

## Laws that apply to Microbial Monitoring of Drinking Water In Washington State

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### WAC 246-290-310

#### Maximum contaminant levels (MCLs) and maximum residual disinfectant levels (MRDLs).

(1) General.

(a) The purveyor shall be responsible for complying with the standards of water quality identified in this section. If a substance exceeds its MCL or its maximum residual disinfectant level (MRDL), the purveyor shall take follow-up action under WAC 246-290-320.

(b) When enforcing the standards described under this section, the department shall enforce compliance with the primary standards as its first priority.

(2) **Bacteriological.**

(a) MCLs under this subsection shall be considered primary standards.

(b) If coliform presence is detected in any sample, the purveyor shall take follow-up action under WAC 246-290-320(2).

(c) **Acute MCL.** An acute MCL for coliform bacteria occurs when there is:

(i) **Fecal coliform presence in a repeat sample;**

(ii) **E. coli presence in a repeat sample;** or

(iii) **Coliform presence in any repeat samples collected as a follow-up to a sample with fecal coliform or E. coli presence.**

Note:

For the purposes of the public notification requirements in Part 7, Subpart A of this chapter, an acute MCL is a violation that requires Tier 1 public notification.

(d) **Nonacute MCL.** A nonacute MCL for coliform bacteria occurs when:

(i) **Systems taking less than forty routine samples during the month have more than one sample with coliform presence;** or

(ii) **Systems taking forty or more routine samples during the month have more than 5.0 percent with coliform presence.**

(e) **MCL compliance.** The purveyor shall determine compliance with the coliform MCL for each month the system provides drinking water to the public. In determining MCL compliance, the purveyor shall:

(i) Include:

(A) **Routine samples;** and

(B) **Repeat samples.**

(ii) Not include:

(A) **Samples invalidated under WAC 246-290-320 (2)(d);** and

(B) **Special purpose samples.**

**WAC 246-290-320**

**Follow-up Action.**

**(1) General.**

- (a) When an MCL or MRDL violation or exceedance occurs, the purveyor shall take follow-up action as described in this section.
- (b) When a primary standard violation occurs, the purveyor shall:
  - (i) Notify the department under WAC 246-290-480<sup>1</sup>;
  - (ii) Notify the consumers served by the system and the owner or operator of any consecutive system served in accordance with 40 C.F.R. 141.201 through 208, and Part 7, Subpart A of this chapter;
  - (iii) Determine the cause of the contamination; and
  - (iv) Take action as directed by the department.
- (c) When a secondary standard violation occurs, the purveyor shall notify the department and take action as directed by the department.
- (d) The department may require additional sampling for confirmation of results.

**(2) Bacteriological.**

- (a) When coliform bacteria are present in any sample and the sample is not invalidated under (d) of this subsection, the purveyor shall ensure the following actions are taken:
  - (i) The sample is analyzed for fecal coliform or E. coli. When a sample with a coliform presence is not analyzed for E. coli or fecal coliforms, the sample shall be considered as having a fecal coliform presence for MCL compliance purposes;
  - (ii) Repeat samples are collected in accordance with (b) of this subsection;
  - (iii) Triggered source water monitoring is conducted in accordance with (g) of this subsection unless the department determines and documents in writing that the total coliform positive sample collected was caused by a distribution system deficiency;

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<sup>1</sup> WAC 246-290-480(2)(a) Unless otherwise specified in this chapter, the purveyor shall report to the department within forty-eight hours the failure to comply with any national primary drinking water regulation (including failure to comply with any monitoring requirements) as set forth in this chapter. For violations assigned to Tier 1 in WAC 246-290-71001, the department must be notified as soon as possible, but no later than twenty-four hours after the violation is known.

WAC 246-290-480(2)(f) Bacteriological. The purveyor shall notify the department of the presence of: (i) Coliform in a sample, within ten days of notification by the laboratory; and (ii) Fecal coliform or E. coli in a sample, by the end of the business day in which the purveyor is notified by the laboratory. If the purveyor is notified of the results after normal close of business, then the purveyor shall notify the department before the end of the next business day.

WAC 246-290-480(2)(n) Systems shall submit to the department, in accordance with 40 C.F.R. 141.31(d), a certification that the system has complied with the public notification regulations (Part 7, Subpart A of this chapter) when a public notification is required. Along with the certification, the system shall submit a representative copy of each type of notice.

WAC 246-290-71001

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(iv) The department is notified in accordance with WAC 246-290-480; and

(v) The cause of the coliform presence is determined and corrected.

(b) Repeat samples.

(i) The purveyor shall collect repeat samples in order to confirm the original sample results and to determine the cause of the coliform presence. Additional treatment, such as batch or shock chlorination, shall not be instituted prior to the collection of repeat samples unless prior authorization by the department is given. Following collection of repeat samples, and before the analytical results are known, there may be a need to provide interim precautionary treatment or other means to insure public health protection. The purveyor shall contact the department to determine the best interim approach in this situation.

(ii) The purveyor shall collect and submit for analysis a set of repeat samples for every sample in which the presence of coliforms is detected. A set of repeat coliform samples consists of:

(A) Four repeat samples for systems collecting one routine coliform sample each month; or

(B) Three repeat samples for all systems collecting more than one routine coliform sample each month.

(iii) The purveyor shall collect repeat sample sets according to Table 7;

(iv) The purveyor shall collect one set of repeat samples for each sample with a coliform presence. All samples in a set of repeat samples shall be collected on the same day and submitted for analysis within twenty-four hours after notification by the laboratory of a coliform presence, or as directed by the department.

(v) When repeat samples have coliform presence, the purveyor shall:

(A) Contact the department and collect a minimum of one additional set of repeat samples as directed by the department; or

(B) Collect one additional set of repeat samples for each sample where coliform presence was detected.

(vi) The purveyor of a system providing water to consumers via a single service shall collect repeat samples from the same location as the sample with a coliform presence. The set of repeat samples shall be collected:

(A) On the same collection date;

(B) Over consecutive days with one sample collected each day until the required samples in the set of repeat samples are collected; or

(C) As directed by the department.

(vii) If a sample with a coliform presence was collected from the first two or last two active services, the purveyor shall monitor as directed by the department;

(viii) The purveyor may change a previously submitted routine sample to a sample in a set of repeat samples when the purveyor:

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- (A) Collects the sample within five active adjacent service connections of the location from which the initial sample with a coliform presence was collected;
  - (B) Collects the sample after the initial sample with a coliform presence was submitted for analysis;
  - (C) Collects the sample on the same day as other samples in the set of repeat samples, except under (b)(iv) of this subsection; and
  - (D) Requests and receives approval from the department for the change.
- (ix) The department may determine that sets of repeat samples specified under this subsection are not necessary during a month when a nonacute coliform MCL violation is determined for the system.
- (c) Monitoring frequency following a coliform presence. Systems having one or more coliform presence samples that were not invalidated during the previous month shall collect and submit for analysis the minimum number of samples shown in the last column of Table 2.
- (i) The purveyor may obtain a reduction in the monitoring frequency requirement when one or more samples with a coliform presence were collected during the previous month, if the purveyor proves to the satisfaction of the department;
    - (A) The cause of the sample with a coliform presence; and
    - (B) The problem is corrected before the end of the next month the system provides water to the public.
  - (ii) If the monitoring frequency requirement is reduced, the purveyor shall collect and submit at least the minimum number of samples required when no samples with a coliform presence were collected during the previous month.
- (d) Invalid samples. Routine and repeat coliform samples may be determined to be invalid under any of the following conditions:
- (i) A certified laboratory determines that the sample results show:
    - (A) Multiple tube technique cultures that are turbid without appropriate gas production;
    - (B) Presence-absence technique cultures that are turbid in the absence of an acid reaction;
    - (C) Occurrence of confluent growth patterns or growth of TNTC (too numerous to count) colonies without a surface sheen using a membrane filter analytic technique;
  - (ii) The analyzing laboratory determines there is excess debris in the sample.
  - (iii) The analyzing laboratory establishes that improper sample collection or analysis occurred;
  - (iv) The department determines that a non-distribution system problem has occurred as indicated by:
    - (A) All samples in the set of repeat samples collected at the same location, including households, as the original coliform presence sample also are coliform presence; and

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(B) All other samples from different locations (households, etc.) in the set of repeat samples are free of coliform.

(v) The department determines a coliform presence result is due to a circumstance or condition that does not reflect water quality in the distribution system.

(e) Follow-up action when an invalid sample is determined. The purveyor shall take the following action when a coliform sample is determined to be invalid:

(i) Collect and submit for analysis an additional coliform sample from the same location as each invalid sample within twenty-four hours of notification of the invalid sample; or

(ii) In the event that it is determined that the invalid sample resulted from circumstances or conditions not reflective of distribution system water quality, collect a set of samples in accordance with Table 7; and

(iii) Collect and submit for analysis samples as directed by the department.

(f) Invalidated samples shall not be included in determination of the sample collection requirement for compliance with this chapter.

(g) Triggered source water monitoring.

(i) All groundwater systems with their own groundwater source(s) must conduct triggered source water monitoring unless the following conditions exist:

(A) The system has submitted a project report and received approval that it provides at least 4-log treatment of viruses (using inactivation, removal, or a department approved combination of 4-log virus inactivation and removal) before or at the first customer for each groundwater source; and

(B) The system is conducting compliance monitoring under WAC 246-290-453(2).

(ii) Any groundwater source sample required under this subsection must be collected at the source prior to any treatment unless otherwise approved by the department.

(iii) Any source sample collected under this subsection must be at least 100 mL in size and must be analyzed for E. coli using one of the analytical methods under 40 C.F.R. 141.402(c).

(iv) Groundwater systems must collect at least one sample from each groundwater source in use at the time a routine sample collected under WAC 246-290-300(3) (see below) is total coliform-positive and not invalidated under (d) of this subsection. These source samples must be collected within twenty-four hours of notification of the total coliform-positive sample. The following exceptions apply:

(A) The twenty-four hour time limit may be extended if granted by the department and will be determined on a case-by-case basis. If an extension is granted, the system must sample by the deadline set by the department.

(B) Systems with more than one groundwater source may meet the requirements of (g)(iv) of this subsection by sampling a representative groundwater source or sources. The system must have an approved triggered source water monitoring plan that identifies one or more groundwater sources that are representative of each monitoring site in the

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system's coliform monitoring plan under WAC 246-290-300 (3)(b). This plan must be approved by the department before representative sampling will be allowed.

(C) Groundwater systems serving one thousand people or fewer may use a repeat sample collected from a groundwater source to meet the requirements of (b) and (g)(iv) of this subsection. If the repeat sample collected from the groundwater source is E. coli positive, the system must comply with (g)(v) of this subsection.

(v) Groundwater systems with an E. coli positive source water sample that is not invalidated under (g)(vii) of this subsection, must:

(A) Provide Tier 1 public notice under Part 7, Subpart A of this chapter and special notification under WAC 246-290-71005 (4) and (5);

(B) If directed by the department, take corrective action as required under WAC 246-290-453(1); and

(C) Systems that are not directed by the department to take corrective action must collect five additional samples from the same source within twenty-four hours of being notified of the E. coli positive source water sample. If any of the five additional samples are E. coli positive, the system must take corrective action under WAC 246-290-453(1).

(vi) Any consecutive groundwater system that has a total coliform-positive routine sample collected under WAC 246-290-300(3) and not invalidated under (d) of this subsection, must notify each wholesale system it receives water from within twenty-four hours of being notified of the total coliform-positive sample and comply with (g) of this subsection.

(A) A wholesale groundwater system that receives notice from a consecutive system under (g)(vi) of this subsection must conduct triggered source water monitoring under (g) of this subsection unless the department determines and documents in writing that the total coliform-positive sample collected was caused by a distribution system deficiency in the consecutive system.

(B) If the wholesale groundwater system source sample is E. coli positive, the wholesale system must notify all consecutive systems served by that groundwater source within twenty-four hours of being notified of the results and must meet the requirements of (g)(v) of this subsection.

(C) Any consecutive groundwater system receiving water from a source with an E. coli positive sample must notify all their consumers as required under (g)(v)(A) of this subsection.

(vii) An E. coli positive groundwater source sample may be invalidated only if the following conditions apply:

(A) The system provides the department with written notice from the laboratory that improper sample analysis occurred; or

(B) The department determines and documents in writing that there is substantial evidence that the E. coli positive groundwater sample is not related to source water quality.

(viii) If the department invalidates an E. coli positive groundwater source sample, the system must collect another source water sample within twenty-four hours of being notified by the department of its invalidation decision and have it analyzed using the same

analytical method. The department may extend the twenty-four hour time limit under (g)(iv)(A) of this subsection.

(ix) Groundwater systems that fail to meet any of the monitoring requirements of (g) of this subsection must conduct Tier 2 public notification under Part 7, Subpart A of this chapter.

**WAC 246-290-300 Monitoring Requirements**

(3) Bacteriological.

(a) The purveyor shall be responsible for collection and submittal of coliform samples from representative points throughout the distribution system. Samples shall be collected after the first service and at regular time intervals each month the system provides water to consumers. Samples shall be collected that represent normal system operating conditions.

(i) Systems providing disinfection treatment shall measure the residual disinfectant concentration within the distribution system at the same time and location of routine and repeat samples.

(ii) Systems providing disinfection treatment shall assure that disinfectant residual concentrations are measured and recorded on all coliform sample report forms submitted for compliance purposes.

(b) Coliform monitoring plan.

(i) The purveyor shall prepare a written coliform monitoring plan and base routine monitoring upon the plan. The plan shall include coliform sample collection sites and a sampling schedule.

(ii) The purveyor shall:

(A) Keep the coliform monitoring plan on file with the system and make it available to the department for inspection upon request;

(B) Revise or expand the plan at any time the plan no longer ensures representative monitoring of the system, or as directed by the department; and

(C) Submit the plan to the department for review and approval when requested and as part of the water system plan required under WAC 246-290-100.

(c) Monitoring frequency. The number of required routine coliform samples is based on total population served.

(i) Purveyors of community systems shall collect and submit for analysis no less than the number of routine samples listed in Table 1 during each calendar month of operation;

(ii) Unless directed otherwise by the department, purveyors of non-community systems shall collect and submit for analysis no less than the number of samples required in Table 1, and no less than required under 40 C.F.R. 141.21. Each month's population shall be based on the average daily population and shall include all residents and nonresidents served during that month. During months when the average daily population served is less than twenty-five, routine sample collection is not required when:

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- (A) Using only protected groundwater sources;
  - (B) No coliform were detected in samples during the previous month; and
  - (C) One routine sample has been collected and submitted for analysis during one of the previous two months.
- (iii) Purveyors of systems serving both a resident and a nonresident population shall base their minimum sampling requirement on the total of monthly populations served, both resident and nonresident as determined by the department, but no less than the minimum required in Table 1; and
- (iv) Purveyors of systems with a nonresident population lasting two weeks or less during a month shall sample as directed by the department. Sampling shall be initiated at least two weeks prior to the time service is provided to consumers.
- (v) Purveyors of TNC systems shall not be required to collect routine samples in months where the population served is zero or the system has notified the department of an unscheduled closure.
- (d) Invalid samples. When a routine or repeat coliform sample is determined invalid under WAC 246-290-320 (2)(d), the purveyor shall:
- (i) Not include the sample in the determination of monitoring compliance; and
  - (ii) Take follow-up action as defined in WAC 246-290-320 (2)(d).
- (e) Assessment source water monitoring. If directed by the department, a groundwater system must conduct assessment source water monitoring which may include, but is not limited to, collection of at least one representative groundwater source sample each month the source provides groundwater to the public, for a minimum of twelve months.
- (i) Sampling must be conducted as follows:
- (A) Source samples must be collected at a location prior to any treatment. If the water system's configuration does not allow sampling at the source itself, the department may approve an alternative source sampling location representative of the source water quality.
  - (B) Source samples must be at least 100 mL in size and must be analyzed for E. coli using one of the analytical methods under 40 C.F.R. 141.402(c).
- (ii) A groundwater system may use a triggered source water sample collected under WAC 246-290-320 (2)(g) to meet the requirements for assessment source water monitoring.
- (iii) Groundwater systems with an E. coli positive assessment source water sample that is not invalidated under WAC 246-290-320 (2)(g)(vii), and consecutive systems receiving water from this source must:
- (A) Provide Tier 1 public notice under Part 7, Subpart A of this chapter and special notification under WAC 246-290-71005 (4) and (5); and
  - (B) Take corrective action as required under WAC 246-290-453(1).



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(iv) The purveyor of a groundwater system that fails to conduct assessment source water monitoring as directed by the department shall provide Tier 2 public notice under Part 7, Subpart A of this chapter.

(f) The purveyor using a surface water or GWI source shall collect representative source water samples for bacteriological density analysis under WAC 246-290-664 and 246-290-694 as applicable.

### **WAC 246-290-451**

#### **Disinfection of drinking water.**

(1) No portion of a public water system containing potable water shall be put into service, nor shall service be resumed until the facility has been effectively disinfected.

(a) In cases of new construction, drinking water shall not be furnished to the consumer until satisfactory bacteriological samples have been analyzed by a laboratory certified by the state; and

(b) In cases of existing water mains, when the integrity of the main is lost resulting in a significant loss of pressure that places the main at risk to cross-connection contamination, the purveyor shall use standard industry practices such as flushing, disinfection, and/or bacteriological sampling to ensure adequate and safe water quality prior to the return of the line to service;

(c) If a cross-connection is confirmed, the purveyor shall satisfy the reporting requirements as described under WAC 246-290-490(8).

(2) The procedure used for disinfection shall conform to standards published by the American Water Works Association, or other industry standards acceptable to the department.

(3) The purveyor of a system using surface water or GWI shall meet disinfection requirements specified in Part 6 of this chapter.

(4) The purveyor of a system using groundwater shall meet the requirements under subsection (6) of this section if required by the department to disinfect for any of the following reasons:

(a) Determination that the groundwater source is in hydraulic connection to surface water under WAC 246-290-640(4);

(b) A history of unsatisfactory source coliform sampling; or

(c) A microbiological contaminant threat within the sanitary control area as defined in WAC 246-290-135.

(5) The purveyor of a groundwater system that is required to disinfect as a result of becoming a SSNC due to repeated total coliform MCL or major repeat violations shall meet the requirements under subsection (7) of this section.

(6) If disinfection is required under subsection (4) of this section, the following requirements must be met:

(a) Provide a minimum contact time at or before the first customer of:

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- (i) Thirty minutes if 0.2 mg/L free chlorine residual is maintained;
  - (ii) Ten minutes if 0.6 mg/L free chlorine residual is maintained; or
  - (iii) Any combination of free chlorine residual concentration (C), measured in mg/L and contact time (T), measured in minutes, that result in a CT product (C x T) of greater than or equal to six; and
- (b) Maintain a detectable residual disinfectant concentration in all active parts of the distribution system, measured as total chlorine, free chlorine, combined chlorine, or chlorine dioxide.
- (c) The department may require the purveyor to provide longer contact times, higher chlorine residuals, or additional treatment to protect the health of consumers served by the water system.
- (d) To demonstrate the required level of treatment is maintained, the purveyor shall:
- (i) Monitor the residual disinfectant concentration at the point of entry to the distribution system, or at a department-approved location, at least once every Monday through Friday (except holidays) that water is supplied;
  - (ii) Calculate the daily CT value at or before the first customer; and
  - (iii) Submit monthly groundwater treatment reports to the department using a department-approved form by the tenth day of the following month.
- (e) All analyses required in this subsection shall be conducted in accordance with EPA standard methods.
- (f) The purveyor may be required to monitor the residual disinfectant concentration each calendar day water is supplied to the distribution system if the department considers treatment operation is unreliable.
- (g) The department may require the use of continuous residual analyzers and recorders to assure adequate monitoring of residual concentrations.
- (7) If disinfection is required under subsection (5) of this section, or a chemical disinfectant is added to a groundwater source for any other reason, the following requirements must be met:
- (a) Monitor residual disinfectant concentration at representative points throughout the distribution system once each day, excluding weekends and holidays, and at the same time and location of routine and repeat coliform sample collection. Frequency of disinfection residual monitoring may be reduced upon written request to the department if it can be shown that disinfection residuals can be maintained on a reliable basis without the provision of daily monitoring.
  - (b) Maintain a detectable residual disinfectant concentration in all active parts of the distribution system, measured as total chlorine, free chlorine, combined chlorine, or chlorine dioxide 480
- . Water in the distribution system with an HPC level less than or equal to 500 organisms/mL is considered to have a detectable residual disinfectant concentration.

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(c) The department may require the purveyor to provide higher chlorine residuals, or additional treatment to protect the health of consumers served by the water system.

(d) All analyses required in this subsection shall be conducted in accordance with EPA standard methods.

(e) The department may require the use of continuous residual analyzers and recorders to assure adequate monitoring of residual concentrations.

### **WAC 246-290-453**

#### **Treatment techniques for groundwater systems.**

(1) Groundwater systems with significant deficiencies identified under WAC 246-290-416, or source fecal contamination as determined under WAC 246-290-320 (2)(g)(v)(C) or 246-290-300 (3)(e), or as directed by the department under WAC 246-290-320 (2)(g)(v)(B) must:

(a) Take one or more of the following corrective actions:

(i) Correct all significant deficiencies;

(ii) Provide an alternate source of water;

(iii) Eliminate the source of contamination; or

(iv) Provide treatment that reliably achieves at least 4-log treatment of viruses (using inactivation, removal, or a department-approved combination of 4-log virus inactivation and removal) before or at the first customer for the groundwater source.

(b) Consult with the department regarding appropriate corrective action within thirty days unless otherwise directed by the department to implement a specific corrective action.

(c) Complete corrective action as directed by the department or be in compliance with an approved corrective action plan within one hundred twenty days (or earlier if directed by the department) of receiving written notice from the department of a significant deficiency or source fecal contamination under this subsection. Any modifications of a corrective action plan must be approved by the department.

#### **40 CFR 141.201 General public notification requirements.**

Public water systems in States with primacy for the public water system supervision (PWSS) program must comply with the requirements in this subpart no later than May 6, 2002 or on the date the State-adopted rule becomes effective, whichever comes first. Public water systems in jurisdictions where EPA directly implements the PWSS program must comply with the requirements in this subpart on October 31, 2000. Prior to these dates, public water systems must continue to comply with the public notice requirements in § 141.32 of this part. The term "primacy agency" is used in this subpart to refer to either EPA or the State or the Tribe in cases where EPA, the State, or the Tribe exercises primary enforcement responsibility for this subpart.

(a) Who must give public notice? Each owner or operator of a public water system (community water systems, non-transient non-community water systems, and transient non-community water systems) must give notice for all violations of national primary drinking water regulations (NPDWR) and for other situations, as listed in Table 1. The term

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“NPDWR violations” is used in this subpart to include violations of the maximum contaminant level (MCL), maximum residual disinfection level (MRDL), treatment technique (TT), monitoring requirements, and testing procedures in this part 141. Appendix A to this subpart identifies the tier assignment for each specific violation or situation requiring a public notice.

### **40 CFR 141.201 - Violation Categories and Other Situations Requiring a Public Notice**

(1) NPDWR violations:

(i) Failure to comply with an applicable maximum contaminant level (MCL) or maximum residual disinfectant level (MRDL).

(ii) Failure to comply with a prescribed treatment technique (TT).

(iii) Failure to perform water quality monitoring, as required by the drinking water regulations.

(iv) Failure to comply with testing procedures as prescribed by a drinking water regulation.

(2) Variance and exemptions under sections 1415 and 1416 of SDWA:

(i) Operation under a variance or an exemption.

(ii) Failure to comply with the requirements of any schedule that has been set under a variance or exemption.

(3) Special public notices:

(i) Occurrence of a waterborne disease outbreak or other waterborne emergency.

(ii) Exceedance of the nitrate MCL by non-community water systems (NCWS), where granted permission by the primacy agency under 141.11(d) of this part.

(iii) Exceedance of the secondary maximum contaminant level (SMCL) for fluoride.

(iv) Availability of unregulated contaminant monitoring data.

(v) Other violations and situations determined by the primacy agency to require a public notice under this subpart, not already listed in Appendix A.

(b) What type of public notice is required for each violation or situation? Public notice requirements are divided into three tiers, to take into account the seriousness of the violation or situation and of any potential adverse health effects that may be involved. The public notice requirements for each violation or situation listed in Table 1 of this section are determined by the tier to which it is assigned. Table 2 of this section provides the definition of each tier. Appendix A of this part identifies the tier assignment for each specific violation or situation.

### **40 CFR 141.201 - Definition of Public Notice Tiers (Table 2)**

(1) Tier 1 public notice - required for NPDWR violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure.

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(2) Tier 2 public notice - required for all other NPDWR violations and situations with potential to have serious adverse effects on human health.

(3) Tier 3 public notice - required for all other NPDWR violations and situations not included in Tier 1 and Tier 2.

(c) Who must be notified? (1) Each public water system must provide public notice to persons served by the water system, in accordance with this subpart. Public water systems that sell or otherwise provide drinking water to other public water systems (i.e., to consecutive systems) are required to give public notice to the owner or operator of the consecutive system; the consecutive system is responsible for providing public notice to the persons it serves.

(2) If a public water system has a violation in a portion of the distribution system that is physically or hydraulically isolated from other parts of the distribution system, the primacy agency may allow the system to limit distribution of the public notice to only persons served by that portion of the system which is out of compliance. Permission by the primacy agency for limiting distribution of the notice must be granted in writing.

(3) A copy of the notice must also be sent to the primacy agency, in accordance with the requirements under 40 CFR 141.31(d).

### **40 CFR 141.202 Tier 1 Public Notice—Form, manner, and frequency of notice.**

(a) Which violations or situations require a Tier 1 public notice? Table 1 of this section lists the violation categories and other situations requiring a Tier 1 public notice. Appendix A to this subpart identifies the tier assignment for each specific violation or situation.

### **40 CFR 141.202 –Violation Categories and Other Situations Requiring a Tier 1 Public Notice**

(1) Violation of the MCL for total coliforms when fecal coliform or E. coli are present in the water distribution system (as specified in 40 CFR 141.63(b)), or when the water system fails to test for fecal coliforms or E. coli when any repeat sample tests positive for coliform (as specified in 40 CFR 141.21(e));

(7) Occurrence of a waterborne disease outbreak, as defined in 40 CFR 141.2, or other **waterborne emergency** (such as a **failure or significant interruption in key water treatment processes, a natural disaster that disrupts the water supply or distribution system, or a chemical spill or unexpected loading of possible pathogens into the source water that significantly increases the potential for drinking water contamination**);

(8) Detection of E. coli, enterococci, or coliphage in source water samples as specified in § 141.402(a) and § 141.402(b);

(9) **Other violations or situations with significant potential to have serious adverse effects on human health as a result of short-term exposure, as determined by the primacy agency either in its regulations or on a case-by-case basis.**

(b) When is the Tier 1 public notice to be provided? What additional steps are required? Public water systems must:

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(1) Provide a public notice as soon as practical but no later than 24 hours after the system learns of the violation;

(2) Initiate consultation with the primacy agency as soon as practical, but no later than 24 hours after the public water system learns of the violation or situation, to determine additional public notice requirements; and

(3) Comply with any additional public notification requirements (including any repeat notices or direction on the duration of the posted notices) that are established as a result of the consultation with the primacy agency. Such requirements may include the timing, form, manner, frequency, and content of repeat notices (if any) and other actions designed to reach all persons served.

(c) What is the form and manner of the public notice? Public water systems must provide the notice within 24 hours in a form and manner reasonably calculated to reach all persons served. **The form and manner used by the public water system are to fit the specific situation, but must be designed to reach residential, transient, and non-transient users of the water system. In order to reach all persons served, water systems are to use, at a minimum, one or more of the following forms of delivery:**

(1) **Appropriate broadcast media (such as radio and television);**

(2) **Posting of the notice in conspicuous locations throughout the area served by the water system;**

(3) **Hand delivery of the notice to persons served by the water system; or**

(4) **Another delivery method approved in writing by the primacy agency.**