a) was found to be *E. coli*-positive.

[(iii) Direction from the Department that an *E. coli* positive sample collected under § 109.1303(a) requires corrective action.]

(3) **[Within 30 days of receiving initial notification under paragraph (2), the groundwater system shall consult with the Department regarding the appropriate corrective action unless the Department directs the groundwater system to implement a specific corrective action.]** **A groundwater system with a significant deficiency or an *E. coli*-positive source water sample collected under § 109.1303(a) or § 109.1304(a) shall comply with § 109.716 (relating to significant deficiencies).**

[(4) Within 120 days of receiving initial notification under paragraph (2), or earlier if directed by the Department, the groundwater system shall correct all significant deficiencies if applicable and shall either:

(i) Have completed corrective action in accordance with applicable Department plan review processes or other Department guidance or direction, if any, including Department-specified interim measures.

(ii) Be in compliance with a Department-approved corrective action plan and schedule subject to the following conditions:

(A) The groundwater system shall request and obtain approval from the Department for any subsequent modifications to a Department-approved corrective action plan and schedule.

(B) If the Department specifies interim measures for protection of the public health pending Department approval of the corrective action plan and schedule or pending completion of the corrective action plan, the system shall comply with these interim measures as well as with any schedule specified by the Department.]

§ 109.1303. Triggered monitoring requirements for groundwater sources.

* * * * *

(h) For an *E. coli*-positive source water sample collected under subsection (a) that is not invalidated under subsection (g)**[:], the system shall comply with Tier 1 public notification requirements under § 109.408 (relating to Tier 1 public notice—categories, timing and delivery of notice).**

[(1) The Department may require a groundwater system to perform a corrective action as described under § 109.1302(c) (relating to treatment technique requirements).

(2) If the Department does not require corrective action under § 109.1302(c), the system shall collect five additional source water samples from the same source within 24 hours of being notified of the *E. coli*-positive sample. If one of the additional samples collected under this paragraph is *E. coli*-positive, the groundwater system shall perform a corrective action as described under § 109.1302(c).

(3) The system shall comply with Tier 1 public notification requirements under § 109.408 (relating to Tier 1 category, timing and delivery of notice).]

(i) Systems providing water to another public water system receiving notification under subsection (e) shall comply with subsection (a).

§ 109.1305. Compliance monitoring.

(a) *Chemical disinfection*. Groundwater systems demonstrating at least 4-log treatment of viruses using chemical disinfection shall monitor for and maintain the Department-approved residual disinfection concentration every day the system serves the public from the groundwater source.

(1) A groundwater system serving greater than 3,300 people shall:

(i) Continuously monitor the residual disinfectant concentration at the entry point or other location approved by the Department and record the results at least every 15 minutes each day that water from the groundwater source is served to the public.

(ii) Maintain the Department-approved minimum residual disinfectant concentration every day the public water system serves water from the groundwater source to the public.

(iii) Conduct grab sampling every 4 hours until the continuous monitoring equipment is returned to service if there is a failure in the continuous monitoring equipment **and notify the Department within 24 hours of the equipment failure that grab sampling is being conducted**. **[The system shall resume continuous residual disinfectant monitoring within 14 days.] Grab sampling or manual recording may not be substituted for continuous monitoring for longer than 5 working days after the equipment fails unless a longer period of time is approved by the Department.**

(2) A groundwater system serving 3,300 or fewer people shall comply with one of the following subparagraphs:

(i) The groundwater system shall maintain the Department-approved minimum residual disinfectant concentration every day the public water system serves water from the groundwater source to the public. The groundwater system shall take a daily grab sample at the entry point or other location approved by the Department during the hour of peak flow or at any other time specified by the Department. If any daily grab sample measurement falls below the Department-approved minimum residual disinfectant

concentration, the groundwater system shall take follow up samples every 4 hours **and record the results** until the residual disinfectant concentration is restored to the Department-approved minimum level.

* * * * *

§ 109.1306. Information describing 4-log treatment and compliance monitoring.

* * * * *

(b) A noncommunity water system not covered under subsection (a) demonstrating at least 4-log treatment of viruses under § 109.1302 (relating to treatment technique requirements) shall:

* * * * *

(3) Submit plans, specifications, engineer's report, water quality analyses and other data, information or documentation reasonably necessary to enable the Department to determine compliance with the act and this chapter. The Department will make available to the applicant the *Public Water Supply Manual*, available from the Bureau of **[Water Standards and Facility Regulation] Safe Drinking Water**, Post Office Box **[8774] 8467**, Harrisburg, Pennsylvania 17105 which contains acceptable design standards and technical guidance. Water quality analyses shall be conducted by a laboratory accredited under this chapter.

* * * * *

§ 109.1307. System management responsibilities.

(a) *Reporting*. Groundwater systems shall comply with the following requirements and otherwise comply with § 109.701 (relating to reporting and recordkeeping):

(1) A groundwater system conducting compliance monitoring under § 109.1305 (relating to compliance monitoring):

* * * * *

(ii) That experiences a breakdown in treatment shall notify the Department within 1 hour after the water system learns of the violation or the situation and provide public notice in accordance with § 109.408 (relating to Tier 1 public notice—categories, timing and delivery **of notice**). A breakdown in treatment occurs whenever the system fails to meet, for greater than 4 **[continuous]** hours **of operation**, any Department-specified requirements relating to:

* * * * *

(*Editor's Note*: The following subchapter is proposed to be added and printed in regular type to enhance readability.)

Subchapter N. DRINKING WATER FEES

Sec.

§ 109.1401. General.

(a) This subchapter establishes fees for each public water system for services provided by the Department to implement the act, retain primacy, and protect the public health and safety.

(b) This subchapter applies to each public water system.

§ 109.1402. Annual fees.

(a) *Annual fee.* Each public water system shall pay an annual fee as set forth in this section.

(1) For community water systems, the annual fees are as follows:

Population Served	***Fee***
25—100	**$250**
101—500	**$500**
501—1,000	**$1,000**
1,001—2,000	**$2,000**
2,001—3,300	**$4,000**
3,301—5,000	**$6,500**
5,001—10,000	**$10,000**
10,001—25,000	**$20,000**
25,001—50,000	**$25,000**
50,001—75,000	**$30,000**
75,001—100,000	**$35,000**
100,001 or more	**$40,000**

(2) For nontransient noncommunity water systems, the annual fees are as follows:

Population Served	*Fee*
25—100	$100
101—500	$250
501—1,000	$500
1,001—3,300	$750
3,301 or more	$1,000

(3) For transient noncommunity water systems, the annual fees are as follows:

Population Served	*Fee*
	$50
25—100	$100
101—500	$200
501—1,000	$500
1,001 or more	

(4) For bottled water or vended water systems, retail water facilities or bulk water hauling systems, the annual fees are as follows:

Type	*Fee*
Bottled—in-State	$2,500
Bottled—out-of-State	$2,500
Vended	$1,000
Retail	$1,000
Bulk	$1,000

(b) *Basis for "population served."* The "population served" shall be based on the Department's public water system inventory at the time of billing.

(c) *Payment of fees.*

(1) All fees payable under this section are due according to the following schedule:

Population Served	*Submit Annual Fee By*
25—100	September 30
101—500	December 31
501—3,300	March 31
3,301 or more	June 30

(2) New systems that begin operation after January 1 will not be assessed an annual fee for partial calendar year periods. Annual fees shall be payable on or before the date indicated in paragraph (1) of the next calendar year, and each year thereafter.

(3) For annual fees of $10,000 or more, a public water system may request to divide its annual fee payment into equal quarterly installments by submitting a written request to the Department. Quarterly installments shall be due on March 31, June 30, September 30 and December 31.

§ 109.1403. Monitoring waiver fees.

(a) *New waivers.* An application for a new waiver from the monitoring requirements in §§ 109.301 and 109.302 (relating to general monitoring requirements; and special monitoring requirements) for a single source must be accompanied by a fee as follows:

Waiver Type	*New Waiver Fee*
VOC use waiver	$100
SOC use waiver	$100
SOC susceptibility waiver	$300
IOC waiver	$100

(b) *Waiver renewals.* An application for a waiver renewal from the monitoring requirements in §§ 109.301 and 109.302 for a single source must be accompanied by the appropriate fee as follows:

(1) For renewal applications with no changes in land uses or potential sources of contamination, the fee is $50.

(2) For renewal applications with changes in land uses or potential sources of contamination, the fee will be based on the type of waiver and the fee for that waiver set forth in subsection (a).

(c) *Waiver fees for systems with more than one source.*

(1) For systems with multiple sources all in the same contributing area, the fee will be as indicated in subsection (a) or (b), as applicable. For groundwater systems, the contributing area is the surface area overlying the portion of the aquifer through which water is diverted to a well or flows to a spring or infiltration gallery.

(2) For systems with sources in two or more contributing areas, the fee will be as indicated in subsection (a) or (b), as applicable, for the first source, plus 1/2 of the applicable fee for each additional contributing area in which a source is located.

§ 109.1404. Community and noncommunity water system permitting fees.

(a) An application for a construction permit or a major construction permit amendment under § 109.503 (relating to public water system construction permits), except for an application for BVRB facilities under § 109.1005 (relating to permit requirements), must be accompanied by a fee as follows:

Population Served	*Fee*
25—100	$300
101—500	$600
501—3,300	$1,000
3,301—10,000	$2,500
10,001—50,000	$5,000
50,001—100,000	$7,500
100,001 or more	$10,000

(b) A written request for a minor construction permit amendment under § 109.503, except for a change in legal status (relating to paragraph 3), must be accompanied by a fee as follows:

Population Served	*Fee*
25—100	$100
101—500	$250
501—3,300	$500
3,301—10,000	$750
10,001—50,000	$1,000
50,001—100,000	$2,500
100,001 or more	$5,000

(c) A written request for a change in legal status, such as a transfer of ownership, incorporation or merger, must be accompanied by a fee of $100.

(d) A written request for a new or amended operations permit under § 109.504 (relating to public water system operating permits) must be accompanied by a fee of $50.

(e) A written request for an emergency permit must be accompanied by a fee of $100.

§ 109.1405. Permitting fees for general permits.

Fees for coverage under a general permit under § 109.511 (relating to general permits) will be established in the general permit. Fees may not exceed $500. An eligible person shall submit to the Department the applicable fee before the Department approves coverage under the general permit for that person.

§ 109.1406. Permitting fees for bottled water and vended water systems, retail water facilities and bulk water hauling systems.

(a) An application for a construction permit or a major construction permit amendment under § 109.1005 (relating to permit requirements), except an out-of-State facility or system using finished water as its sole source of water, must be accompanied by a fee as follows:

System Type	*Fee*
Bottled water system (population served)	
25—100	$500
101—500	$750
501—3,300	$1,000
3,301—10,000	$2,500
10,001—50,000	$5,000
50,001—100,000	$7,500
100,001 or more	$10,000
Vended water system	$100
Retail water ~~facilities~~FACILITY	$250
Bulk water hauling system	$500

(b) An application from a bottled water system, retail water facility or bulk water hauling system whose sole source of water is finished water purchased from another public water system must be accompanied by a fee as follows:

System Type	*Fee*
Bottled water system (population served)	
25—100	**$100**
101—500	**$250**
501—3,300	**$500**
3,301—10,000	**$750**
10,001—50,000	**$1,000**
50,001—100,000	**$2,500**
100,001 or more	**$5,000**
Retail water ~~facilities~~FACILITY	**$100**
Bulk water hauling system	**$100**

(c) An application from an out-of-State bottled water system submitting proof of out-of-State approval under § 109.1005 must be accompanied by a fee of $1,000.

(d) A written request for a minor construction permit amendment under § 109.1005, except for a change in legal status, must be accompanied by a fee as follows:

System Type	*Fee*
Bottled water system	**$1,000**
Vended water system	**$100**
Retail water ~~facilities~~FACILITY	**$100**
Bulk water hauling system	**$100**

(e) A request for a change in legal status, such as a transfer of ownership, incorporation or merger, must be accompanied by a fee of $100.

(f) A written request for a new or amended operations permit must be accompanied by a fee of $50.

(g) A written request for an emergency permit must be accompanied by a fee of $100.

§ 109.1407. Feasibility study.

An application for a review of a feasibility study or pilot study must be accompanied by a fee as follows:

Population Served	*Fee*
25—100	**$300**
101—500	**$600**
501—3,300	**$1,000**
3,301—10,000	**$2,500**
10,001—50,000	**$5,000**
50,001—100,000	**$7,500**
100,001 or more	**$10,000**

§ 109.1408. Noncommunity water system application for approval.

For a noncommunity water system that is released from the obligation to obtain a construction and an operation permit under § 109.505 (relating to requirements for noncommunity water systems), the application for approval required under § 109.505(a)(2)(ii) must be accompanied by a fee of $50.

§ 109.1409. Noncommunity water system 4-log permit.

For noncommunity water systems demonstrating 4-log treatment of viruses under Subchapter M (relating to additional requirements for groundwater sources), the permit application must be accompanied by a fee of $50.

§ 109.1410. Payment of fees.

All fees under this subchapter shall be payable by a check to the "Commonwealth of Pennsylvania" or through a secure computer application provided by the Department.

§ 109.1411. Disposition of funds.

All fees shall be paid into the State Treasury into a special restricted revenue account in the General Fund known as the Safe Drinking Water Account administered by the Department for use in protecting the public from the hazards of unsafe drinking water and which funds are hereby appropriated to the Department for the purposes as are authorized in the act.

§ 109.1412. Failure to remit fees.

(a) If fees are not remitted as required under § 109.1402 (relating to annual fees), interest will accrue on the entire amount from the original date payment was due at a rate of 6% per annum until payment is remitted.

(b) For any system delinquent in payment of fees in excess of 180 days, the Department may suspend technical services provided by the Department until payment is remitted.

§ 109.1413. Evaluation of fees.

At least every 3 years, the Department will provide the EQB with an evaluation of the fees in this chapter and recommend regulatory changes to the EQB to address any disparity between the program income generated by the fees and the Department's cost of administering the program with the objective of ensuring fees meet all program costs and programs are self-sustaining. The evaluation will include an assessment of program complement and workload.