



Ohio Administrative Code

Rule 3745-81-65 Source monitoring requirements.

Effective: August 7, 2025

(A) Initial round of source water monitoring.

(1) Systems serving at least ten thousand people shall sample their source water for Cryptosporidium, E. coli, and turbidity at least monthly for twenty-four months.

(2) Systems serving less than ten thousand people shall sample their source water for E. coli at least once every two weeks for twelve months.

(3) Systems serving less than ten thousand people may avoid E. coli monitoring if the system notifies the director that it will monitor for Cryptosporidium as described in paragraph (A)(4) of this rule. The system shall notify the primacy agency at the time of this requirement, no later than three months prior to the date the system is otherwise required to start E. coli monitoring under paragraph (C) of this rule.

(4) Systems serving less than ten thousand people shall sample their source water for Cryptosporidium at least twice per month for twelve months or at least monthly for twenty-four months if they meet one of the following, based on monitoring conducted under paragraph (A)(2) of this rule:

(a) For systems using lake/reservoir sources, the annual mean E. coli concentration is greater than ten E. coli per one hundred milliliters.

(b) For systems using flowing stream sources, the annual mean E. coli concentration is greater than fifty E. coli per one hundred milliliters.

(c) The system does not conduct E. coli monitoring as described in paragraph (A)(2) of this rule.



(d) Systems using a well designated as surface water in accordance with rule 3745-81-76 of the Administrative Code shall comply with the requirements of paragraph (A)(4) of this rule based on the E. coli level that applies to the nearest surface water body. If no surface water body is nearby, the system shall comply based on the requirements that apply to systems using lake/reservoir sources.

(5) For systems serving less than ten thousand people, the primacy agency at the time of this requirement may accept monitoring for an indicator other than E. coli under paragraph (A)(2) of this rule. The primacy agency also may accept an alternative to the E. coli concentration in paragraph (A)(4) of this rule to trigger Cryptosporidium monitoring. This acceptance by the primacy agency shall be provided to the system in writing and include the basis for the primacy agency's determination that the alternative indicator and/or trigger level will provide a more accurate identification of whether a system will exceed the Bin 1 Cryptosporidium level in paragraphs (A) to (D) of rule 3745-81-67 of the Administrative Code.

(6) Systems may sample more frequently if the sampling frequency is evenly spaced throughout the monitoring period.

(B) Second round of source water monitoring.

Systems shall conduct a second round of source water monitoring that meets the requirements for monitoring parameters, frequency, and duration described in paragraph (A) of this rule, unless they meet the monitoring exemption criteria in paragraph (C) of this rule.

(C) Monitoring avoidance.

(1) Systems are not required to conduct source water monitoring under this rule if the system will provide a total of at least 5.5-log of treatment for Cryptosporidium, equivalent to meeting the treatment requirements of Bin 4 in paragraph (E) of rule 3745-81-67 of the Administrative Code.

(2) If a system chooses to provide the level of treatment in paragraph (C)(1) of this rule, as applicable, rather than start source water monitoring, the system shall notify the primacy agency at the time of this requirement, in writing no later than the date the system is otherwise required to



submit a sampling schedule for monitoring in accordance with paragraph (G) of this rule.

Alternatively, a system may choose to stop sampling at any point after it has initiated monitoring if it notifies the primacy agency in writing that it will provide this level of treatment. Systems shall install and operate technologies to provide this level of treatment by the applicable treatment compliance date in paragraph (F) of rule 3745-81-67 of the Administrative Code. The system shall obtain plan approval of the treatment process scheme which provides at least 5.5 log of treatment. The primacy agency may require additional performance monitoring and reporting.

(D) Plants operating only part of the year.

Systems that operate for only part of the year shall conduct source water monitoring in accordance with this rule with the following modifications:

(1) Sample the source water only during the months that the plant operates unless the director specifies another monitoring period based on plant operating practices.

(2) Systems with plants that operate less than six months per year and that monitor for *Cryptosporidium* collect at least six *Cryptosporidium* samples ,evenly spaced throughout the period the plant operates, per year during each of two years or monitoring.

(E) New sources.

Source water monitoring of new sources shall meet the requirements in paragraphs (E)(1) to (E)(3) of this rule unless the system meets the monitoring avoidance requirements of paragraph (C) of this rule. The system shall also meet the bin classification and *Cryptosporidium* treatment requirements of paragraphs (A) to (E) of rule 3745-81-67 of the Administrative Code, as applicable, for the new source on a schedule the director approves.

(1) An existing system that begins using a new source of surface water shall monitor the new source on a schedule the director approves.

(2) A new system that begins operation using a new source shall monitor the new source on a schedule the director approves.



(3) The system shall begin a second round of source water monitoring no later than six years following initial bin classification in accordance with paragraphs (A) to (D) of rule 3745-81-67 of the Administrative Code.

(4) A new surface water source shall be sampled for twelve consecutive months and analyzed for the contaminants that are listed in the appendix to this rule, "Required Analyses for New Surface Water Sources." The director may reduce or add to the contaminants that are listed in the appendix to this rule because of treatment, promulgated drinking water standards, or other criteria. Other criteria may include existing or emerging contaminants which may pose a threat to public health. Samples collected from a public water system surface water source shall be analyzed in a laboratory certified to analyze drinking water for contaminants in accordance with Chapter 3745-89 of the Administrative Code. The analytical methods shall be the same as required by the entry point to the distribution system monitoring in accordance with rule 3745-81-27 of the Administrative Code and include all the volatile organic and synthetic organic analytes that are quantified by the laboratory for the organic analytical method. Cryptosporidium samples for new surface water sources shall be collected in accordance with the source monitoring requirements in this rule and 3745-81-66 of the Administrative Code.

(F) Failure to collect any source water sample required under this rule in accordance with the sampling schedule, sampling location, analytical method, approved laboratory, and reporting requirements of paragraphs (G) to (I) of this rule, paragraph (H) of rule 3745-81-27, rule 3745-89-11, and paragraph (A) of rule 3745-81-66 of the Administrative Code, is a monitoring violation.

(G) Sampling schedules.

(1) Systems required to conduct source water monitoring in accordance with paragraphs (A) to (F) of this rule shall submit a sampling schedule that specifies the calendar dates when the system will collect each required sample.

(a) Systems shall submit their sampling schedule for the initial round of source water monitoring in accordance with paragraph (A) of this rule to the primacy agency at the time of this requirement electronically. If a system is unable to submit the sampling schedule electronically, the system may



use an alternative approach for submitting the sampling schedule that the primacy agency approves.

(b) Systems shall submit sampling schedules for the second round of source water monitoring required by paragraph (B) of this rule to the director.

(c) If the primacy agency at the time of this requirement does not respond to a system regarding its sampling schedule, the system shall sample at the reported schedule.

(2) Systems shall collect samples within two days before or two days after the dates indicated in their sampling schedule (e.g., within a five day period around the schedule date) unless one of the following conditions applies:

(a) 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 five day period, as close to the scheduled date as is feasible unless the primacy agency at the time of this requirement accepts an alternative sampling date. The system shall submit an explanation for the delayed sampling date to the primacy agency concurrent with the shipment of the sample to the laboratory.

(b) If a system is unable to report a valid analytical result for a scheduled sampling date due to equipment failure, loss of or damage to the sample, failure to comply with the analytical method requirements, including the quality control requirements in paragraph (H) of rule 3745-81-27 of the Administrative Code, or the failure of an approved laboratory to analyze the sample, collect a replacement sample. The system shall collect the replacement sample not later than twenty-one days after receiving information that an analytical result cannot be reported for the scheduled date unless the system demonstrates that collecting a replacement sample within this time frame is not feasible or the director accepts an alternative resampling date. The system shall submit an explanation for the delayed sampling date to the primacy agency at the time of this requirement, concurrent with the shipment of the sample to the laboratory.

(3) Systems that fail to meet the criteria of paragraphs (G)(2)(a) and (G)(2)(b) of this rule for any source water sample required by paragraphs (A) to (F) of this rule shall revise their sampling schedules to add dates for collecting all missed samples and submit the revised schedule to the primacy agency at the time of this requirement, for acceptance prior to when the system begins



collecting the missed samples.

(H) Sampling locations.

Systems required to conduct source water monitoring by paragraphs (A) to (F) of this rule shall collect samples for each plant that treats a surface water source. Where multiple plants draw water from the same influent, such as the same pipe or intake, the primacy agency at the time of this requirement, may accept one set of monitoring results to be used to satisfy the requirements of paragraphs (A) to (F) of this rule for all plants.

(1) Systems shall collect source water samples prior to chemical treatment, such as coagulants, oxidants and disinfectants, unless the system meets the condition of paragraph (H)(2) of this rule.

(2) The primacy agency at the time of this requirement may accept a system to collect a source water sample after chemical treatment, if the primacy agency determines that collecting a sample prior to chemical treatment is not feasible for the system and that the chemical treatment is unlikely to have a significant adverse effect on the analysis of the sample.

(3) Systems that recycle filter backwash water shall collect source water samples prior to the point of filter backwash water addition.

(4) Bank filtration.

(a) Systems that receive *Cryptosporidium* treatment credit for bank filtration in accordance with paragraph (C) of rule 3745-81-73 of the Administrative Code, as applicable, shall collect source water samples in the surface water prior to bank filtration.

(b) Systems that do not receive *Cryptosporidium* treatment credit for bank filtration in accordance with paragraph (C) of rule 3745-81-73 of the Administrative Code and that use bank filtration as pretreatment to a filtration plant and do not intend to receive *Cryptosporidium* treatment credit for bank filtration under paragraph (F) of rule 3745-81-68 of the Administrative Code shall collect source water samples from the well (e.g., after bank filtration). Use of bank filtration during monitoring shall be consistent with routine operational practice.



(5) Multiple sources.

Systems with plants that use multiple water sources, including multiple surface water sources and blended surface water and ground water sources, shall collect samples as specified in paragraph (H)(5)(a) or (H)(5)(b) of this rule. The use of multiple sources during monitoring shall be consistent with routine operational practice.

(a) If a sampling tap is available where the sources are combined prior to treatment, collect samples from the tap.

(b) If a sampling tap where the sources are combined prior to treatment is not available, collect samples at each source near the intake on the same day and do either of the following:

(i) Systems may composite samples from each source into one sample prior to analysis. The volume of sample from each source shall be weighted according to the proportion of the source in the total plant flow at the time the sample is collected.

(ii) Systems may analyze samples from each source separately and calculate a weighted average of the analysis results for each sampling date. The weighted average shall be calculated by multiplying the analysis result for each source by the fraction the source contributed to total plant flow at the time the sample was collected and then summing these values.

(I) Additional requirements.

Systems shall submit a description of their sampling location to the primacy agency at the time of this requirement, at the same time as the sampling schedule required by paragraph (G) of this rule. This description shall address the position of the sampling location in relation to the system's water source and treatment processes, including pretreatment, points of chemical treatment, and filter backwash recycle. If the primacy agency does not respond to a system regarding sampling location, the system shall sample at the reported location.