

3745-81-51

Revised total coliform rule - routine monitoring requirements.

(A) ~~Subject to the provisions of paragraph (A) of rule 3745-81-50 of the Administrative Code, all~~ All public water systems shall conduct routine total coliform monitoring in accordance with this rule ~~beginning April 1, 2016.~~

- (1) Following any total coliform-positive sample collected in accordance with paragraph (B), (C), (D) or (E) of this rule, public water systems shall comply with the repeat monitoring requirements and Escherichia coli (E. coli) analytical requirements in rule 3745-81-52 of the Administrative Code.
- (2) Once all monitoring required by paragraph (B), (C), (D) or (E) of this rule and rule 3745-81-52 of the Administrative Code for a calendar month has been completed, public water systems shall determine whether any coliform treatment technique triggers have been exceeded in accordance with rule 3745-81-53 of the Administrative Code. If any triggers have been exceeded, public water systems shall complete the assessments as required in rule 3745-81-53 of the Administrative Code.

(B) Noncommunity public water systems using only source water designated as ground water in accordance with rule 3745-81-76 of the Administrative Code and serving not more than one thousand persons shall conduct routine total coliform monitoring as follows:

- (1) Monitoring for total coliforms shall be conducted at a minimum frequency of one sample each calendar quarter that the system provides water to the public, except as required by paragraphs (B)(3) to (B)(6) of this rule.
- (2) ~~Beginning April 1, 2016, the~~The director shall perform a detailed monitoring evaluation during each sanitary survey to determine whether the system is on an appropriate routine total coliform monitoring schedule. The director shall consider system factors such as pertinent water quality and compliance history, the establishment and maintenance of contamination barriers, and other appropriate protections. Based on the findings of each monitoring evaluation, the director may modify the public water system's routine total coliform monitoring schedule.
- (3) Triggered increased routine monitoring. A public water system on quarterly monitoring that experiences any of the events identified in this paragraph shall begin monthly monitoring during the month following the event. The system shall continue monthly monitoring until the director reduces the monitoring frequency after the requirements of paragraph (B)(4) of this rule are met. A system on monthly monitoring for reasons other than those identified as

follows, including seasonal systems, is not considered to be on increased monitoring for the purposes of paragraph (B)(4) of this rule.

- (a) The system triggers a level two assessment or two level one assessments in a consecutive twelve-month period in accordance with rule 3745-81-53 of the Administrative Code.
 - (b) The system has an E. coli maximum contaminant level violation in accordance with paragraph (A) of rule 3745-81-54 of the Administrative Code.
 - (c) The system has a coliform treatment technique violation in accordance with paragraph (B) of rule 3745-81-54 of the Administrative Code.
 - (d) The system has two monitoring violations in accordance with paragraph (C) of rule 3745-81-54 of the Administrative Code, or has one monitoring violation in accordance with paragraph (C) of rule 3745-81-54 of the Administrative Code and one level one assessment in a consecutive twelve-month period.
- (4) The director may reduce the monitoring frequency for a public water system on monthly monitoring triggered under paragraph (B)(3) of this rule to quarterly monitoring if the system meets all of the following:
- (a) Had a sanitary survey, site visit or level two assessment conducted by a person approved by the director within the previous twelve months.
 - (b) Had a clean compliance history for a minimum of the previous twelve months.
 - (c) Is free of significant deficiencies.
 - (d) Has a protected water source.
 - (e) Holds a valid license to operate, unless the system is exempt from being required to obtain a license to operate under section 6109.21 of the Revised Code.
 - (f) Has no outstanding violations of any of the following:
 - (i) Nitrate or nitrite MCL or monitoring requirements under rule 3745-81-11 or rule 3745-81-23 of the Administrative Code, respectively.

- (ii) Source water monitoring requirements under rule 3745-81-42 of the Administrative Code.
- (iii) Treatment technique requirements under rule 3745-81-44 of the Administrative Code.
- (iv) Operational requirements under 3745-83-01 of the Administrative Code with respect to disinfection and monthly operating reports.

(5) Seasonal system requirements.

- (a) ~~Beginning April 1, 2016, all~~ All seasonal public water systems, except for fully pressurized year-round seasonal systems as provided by paragraph (B)(5)(d) of this rule, shall demonstrate completion of the start-up procedure in the appendix to this rule, which shall include start-up total coliform sampling prior to the first day of each operating season, ~~to serving water to the public.~~
- (b) The type of seasonal system will be determined by the director through a detailed monitoring evaluation performed during a sanitary survey or limited scope site visit. A depressurized seasonal system shall monitor for total coliforms with a minimum of one sample per month during the system's operating season if, after the director performs a detailed monitoring evaluation during a sanitary survey or limited scope site visit, it is determined the system does not meet any of the exceptions as provided in paragraph (B)(5)(c) or (B)(5)(d) of this rule.
- (c) A partially-depressurized seasonal system that operates a portion of the system for maintenance or caretaker staff on a year round basis shall monitor for total coliforms with a minimum of one sample per month during the system's operating season and a minimum of one sample per quarter during the system's off closed season. The director may reduce the monitoring frequency for partially- depressurized systems that meet specific criteria in a seasonal system monitoring evaluation in addition to demonstrating completion of the start-up procedure.
- (d) A fully-pressurized year-round seasonal system that maintains a fully pressurized system throughout the year, other than depressurizations resulting from maintenance or line breaks, shall monitor for total coliforms with a minimum of one sample per calendar quarter during the systems operating season. Monitoring must be conducted during the time period specified for monitoring in accordance with paragraph (B)(1) of rule 3745-81-50 of the Administrative Code. These systems shall adjust

the monitoring frequency or complete elements of the start-up procedure in the appendix to this rule as required in writing by the director based on the findings of a sanitary survey or detailed monitoring evaluation. A simplified start-up procedure may be appropriate for these systems due to the potential for deteriorated water quality during extended periods of non-use.

- (6) Public water systems collecting samples on a quarterly frequency shall monitor with at least three routine samples during the month following one or more total coliform-positive samples (with or without a level one treatment technique trigger). Systems may either collect samples at regular time intervals throughout the month or may collect all required routine samples on a single day if samples are taken from different sites. Systems shall use the results of additional routine samples in coliform treatment technique trigger calculations under paragraph (A) of rule 3745-81-53 of the Administrative Code.
- (7) The director may postpone the requirement in paragraph (B)(6) of this rule for a system to monitor with at least three routine samples during the month following one or more total coliform positive samples if all of the following criteria are met:
 - (a) The system collected all required repeat samples.
 - (b) The director conducts a site visit of the system and has determined the source of the bacterial contamination within two weeks of receiving notification that the routine total coliform positive sample was collected.
 - (c) The system has submitted an approvable plan to eliminate the cause of the bacterial contamination, including all of the following:
 - (i) Details on how the source of bacterial contamination will be eliminated.
 - (ii) Who will perform the work.
 - (iii) A schedule for completing the work no later than ninety days from the date of the total coliform routine sample.
 - (d) An approvable plan for corrective action required by rule 3745-81-61 of the Administrative Code may also fulfill the requirements of paragraph (B)(7)(c) of this rule for a plan to eliminate the cause of the bacterial contamination.

- (8) If the director approves a postponement of the requirements of paragraph (B) (6) of this rule, the public water system shall collect at least three routine total coliform samples during the month after the work to eliminate the source of the bacterial contamination has been completed.
- (C) Routine monitoring requirements for community water systems using only source water designated as ground water in accordance with rule 3745-81-76 of the Administrative Code and serving not more than one thousand persons.
- (1) Monitoring for total coliforms shall be conducted at a minimum frequency of one sample each month that the system provides water to the public.
- (2) The director shall perform a detailed monitoring evaluation during each sanitary survey to determine whether the system is on an appropriate routine total coliform monitoring schedule. The director shall consider system factors such as pertinent water quality and compliance history, the establishment and maintenance of contamination barriers, and other appropriate protections. Based on the findings of each monitoring evaluation, the director may modify the public water system's routine total coliform monitoring schedule.
- ~~(2) Transition from the requirements of rule 3745-81-21 of the Administrative Code:~~
- ~~(a) All systems subject to this paragraph shall continue to monitor according to the total coliform monitoring schedules established under rule 3745-81-21 of the Administrative Code that were in effect on March 31, 2016, unless otherwise specified by the director.~~
- ~~(b) Beginning April 1, 2016, the director shall perform a detailed monitoring evaluation during each sanitary survey to determine whether the system is on an appropriate routine total coliform monitoring schedule. The director shall consider system factors such as pertinent water quality and compliance history, the establishment and maintenance of contamination barriers, and other appropriate protections. Based on the findings of each monitoring evaluation, the director may modify the public water system's routine total coliform monitoring schedule.~~
- (D) Routine monitoring requirements for public water systems using a surface water source, in whole or in part, and serving not more than four thousand one hundred persons.
- (1) Monitoring for total coliforms shall be conducted at a minimum frequency of four samples, taken at regular intervals, during each month the system provides water to the public. Consecutive surface water systems serving not more than

one thousand persons shall monitor at a minimum frequency of one sample per month that the system serves water to the public.

(2) Seasonal system start-up requirements.

- (a) ~~Beginning April 1, 2016, seasonal~~Seasonal public water systems subject to this paragraph, except fully-pressurized year-round seasonal systems ~~those that maintain a fully pressurized system throughout the year~~, shall demonstrate completion of the start-up procedure in the appendix to this rule, which shall include start-up total coliform sampling prior to the first day of operating season ~~serving water to the public~~.
- (b) A fully-pressurized year-round seasonal system ~~that maintains a fully pressurized system throughout the year~~ shall complete elements of the start-up procedure in the appendix to this rule as required in writing by the director based on the findings of a sanitary survey.

(E) Routine monitoring requirements for all other public water systems serving more than one thousand persons.

(1) Seasonal system start-up requirements.

- (a) ~~Beginning April 1, 2016, seasonal~~Seasonal public water systems subject to this paragraph, except fully-pressurized year-round seasonal systems ~~those that maintain a fully pressurized system throughout the year~~, shall demonstrate completion of the start-up procedure in the appendix to this rule, which shall include start-up total coliform sampling prior to the first day of each operating season ~~serving water to the public~~.
- (b) A fully-pressurized year-round seasonal system ~~that maintains a fully pressurized system throughout the year~~ shall complete elements of the start-up procedure in the appendix to this rule as required in writing by the director based on the findings of a sanitary survey.

(2) The monitoring frequency for total coliforms for ground water systems and consecutive surface water systems serving more than one thousand persons and surface water systems serving more than four thousand one hundred persons is based on the population served by the system, as follows:

Population served	Minimum number of samples per month
1,001 to 2,500 (ground water systems and consecutive surface water systems)	2

2,501 to 3,300 (ground water systems and consecutive surface water systems)	3
3,301 to 4,100 (ground water systems and consecutive surface water systems)	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120
220,001 to 320,000	150
320,001 to 450,000	180

450,001 to 600,000	210
600,001 to 780,000	240
780,001 to 970,000	270
970,001 to 1,230,000	300
1,230,001 to 1,520,000	330
1,520,001 to 1,850,000	360
1,850,001 to 2,270,000	390
2,270,001 to 3,020,000	420
3,020,001 to 3,960,000	450
3,960,001 or more	480

- (3) Public water systems may not reduce monitoring, except for noncommunity public water systems using only ground water (and not ground water under the direct influence of surface water) and serving more than one thousand persons in any month. In months when more than one thousand persons are served, the systems shall monitor at the frequency specified in paragraph (E) of this rule. In months when no more than one thousand persons are served, the director may reduce the monitoring frequency, in writing, to a frequency allowed under paragraph (B) of this rule.

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Certification

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