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(2) If a system is unable to report monitoring results electronically, the system may use an alternative approach for reporting monitoring results that EPA approves.

(c) Systems serving fewer than 10,000 people must report results from the initial source water monitoring required under §141.701(a) to the State.

(d) All systems must report results from the second round of source water monitoring required under §141.701(b) to the State.

(e) Systems must report the applicable information in paragraphs (e)(1) and (2) of this section for the source water monitoring required under §141.701.

(1) Systems must report the following data elements for each *Cryptosporidium* analysis:

Data element.

1. PWS ID.
2. Facility ID.
3. Sample collection date.
4. Sample type (field or matrix spike).
5. Sample volume filtered (L), to nearest ¼ L.
6. Was 100% of filtered volume examined.
7. Number of oocysts counted.

(i) For matrix spike samples, systems must also report the sample volume spiked and estimated number of oocysts spiked. These data are not required for field samples.

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

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

(2) Systems must report the following data elements for each *E. coli* analysis:

Data element.

1. PWS ID.
2. Facility ID.
3. Sample collection date.
4. Analytical method number.
5. Method type.
6. Source type (flowing stream, lake/reservoir, GWUDI).
7. *E. coli*/100 mL.

8. Turbidity.¹

¹Systems serving fewer than 10,000 people that are not required to monitor for turbidity under §141.701 are not required to report turbidity with their *E. coli* results.

§ 141.707 Grandfathering previously collected data.

(a)(1) Systems may comply with the initial source water monitoring requirements of §141.701(a) by grandfathering sample results collected before the system is required to begin monitoring (i.e., previously collected data). To be grandfathered, the sample results and analysis must meet the criteria in this section and the State must approve.

(2) A filtered system may grandfather *Cryptosporidium* samples to meet the requirements of §141.701(a) when the system does not have corresponding *E. coli* and turbidity samples. A system that grandfathers *Cryptosporidium* samples without *E. coli* and turbidity samples is not required to collect *E. coli* and turbidity samples when the system completes the requirements for *Cryptosporidium* monitoring under §141.701(a).

(b) *E. coli* sample analysis. The analysis of *E. coli* samples must meet the analytical method and approved laboratory requirements of §§141.704 through 141.705.

(c) *Cryptosporidium* sample analysis. The analysis of *Cryptosporidium* samples must meet the criteria in this paragraph.

(1) Laboratories analyzed *Cryptosporidium* samples using one of the analytical methods in paragraphs (c)(1)(i) through (vi) of this section, which are incorporated by reference. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy of these methods on-line from the United States Environmental Protection Agency, Office of Ground Water and Drinking Water, 1201 Constitution Ave, NW, Washington, DC 20460 (Telephone: 800-426-4791). You may inspect a copy at the Water Docket in the EPA Docket Center, 1301 Constitution Ave., NW, Washington, DC, (Telephone: 202-566-2426) or at the National Archives and Records Administration (NARA). For information on

the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(i) *Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA*, 2005, United States Environmental Protection Agency, EPA-815-R-05-002.

(ii) *Method 1622: Cryptosporidium in Water by Filtration/IMS/FA*, 2005, United States Environmental Protection Agency, EPA-815-R-05-001.

(iii) *Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA*, 2001, United States Environmental Protection Agency, EPA-821-R-01-025.

(iv) *Method 1622: Cryptosporidium in Water by Filtration/IMS/FA*, 2001, United States Environmental Protection Agency, EPA-821-R-01-026.

(v) *Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA*, 1999, United States Environmental Protection Agency, EPA-821-R-99-006.

(vi) *Method 1622: Cryptosporidium in Water by Filtration/IMS/FA*, 1999, United States Environmental Protection Agency, EPA-821-R-99-001.

(2) For each *Cryptosporidium* sample, the laboratory analyzed at least 10 L of sample or at least 2 mL of packed pellet or as much volume as could be filtered by 2 filters that EPA approved for the methods listed in paragraph (c)(1) of this section.

(d) *Sampling location*. The sampling location must meet the conditions in §141.703.

(e) *Sampling frequency*. *Cryptosporidium* samples were collected no less frequently than each calendar month on a regular schedule, beginning no earlier than January 1999. Sample collection intervals may vary for the conditions specified in §141.702(b)(1) and (2) if the system provides documentation of the condition when reporting monitoring results.

(1) The State may approve grandfathering of previously collected data where there are time gaps in the sampling frequency if the system conducts additional monitoring the State specifies to ensure that the data used to comply with the initial source water monitoring requirements of §141.701(a) are seasonally representative and unbiased.

(2) Systems may grandfather previously collected data where the sampling frequency within each month varied. If the *Cryptosporidium* sampling frequency varied, systems must follow the monthly averaging procedure in §141.710(b)(5) or §141.712(a)(3), as applicable, when calculating the bin classification for filtered systems or the mean *Cryptosporidium* concentration for unfiltered systems.

(f) *Reporting monitoring results for grandfathering*. Systems that request to grandfather previously collected monitoring results must report the following information by the applicable dates listed in this paragraph. Systems serving at least 10,000 people must report this information to EPA unless the State approves reporting to the State rather than EPA. Systems serving fewer than 10,000 people must report this information to the State.

(1) Systems must report that they intend to submit previously collected monitoring results for grandfathering. This report must specify the number of previously collected results the system will submit, the dates of the first and last sample, and whether a system will conduct additional source water monitoring to meet the requirements of §141.701(a). Systems must report this information no later than the date the sampling schedule under §141.702 is required.

(2) Systems must report previously collected monitoring results for grandfathering, along with the associated documentation listed in paragraphs (f)(2)(i) through (iv) of this section, no later than two months after the applicable date listed in §141.701(c).

(i) For each sample result, systems must report the applicable data elements in §141.706.

(ii) Systems must certify that the reported monitoring results include all results the system generated during the time period beginning with the first reported result and ending with the final reported result. This applies to samples that were collected from the sampling location specified for source water monitoring under this subpart, not spiked, and analyzed using the laboratory's routine process for the analytical methods listed in this section.

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(iii) Systems must certify that the samples were representative of a plant's source water(s) and the source water(s) have not changed. Systems must report a description of the sampling location(s), which must address the position of the sampling location in relation to the system's water source(s) and treatment processes, including points of chemical addition and filter backwash recycle.

(iv) For *Cryptosporidium* samples, the laboratory or laboratories that analyzed the samples must provide a letter certifying that the quality control criteria specified in the methods listed in paragraph (c)(1) of this section were met for each sample batch associated with the reported results. Alternatively, the laboratory may provide bench sheets and sample examination report forms for each field, matrix spike, IPR, OPR, and method blank sample associated with the reported results.

(g) If the State determines that a previously collected data set submitted for grandfathering was generated during source water conditions that were not normal for the system, such as a drought, the State may disapprove the data. Alternatively, the State may approve the previously collected data if the system reports additional source water monitoring data, as determined by the State, to ensure that the data set used under §141.710 or §141.712 represents average source water conditions for the system.

(h) If a system submits previously collected data that fully meet the number of samples required for initial source water monitoring under §141.701(a) and some of the data are rejected due to not meeting the requirements of this section, systems must conduct additional monitoring to replace rejected data on a schedule the State approves. Systems are not required to begin this additional monitoring until two months after notification that data have been rejected and additional monitoring is necessary.

DISINFECTION PROFILING AND BENCHMARKING REQUIREMENTS

§ 141.708 Requirements when making a significant change in disinfection practice.

(a) Following the completion of initial source water monitoring under §141.701(a), a system that plans to make a significant change to its disinfection practice, as defined in paragraph (b) of this section, must develop disinfection profiles and calculate disinfection benchmarks for *Giardia lamblia* and viruses as described in §141.709. Prior to changing the disinfection practice, the system must notify the State and must include in this notice the information in paragraphs (a)(1) through (3) of this section.

(1) A completed disinfection profile and disinfection benchmark for *Giardia lamblia* and viruses as described in §141.709.

(2) A description of the proposed change in disinfection practice.

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

(b) Significant changes to disinfection practice are defined as follows:

(1) Changes to the point of disinfection;

(2) Changes to the disinfectant(s) used in the treatment plant;

(3) Changes to the disinfection process; or

(4) Any other modification identified by the State as a significant change to disinfection practice.

§ 141.709 Developing the disinfection profile and benchmark.

(a) Systems required to develop disinfection profiles under §141.708 must follow the requirements of this section. Systems must monitor at least weekly for a period of 12 consecutive months to determine the total log inactivation for *Giardia lamblia* and viruses. If systems monitor more frequently, the monitoring frequency must be evenly spaced. Systems that operate for fewer than 12 months per year must monitor weekly during the period of operation. Systems must determine log inactivation for *Giardia lamblia* through the entire plant, based on $CT_{99.9}$ values in Tables 1.1 through 1.6, 2.1 and 3.1 of