

Reporting and Record Keeping

- (1) Reporting requirements:
 - (a) Any person who has reason to believe that his or her actions have led to contamination of a public water system shall report that fact immediately to the water supplier and the Authority.
 - (b) Laboratory Reporting:
 - (A) Analyses required by OAR 333-061-0036 and performed by an accredited laboratory as defined in OAR 333-061-0036(1)(b) must be reported on a form produced by the accredited laboratory. The laboratory analysis report must be submitted to the Authority within 10 days of the end of the month, or within 10 days of the end of the required monitoring period.
 - (B) "Analytical Run" means the process during which a set of analytical drinking water samples along with an appropriate number of blanks, matrix spikes, or quality control samples are analyzed according to National Environmental Laboratory Accreditation Conference requirements to determine the presence, absence, or concentration of a specific target analyte or analytes. An analytical run is complete when the instrument performing the sample analysis generates a report of the sample analysis.
 - (C) Mandatory reporting requirements for primary laboratories as defined in OAR 333-061-0036(1)(b)(A). These laboratories must:
 - (i) Validate the results of any sample analysis and report that analysis directly to the Authority and to the water supplier within 48 hours or two business days of completing the analytical run if the samples analysis:
 - (I) Exceeds the MCL for nitrate as specified in OAR 333-061-0030(1); or
 - (II) Is positive for coliform bacteria.
 - (ii) Report any sample analysis directly to the Authority and to the water supplier within 24 hours or on the next business day after validating a sample result that exceeds the MCL for any chemical analyte specified in OAR 333-061-0030 other than nitrate.
 - (iii) Report any sample analysis directly to the Authority and to the water supplier within 24 hours or on the next business day after obtaining a sample result from a subcontracted laboratory, if the sample analysis:
 - (I) Exceeds the MCL for nitrate as specified in OAR 333-061-0030(1) or is positive for coliform bacteria; or
 - (II) Exceeds the MCL for any chemical analyte specified in OAR 333-061-0030 other than nitrate upon validating the sample analysis.
 - (D) Mandatory reporting requirements for subcontracted laboratories as defined in OAR 333-061-0036(1)(b)(B). These laboratories must:

- (i) Validate the results of any sample analysis and report that analysis to their client laboratory within 48 hours or two business days of completing the analytical run if the analysis:
 - (I) Exceeds the MCL for nitrate as specified in OAR 333-061-0030(1); or
 - (II) Is positive for coliform bacteria.
 - (ii) Report any sample analysis to their client laboratory within 24 hours or on the next business day after validating a sample result that exceeds the MCL for any chemical analyte specified in OAR 333-061-0030 other than nitrate.
- (c) Water suppliers must report the following events to the Authority within 24 hours or sooner as prescribed in this subsection.
 - (A) The detection of any substance or pathogenic organisms in the water that has caused or is likely to cause physical suffering or illness.
 - (B) An exceedance of the MCL for *E. coli*, which must be reported to the Authority by the end of the day when the water supplier learns of the exceedance and which must be followed by public notice according to OAR 333-061-0042.
 - (C) Notification of an *E. coli*-positive routine sample, which must be reported to the Authority according to by the end of the day when the water supplier learns of the result, unless the water supplier is notified of the result after the Authority office is closed, in which case the water supplier must notify the Authority before the end of the next business day.
 - (D) Violation of a coliform investigation requirement as specified in OAR 333-061-0078(5), which must be followed by public notice according to OAR 333-061-0042.
- (d) The water supplier using a surface water source or a groundwater source under direct influence of surface water which provides filtration treatment shall report monthly after filtration is installed to the Authority the results of any test, measurement or analysis required by OAR 333-061-0036(5)(b) of these rules within 10 days after the end of the month.
 - (A) All systems using surface water or groundwater under the direct influence of surface water shall consult with the Authority within 24 hours, after learning:
 - (i) That the turbidity exceeded 5 NTU;
 - (ii) Of a waterborne disease outbreak potentially attributable to that water system;
 - (iii) That the disinfectant residual concentration in the water entering the distribution system fell below 0.2 mg/l and whether or not the residual was restored to at least 0.2 mg/l within four hours.
 - (B) In addition to the reporting and recordkeeping requirements in paragraph (1)(d)(A) of this rule, a public water system which provides conventional filtration treatment or direct filtration serving at least 10,000 people must

report monthly to the Authority the information specified in subparagraphs (1)(d)(B)(i) and (ii) of this rule. Public water systems which provide filtration treatment other than conventional filtration treatment, direct filtration, slow sand filtration, and diatomaceous earth filtration, regardless of population served, must also meet the requirements of paragraph (1)(d)(A) of this rule and must report monthly to the Authority the information specified in subparagraph (1)(d)(B)(i) of this rule. For the purposes of this rule, filter profile means a graphical representation of individual filter performance, based on continuous turbidity measurements or total particle counts versus time for an entire filter run, from start-up to backwash inclusively, that includes an assessment of filter performance while another filter is being backwashed.

- (i) Turbidity measurements as required by OAR 333-061-0036(5) must be reported within 10 days after the end of each month the system serves water to the public. Information that must be reported includes:
 - (I) The total number of filtered water turbidity measurements taken during the month;
 - (II) The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to the turbidity limits specified by OAR 333-061-0030(3)(b)(A) through (D);
 - (III) The date and value of any turbidity measurements taken during the month which exceed 1 NTU for systems using conventional filtration treatment or direct filtration, or which exceed the maximum level set by the Authority specified in OAR 333-061-0030(3)(b)(D).
 - (IV) The date and value of any turbidity measurements taken during the month which exceed 5 NTU for systems using slow sand filtration or diatomaceous earth filtration.
- (ii) Water systems must maintain the results of individual filter monitoring for at least three years. Water systems must report that they have conducted individual filter turbidity monitoring within 10 days after the end of each month the system serves water to the public. Water systems must also report individual filter turbidity measurement results within 10 days after the end of each month the system serves water to the public only if measurements demonstrate one or more of the conditions in subparagraphs (1)(d)(B)(ii)(I) through (IV) of this rule. Water systems that use lime softening may apply to the Authority for alternative exceedance levels for the levels specified in subparagraphs (1)(d)(B)(ii)(I) through (IV) of this rule if the water system can

demonstrate that higher turbidity levels in individual filters are due to lime carryover only and not due to degraded filter performance.

- (I) For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart, the water system must report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the water system must either produce a filter profile for the filter within seven days of the exceedance (if the water system is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.
- (II) For any individual filter that 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 four hours of continuous filter operation after the filter has been backwashed or otherwise taken offline, the system must report the filter number, the turbidity, and the date(s) on which the exceedance occurred. In addition, the system must either produce a filter profile for the filter within seven days of the exceedance (if the system is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.
- (III) For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of three consecutive months, the water system must report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the water system must conduct a self-assessment of the filter within 14 days of the exceedance and report that the self-assessment was conducted. The self assessment must consist of at least the following components: assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report.
- (IV) For any individual filter that has a measured turbidity level of greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of two consecutive months, the water system must report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the water system must

arrange to have a CPE by the Authority or a third party approved by the Authority conducted no later than 30 days following the exceedance and have the evaluation completed and submitted to the Authority no later than 90 days following the exceedance.

- (iii) If at any time the turbidity exceeds 1 NTU in representative samples of filtered water in a system using conventional filtration treatment or direct filtration, the system must inform the Authority as soon as possible, but no later than the end of the next business day.
 - (iv) If at any time the turbidity in representative samples of filtered water exceed the maximum level set by the Authority as specified in OAR 333-061-0030(3)(b)(D) for filtration technologies other than conventional filtration treatment, direct filtration, slow sand filtration, or diatomaceous earth filtration, the water system must inform the Authority as soon as possible, but no later than the end of the next business day.
- (C) In addition to the reporting and recordkeeping requirements in paragraph (1)(d)(A) of this rule, a public water system which provides conventional filtration treatment or direct filtration treatment serving less than 10,000 people must report monthly to the Authority the information specified in subparagraphs (1)(d)(B)(i) of this rule and the information specified in subparagraph (1)(d)(D) of this rule. Public water systems which provide filtration treatment other than conventional filtration treatment, direct filtration, slow sand filtration, and diatomaceous earth filtration regardless of population served must also meet the requirements of paragraph (1)(d)(A) of this rule and must report monthly to the Authority the information specified in subparagraph (1)(d)(B)(i) of this rule.
- (D) Water systems must maintain the results of individual filter monitoring for at least three years. Water systems must report that they have conducted individual filter turbidity monitoring within 10 days after the end of each month the system serves water to the public. Water systems must also report individual filter turbidity measurement results within 10 days after the end of each month the system serves water to the public only if measurements demonstrate one or more of the conditions in subparagraphs (1)(d)(D)(i) through (iii) of this rule. Water systems that use lime softening may apply to the Authority for alternative exceedance levels for the levels specified in subparagraphs (1)(d)(D)(i) through (iii) of this rule if the water system can demonstrate that higher turbidity levels in individual filters are due to lime carryover only and not due to degraded filter performance.
- (i) If the turbidity of an individual filter (or the turbidity of the combined filter effluent (CFE) for systems with two or less filters that monitor CFE in lieu of individual filter monitoring) is greater

than 1.0 NTU in two consecutive measurements taken 15 minutes apart, the water system must report to the Authority by the 10th day of the following month the filter number(s), the turbidity value(s) that exceeded 1.0 NTU, the corresponding date(s) of occurrence, and the cause (if known) for the elevated turbidity values. The Authority may request the water system produce a turbidity profile for the filter(s) in question.

- (ii) If the turbidity of an individual filter (or the turbidity of the combined filter effluent (CFE) for systems with two or less filters that monitor CFE in lieu of individual filter monitoring) is greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart for three consecutive months, the water system must conduct a filter self-assessment within 14 days of the date the turbidity exceeded 1.0 NTU during the third month, unless a CPE is performed in lieu of a filter self-assessment. Systems with two filters monitoring the CFE must conduct a filter self-assessment for both filters. The self-assessment must consist of the following components: assessment of filter performance; development of a filter profile as defined in paragraph (1)(d)(B) of this rule; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report. When a self-assessment is required, the water system must report the date the self-assessment was triggered, the date the self-assessment was completed, and the conclusion(s) of the self-assessment by the 10th of the following month or 14 days after the self-assessment was triggered only if the self-assessment was triggered during the last four days of the month.
- (iii) If the turbidity of an individual filter (or the turbidity of the combined filter effluent (CFE) for systems with two or less filters that monitor CFE in lieu of individual filter monitoring) is greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart for two consecutive months, the water system must report these turbidity results to the Authority by the 10th of the following month and arrange to have a CPE by the Authority or a third party approved by the Authority conducted within 60 days of the date the turbidity exceeded 2.0 NTU during the second month. The CPE report must be submitted to the Authority no later than 120 days following the date the turbidity exceeded 2.0 NTU during the second month. A CPE is not needed if the Authority or approved third party has conducted a CPE within the last 12 months or the Authority and the water system are jointly participating in an on-going Comprehensive Technical Assistance (CTA) project as part of the Composite Correction Program with the water system. When

a CPE is required, the water system must report that a CPE is required and the date that the CPE was triggered by the 10th day of the following month.

- (e) The water supplier for water systems using a surface water source or a groundwater source under direct influence of a surface source which does not provide filtration treatment shall report according to subsection (1)(d) of this rule in addition to the requirements of this subsection. Monthly reporting must begin no later than six months after the Authority determines a source to be GWUDI.
 - (A) Report to the Authority within 10 days after the end of each month, the results or analysis of:
 - (i) Fecal coliform or total coliform bacteria test results on raw (untreated) source water.
 - (ii) Daily disinfection "CT" values including parameters such as pH measurements, temperature, and disinfectant residuals at the first customer used to compute the "CT" values.
 - (iii) Daily determinations using the "CT" values of the adequacy of disinfectant available for inactivation of *Giardia lamblia* or viruses as specified in OAR 333-061-0032(1)(a).
 - (B) Report to the Authority within 10 days after the end of each Federal Fiscal year (September 30), the results of:
 - (i) The watershed control program requirements as specified in OAR 333-061-0032(2)(b)(B).
 - (ii) The on-site inspection summary requirements as specified in OAR 333-061-0032(2)(b)(C).
- (f) Special reporting requirements for groundwater systems.
 - (A) Water suppliers monitoring disinfection effectiveness for groundwater systems according to OAR 333-061-0036(11)(b) must notify the Authority any time the Authority-specified operating requirements are not met, including but not limited to, minimum residual disinfectant concentration, membrane operating criteria or membrane integrity, and alternative treatment operating criteria, if operation in accordance with the specified criteria is not restored within four hours. The water supplier must notify the Authority as soon as possible, but in no case later than the end of the next business day.
 - (B) Water suppliers must notify the Authority within 30 days of completing any corrective action as prescribed by OAR 333-061-0032(6).
 - (C) At groundwater systems subject to the requirements of OAR 333-061-0036(6)(i), water suppliers must provide documentation to the Authority within 30 days that a total coliform-positive sample met Authority criteria for exceptions to triggered source water monitoring requirements because the total coliform-positive sample was attributed to distribution system conditions.

- (D) At groundwater systems where monitoring as prescribed by OAR 333-061-0036(11)(b) is conducted, water suppliers must report the results of daily residual disinfectant concentration measurements at the entry point within 10 days after the end of each month.
- (g) All Community and NTNC public water systems shall report all of the following information pertaining to lead and copper to the Authority in accordance with the requirements of this subsection.
 - (A) Except as provided in subparagraph (1)(h)(A)(vii) of this rule, a public water system shall report the information below for all tap water samples and for all water quality parameter samples within 10 days following the end of each applicable monitoring period. For monitoring periods with a duration less than six-months, the end of the monitoring period is the last date samples can be collected during that period.
 - (i) The results of all tap samples for lead and copper including the location of each site and the criteria under which the site was selected for the system's sampling pool. With the exception of initial tap sampling, the system shall designate any site which was not sampled during previous monitoring periods, and include an explanation of why sampling sites have changed. By the applicable date specified in OAR 333-061-0036(10)(d)(A) for commencement of initial monitoring, each Community Water System which does not complete its targeted sampling pool meeting the criteria for tier 1 sampling sites shall send a letter to the Authority justifying its selection of tier 2 or tier 3 sampling sites. By the applicable date specified in OAR 333-061-0036(10)(d)(A) for commencement of initial monitoring, each NTNC water system which does not complete its sampling pool meeting the criteria for tier 1 sampling sites shall send a letter to the Authority justifying its selection of sampling sites.
 - (ii) A certification that each first draw sample collected by the water system is one-liter in volume and, to the best of their knowledge, has stood motionless in the service line, or in the interior plumbing of a sampling site, for at least six hours. Where residents collected samples, a certification that each tap sample collected by the residents was taken after the water system informed them of proper sampling procedures according to OAR 333-061-0036(10)(b).
 - (iii) The results of all tap samples for pH, and where applicable, alkalinity, calcium, conductivity, temperature, and orthophosphate or silica, and the results of all samples collected at the entry point(s) to the distribution system for applicable water quality parameters according to OAR 333-061-0036(10)(f).
 - (iv) Each water system that requests that the Authority reduce the number and frequency of sampling shall provide the information required in OAR 333-061-0036(10)(d)(D).

- (v) Documentation for each tap water lead and copper sample for which the water system requests invalidation.
 - (vi) The 90th percentile lead and copper tap water samples collected during each monitoring period.
 - (vii) A water system shall report the results of all water quality parameter samples collected for follow-up tap monitoring prescribed in OAR 333-061-0036(10)(f) during each six-month monitoring period within 10 days following the end of the monitoring period unless the Authority specifies a more frequent monitoring requirement.
- (B) A water system shall report the sampling results for all source water samples collected for lead and copper within the first 10 days following the end of each source water monitoring period according to OAR 333-061-0036(10)(g). With the exception of the first round of source water sampling, the system shall specify any site which was not sampled during previous monitoring periods, and include an explanation of why the sampling point has changed.
- (C) Corrosion control treatment reporting requirements. By the applicable dates according to OAR 333-061-0034(2)(a) through (d), systems shall report the following information: for systems demonstrating that they have already optimized corrosion control, the information required in OAR 333-061-0034(2)(d)(B) or (C); for systems required to optimize corrosion control, their recommendation regarding optimal corrosion control treatment according to OAR 333-061-0034(3)(a); for systems required to evaluate the effectiveness of corrosion control treatments, the information required in OAR 333-061-0034(3)(b) of these rules; for systems required to install optimal corrosion control designated by the Authority according to OAR 333-061-0034(3)(h), a letter certifying that the system has completed the installation.
- (D) Source water treatment reporting requirements. By the applicable dates according to OAR 333-061-0034(4)(a), systems shall report the following information to the Authority: the system's recommendation regarding source water treatment if required according to OAR 333-061-0034(4)(b)(A); for systems required to install source water treatment according to OAR 333-061-0034(4)(b)(B), a letter certifying that the system has completed the installation of the treatment designated by the Authority within 24 months after the Authority designated the treatment.
- (E) Public education program reporting requirements.
- (i) Any water system that is subject to the public education requirements in OAR 333-061-0034(5) shall, within 10 days after the end of each period in which the system is required to perform public education tasks in accordance with OAR 333-061-0034(5)(c), send written documentation to the Authority that contains:

- (I) A demonstration that the system has delivered the public education materials that meet the content and delivery requirements specified in OAR 333-061-0034(5)(a) through (c); and
- (II) A list of all the newspapers, radio stations, television stations, and facilities and organizations to which the system delivered public education materials during the period in which the system was required to perform public education tasks.
 - (ii) Unless required by the Authority, a system that previously has submitted the information in subparagraph (1)(g)(E)(i)(II) of this rule need not resubmit the information, as long as there have been no changes in the distribution list and the system certifies that the public education materials were distributed to the same list submitted previously.
 - (iii) No later than three months following the end of the monitoring period, each system must mail a sample copy of the consumer notification of tap results to the Authority along with a certification that the notification has been distributed in a manner consistent with the requirements of OAR 333-061-0034(5)(e).
- (F) Any system which collects sampling data in addition to that required by this subsection shall report the results to the Authority within the first 10 days following the end of the applicable monitoring period under OAR 333-061-0036(10) during which the samples are collected.
- (G) At a time specified by the Authority prior to the addition of a new source or any long-term change in water treatment, a water system deemed to have optimized corrosion control, or is subject to reduced monitoring, shall submit written documentation to the Authority describing the change or addition. The Authority must review and approve the addition or change before it is implemented by the water system.
- (H) Each ground water system that limits water quality parameter monitoring to a subset of entry points shall provide written correspondence to the Authority that identifies the selected entry points and includes information sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system. This correspondence must be submitted to the Authority prior to commencement of such monitoring.
- (h) The water supplier shall report to the Authority the results of any test, measurement or analysis required by these rules that is performed on site (for example, supplemental fluoride) by trained personnel within 10 days after the end of the month, except that reports which indicate that fluoride levels exceed 4.0 mg/l shall be reported within 48 hours:
 - (i) The water supplier shall submit to the Authority within 10 days after completing any public notification action as prescribed in OAR 333-061-0042 a

representative copy of each type of notice distributed to the water users or made available to the public and the media along with certification that the system has fully complied with the distribution and public notification requirements.

(j) Water systems required to sample for the contaminants listed in OAR 333-061-0036(4)(c) through (4)(e) or (4)(g) through (4)(k) must report the information listed in Tables 35 through 37 to the Authority. Water systems monitoring quarterly or more frequently must report to the Authority within 10 days after the end of each quarter in which samples were collected. Water systems required to sample less frequently than quarterly must report to the Authority within 10 days after the end of each monitoring period in which samples were collected. Water systems are required to submit the information listed in Tables 35 through 37, within 10 days of the end of any quarter in which monitoring is required.

(A) Disinfection byproducts. Water systems must report the information specified in Table 35 as follows:

Table 35

Water systems which	Must report ¹
Monitor for TTHM and HAA5 in accordance with OAR 333-061-0036(4)(c)(A) or (4)(d).	<p>The number of samples taken during the last quarter;</p> <p>The date and results of each sample taken during the last quarter;</p> <p>The arithmetic average of quarterly results for the last four quarters for each monitoring location (LRAA), beginning at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter;</p> <p>If the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters;</p> <p>Whether the MCL was violated at any monitoring location; and</p> <p>Any operational evaluation levels that were exceeded during the quarter and, if so, the location, date, and calculated TTHM and HAA5 levels.</p>
Monitor for chlorite as required by OAR 333-061-0036(4)(g).	<p>The number of entry point samples taken each month for the last 3 months;</p> <p>The location, date, and result of each sample both entry point and distribution system taken during the last quarter;</p> <p>For each month in the reporting period, the arithmetic average of all samples taken in each of the three sample sets taken in the distribution system; and</p> <p>Whether the MCL was violated as determined in OAR 333-061-0036(4)(g) including which month and how many times it was violated each month.</p>
Monitor for bromate as required by OAR 333-061-0036(4)(h).	<p>The number of samples taken during the last quarter;</p> <p>The location, date, and result of each sample taken during the last quarter;</p>

The arithmetic average of the monthly arithmetic averages of all samples taken in the last year;
Whether the MCL was violated as determined in OAR 333-061-0036(4)(h).

¹The Authority may choose to perform calculations and determine whether the MCL was violated, in lieu of having the system report that information.

(B) Disinfectants. Water systems must report the information specified in Table 36 as follows:

Table 36

Water systems which	Must report ¹
Monitor for chlorine or chloramines as required by OAR 333-061-0036(4)(i)(A).	(1) The number of samples taken during each month of the last quarter. (2) The monthly arithmetic average of all samples taken in each month for the last 12 months. (3) The arithmetic average of all monthly averages for the last 12 months. (4) Whether the MRDL was violated as determined in OAR 333-061-0036(4)(i).
Monitor for chlorine dioxide as required by OAR 333-061-0036(4)(i)(B).	(1) The dates, results, and locations of samples taken during the last quarter. (2) Whether the MRDL was violated as determined in OAR 333-061-0036(4)(i). (3) Whether the MRDL was exceeded in any two consecutive daily samples and whether the resulting violation was acute or non-acute.

¹The Authority may choose to perform calculations and determine whether the MRDL was violated, in lieu of having the system report that information.

(C) Disinfection byproduct precursors and enhanced coagulation or enhanced softening. Water systems must report the information specified in Table 37 as follows:

Table 37

Water systems which	Must Report ¹
Monitor monthly or quarterly for TOC as required by OAR 333-061-0036(4)(k) and are required to meet the enhanced coagulation or enhanced softening requirements as required by OAR 333-061-0032(10)(d)(B) or (C).	The number of paired (source water and treated water) samples taken during the last quarter; The location, date, and results of each paired sample and associated alkalinity taken during the last quarter; For each month in the reporting period that paired samples were taken, the arithmetic average of the percent reduction of TOC for each paired sample and the required TOC percent removal;

	<p>Calculations for determining compliance with the TOC percent removal requirements, as specified by OAR 333-061-0032(10)(e)(A); and</p> <p>Whether the system is in compliance with the enhanced coagulation or enhanced softening percent removal requirements as specified in OAR 333-061-0032(10)(d) for the last four quarters.</p>
<p>Monitor monthly or quarterly for TOC as required by OAR 333-061-0036(4)(k) and meeting one or more of the alternative compliance criteria specified by OAR 333-061-0032(10)(c)(A) or (B).</p>	<p>The alternative compliance criterion that the system is using;</p> <p>The number of paired samples taken during the last quarter;</p> <p>The location, date, and result of each paired sample and associated alkalinity taken during the last quarter;</p> <p>The running annual arithmetic average based on monthly averages (or quarterly samples) of source water TOC for systems meeting a criterion specified in OAR 333-061-0032(10)(c)(A)(i) or (iii) or of treated water TOC for systems meeting the criteria specified in OAR 333-061-0032 (10)(c)(A)(ii);</p> <p>The running annual arithmetic average based on monthly averages (or quarterly samples) of source water SUVA for systems meeting the criteria specified in OAR 333-061-0032(10)(c)(A)(v) or of treated water SUVA for systems meeting the criteria specified in OAR 333-061-0032(10)(c)(A)(vi);</p> <p>The running annual average of source water alkalinity for systems meeting the criterion specified in OAR 333-061-0032(10)(c)(A)(iii) and of treated water alkalinity for systems meeting the criterion specified in OAR 333-061-0032(10)(c)(B)(i);</p> <p>The running annual average for both TTHM and HAA5 for systems meeting the criteria specified in OAR 333-061-0032(10)(c)(A)(iii) or (iv);</p> <p>The running annual average of the amount of magnesium hardness removal (as CaCO₃, in mg/L) for systems meeting the criteria specified in OAR 333-061-0032(10)(c)(B)(ii); and</p> <p>Whether the system is in compliance with the particular alternative compliance criteria specified in OAR 333-061-0032(10)(c)(A) or (B).</p>
<p>Surface water or groundwater under the direct influence of surface water systems seeking to qualify for or remain on reduced TTHM/HAA5 monitoring must report the following source water TOC information for each treatment plant that treats surface water or groundwater under the direct influence of surface water to the Authority within 10 days of the end of any quarter in which monitoring is required:</p>	<p>The number of source water TOC samples taken each month during last quarter;</p> <p>The date and result of each sample taken during last quarter;</p> <p>The quarterly average of monthly samples taken during last quarter or the result of the quarterly sample;</p> <p>The running annual average (RAA) of quarterly averages from the past four quarters; and</p> <p>Whether the RAA exceeded 4.0 mg/L.</p>

¹The Authority may choose to perform calculations and determine whether the MCL was violated, in lieu of having the system report that information.

- (D) The Authority may choose to perform calculations and determine whether the MCL was exceeded or the system is eligible for reduced monitoring in lieu of having the system report that information.
- (k) Systems using surface water or GWUDI sources must respond to the Authority within 45 days of receiving a sanitary survey report or CPE report that identifies significant deficiencies. The response must meet the criteria specified in OAR 333-061-0076(6)(a). Failure to report to the Authority requires a Tier 2 public notice as prescribed in OAR 333-061-0042(2)(b)(D).
- (l) Reporting requirements related to triggered coliform investigations.
 - (A) Water suppliers required to conduct a level 1 coliform investigation as prescribed by OAR 333-061-0078 must submit a completed investigation report as prescribed by OAR 333-061-0078(3) to the Authority within 30 days of learning a trigger as specified in OAR 333-061-0078(2) was exceeded. Water suppliers subject to a level 2 coliform investigation as prescribed by OAR 333-061-0078(3) must ensure a completed investigation report is submitted to the Authority within 30 days of learning a trigger as specified in OAR 333-061-0078(2) was exceeded.
 - (B) Water suppliers must report to the Authority the completion of every scheduled corrective action within 30 days for corrections not completed by the time the investigation report was reported to the Authority as specified in paragraph (1)(l)(A) of this rule.
- (m) Water suppliers that have failed to comply with a coliform monitoring requirement as prescribed by OAR 333-061-0036(6) must report the monitoring violation to the Authority within 10 days after the water supplier discovers the violation, and notify the public in accordance with OAR 333-061-0042.
- (n) Water suppliers responsible for seasonal water systems must certify in a manner determined by the Authority, that an Authority-approved start-up procedure has been completed prior to serving water to the public. Water suppliers must submit the certification to the Authority prior to the seasonal water system opening for the season and serving water to the public.
- (o) Reporting source water monitoring results for *Cryptosporidium* and *E. coli* collected in accordance with OAR 333-061-0036(5)(e). Water systems must report results from the source water monitoring no later than 10 days after the end of the first month following the month when the sample is collected as prescribed by this subsection.
 - (A) Water systems must report the following data elements for each *Cryptosporidium* analysis: PWS ID, facility ID, sample collection date, sample type (field or matrix spike), sample volume filtered in Liters (to nearest 250 mL), whether 100 percent of the filtered volume was examined, and the number of oocysts counted.

- (i) For matrix spike samples, water 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 percent 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 percent of sample volume is examined, systems must also report the volume of re-suspended concentrate and volume of this re-suspension processed through immunomagnetic separation.
- (B) Water systems must report the following data elements for each *E. coli* analysis: PWS ID, facility ID, sample collection date, analytical method number, method type, source type (flowing stream, lake/reservoir, or GWUDI), *E. coli*/100 mL, and turbidity (if required). For the purposes of *Cryptosporidium* monitoring and reporting, lake/reservoir means a natural or man-made basin or hollow on the Earth's surface in which water collects or is stored that may or may not have a current or single direction of flow.
- (p) Reporting requirements relating to *Cryptosporidium* protection.
- (A) Water systems must report sampling schedules prescribed by OAR 333-061-0036(5)(f) and source water monitoring results in accordance with subsection (1)(p) of this rule unless they notify the Authority that they will not conduct source water monitoring due to meeting the criteria of OAR 333-061-0036(5)(e)(D).
 - (B) Filtered water systems must report their *Cryptosporidium* bin classification as described in OAR 333-061-0032(4)(f).
 - (C) Unfiltered water systems must report their mean source water *Cryptosporidium* level as described in OAR 333-061-0032(2)(c).
 - (D) Water systems must report disinfection profiles and benchmarks to the Authority as prescribed by OAR 333-061-0036(4)(l) and 333-061-0060(1)(e) prior to making a significant change in disinfection practice.
 - (E) Water systems must report to the Authority any microbial toolbox options as specified in Table 38 used to comply with treatment requirements under OAR 333-061-0032(2)(c), (3)(e) through (g), and (4)(g). Alternatively, the Authority may approve a water system to operate within required parameters for treatment credit rather than reporting monthly operational data for toolbox options.

Table 38
Microbial Toolbox Reporting Requirements

Toolbox Option	Systems must submit the following information	On the following schedule*
Watershed control program	Notice of intention to develop a new or continue an existing watershed control program	No later than two years before the applicable treatment compliance date.

	Watershed control plan	No later than one year before the applicable treatment compliance date.
	Annual watershed control program status report	Every 12 months, beginning one year after the applicable treatment compliance date.
	Watershed sanitary survey report	For a community water system, every three years beginning three years after the applicable treatment compliance date. For non-community systems, every 5 years beginning five years after the applicable treatment compliance date.
Alternative source / intake management	Verification the system has relocated the intake or adopted the intake withdrawal procedure reflected in monitoring results	No later than the applicable compliance date.
Presedimentation	Monthly verification of the following: continuous basin operation; treatment of 100% of the flow; continuous addition of a coagulant; and at least 0.5-log mean reduction of influent turbidity or compliance with alternate Authority approved criteria.	Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date.
Two-stage lime softening	Monthly verification of the following: chemical addition and hardness precipitation occurred in two separate and sequential softening stages prior to filtration; and both stages treated 100% of the plant flow.	Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date.
Bank Filtration	<ol style="list-style-type: none"> 1. Initial demonstration of an unconsolidated, predominantly sandy aquifer with a setback distance of at least 25 feet for 0.5 log credit, or 50 feet for 1.0 log credit 2. A report listing the result and assessing the cause if the monthly average of daily max turbidity is greater than 1 NTU. 	<ol style="list-style-type: none"> 1. No later than the applicable treatment compliance date. 2. Within 30 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date.
Combined filter performance	Monthly verification of combined filter effluent (CFE) turbidity levels less than or equal to 0.15 NTU in at least 95 percent of the 4 hour CFE measurements taken each month.	Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date.
Individual filter performance	Monthly verification of the following: Individual filter effluent (IFE) turbidity levels less than or equal to 0.15 NTU in at least 95% of samples each month in each filter; and no IFE turbidity greater than 0.3 NTU in two consecutive readings 15 minutes apart.	Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date.

Demonstration of performance	<ol style="list-style-type: none"> 1. Results from testing, following an Authority approved protocol. 2. Monthly verification of operation within conditions of Authority approval for demonstration of performance credit. 	<ol style="list-style-type: none"> 1. No later than the applicable treatment compliance date. 2. Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date.
Bag filters and cartridge filters	<ol style="list-style-type: none"> 1. Demonstration that the process meets the definition of bag or cartridge filtration, and that removal efficiency established through challenge testing meets the criteria specified in OAR 333-061-0050(4)(c)(J). 2. Monthly verification that 100% of plant flow was filtered. 	<ol style="list-style-type: none"> 1. No later than the applicable treatment compliance date. 2. Within ten days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date.
Membrane Filtration	<ol style="list-style-type: none"> 1. Results of verification testing demonstrating that removal efficiency established through challenge testing meets the criteria in OAR 333-061-0050(4)(c)(I); and the integrity test method and parameters, including resolution, sensitivity, test frequency, control limits, and associated baseline. 2. Monthly report summarizing all direct integrity tests above the control limit; and any turbidity or alternative Authority approved indirect integrity monitoring results triggering direct integrity testing (and the corrective action that was taken), if applicable. 	<ol style="list-style-type: none"> 1. No later than the applicable treatment compliance date. 2. Within ten days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date.
Second stage filtration	Monthly verification that 100% of flow was filtered through both stages and that first stage was preceded by coagulation step.	Within ten days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date.
Slow sand filtration (as secondary filter)	Monthly verification that both a slow sand filter and a preceding separate stage of filtration treated 100% of flow.	Within ten days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date.
Chlorine Dioxide	Summary of CT values for each day as described in OAR 333-061-0036(5)(c).	Within ten days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date.
Ozone	Summary of CT values for each day as described in OAR 333-061-0036(5)(c).	Within ten days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date.
UV	Validation test results demonstrating operating conditions that achieve required UV dose.	No later than the applicable treatment compliance date.

	Monthly report summarizing the percentage of water entering the distribution system that was not treated by UV reactors operating within validated conditions for the required dose as specified in OAR 333-061-0036(5)(c)(D).	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date.
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* Compliance dates are specified in OAR 333-061-0032(1)(a)(F)

- (q) Water systems must report the use of uncovered finished water storage facilities to the Authority as described in OAR 333-061-0032(11).
- (r) Water suppliers must report analyses of special samples for coliform bacteria to the Authority upon request.
- (s) Reporting violations.
 - (A) Failure to report coliform sampling results as required by OAR 333-061-0036(6) after monitoring was properly conducted in a timely manner is a violation of this rule.
 - (B) Failure to submit a completed coliform investigation report form after conducting an investigation or failure to ensure a coliform investigation report is submitted following a level 2 coliform investigation is a violation of this rule.
 - (C) Failure to notify the Authority following an *E. coli*-positive sample as required by paragraph (1)(c)(C) of this rule is a violation of this rule.
 - (D) Failure to certify and report completion of an Authority-approved start-up procedure at a seasonal water system as required by subsection (1)(n) of this rule is a violation of this rule.
- (2) Record Maintenance by Water Suppliers:
 - (a) Water suppliers of public water systems shall retain records relating to the quality of the water produced and the condition of the physical components of the system. These records shall be kept at a convenient location within or near the area served by the water system;
 - (b) Records of microbiological analyses shall be kept for at least five years. Records of chemical analyses, secondary contaminants, turbidity, radioactive substances, and monitoring plans shall be kept for at least 10 years. Data may be transferred to tabular summaries provided the following information is included:
 - (A) Date, place and time of sampling, and the name of the person who collected the sample;
 - (B) Identification of the sample as to whether it was a routine finished water sample, repeat sample, raw water sample or special purpose sample;
 - (C) Date and time of the analysis, the laboratory and person performing the analysis; and,
 - (D) Analytical method used and results of the analysis.

- (c) Records of actions taken to correct items of non-compliance shall be kept for at least three years after the last action taken with respect to the particular violation;
- (d) Reports, summaries or communications on sanitary surveys shall be kept for at least 10 years;
- (e) Records concerning variances or permits shall be kept for at least five years after the expiration of the variance or permit;
- (f) Records of residual disinfectant measurements shall be kept for at least two years.
- (g) All public water systems subject to the requirements of subsection (1)(g) of this rule shall retain the original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, Authority determinations, and any other information required for no fewer than 12 years.
- (h) Copies of public notices issued pursuant to OAR 333-061-0042 and certifications made to the Authority must be kept for three years after issuance.
- (i) For water systems using surface water or groundwater under the direct influence of surface water that use conventional filtration treatment or direct filtration treatment and that recycle spent filter backwash water, thickener, supernatant, or liquids from dewatering processes, water suppliers must collect and retain on file recycle flow information specified in paragraphs (2)(i)(A) through (F) of this rule for review and evaluation by the Authority:
 - (A) Copy of the recycle notification and information submitted to the Authority as required by OAR 333-061-0032(10);
 - (B) List of all recycle flows and the frequency with which they are returned;
 - (C) Average and maximum backwash flow rate through the filters and the average and maximum duration of the filter backwash process in minutes;
 - (D) Typical filter run length and a written summary of how filter run length is determined;
 - (E) The type of treatment provided for the recycle flow;
 - (F) Data on the physical dimensions of the equalization or treatment units, typical and maximum hydraulic loading rates, type of treatment chemicals used and average dose and frequency of use, and frequency at which solids are removed, if applicable.
- (j) Water suppliers must maintain the following information in their records relating to water systems using groundwater sources:
 - (A) Documentation of corrective actions for a period of not less than 10 years;
 - (B) Documentation of notice to the public as prescribed by OAR 333-061-0042(8) for a period of not less than three years;
 - (C) Records of decisions made in accordance with OAR 333-061-0036(6)(i)(A)(iv) and records of invalidation of *E. coli* -positive groundwater source samples in accordance with OAR 333-061-0036(6)(l) for a period of not less than five years;

- (D) For purchasing water systems, documentation of notification to the wholesale system(s) of total-coliform positive samples not invalidated in accordance under OAR 333-061-0036(6)(a)(F) for a period of not less than five years; and
- (E) For any water system required to perform compliance monitoring in accordance with OAR 333-061-0036(11)(b):
 - (i) Records of the Authority-specified minimum disinfectant residual for a period of not less than ten years;
 - (ii) Records of the lowest daily residual disinfectant concentration and records of the date and duration of any failure to maintain the Authority-prescribed minimum residual disinfectant concentration for a period of more than four hours for a period of not less than five years; and
 - (iii) Records of Authority-specified compliance requirements for membrane filtration, parameters specified by the Authority for Authority-approved alternative treatment, and records of the date and duration of any failure to meet the membrane operating, membrane integrity, or alternative treatment operating requirements for more than four hours for a period of not less than five years.
- (k) For systems required to compile a disinfection profile, the results of the profile (including raw data and analysis) must be kept indefinitely as well as the disinfection benchmark (including raw data and analysis) determined from the profile.
- (l) Recordkeeping requirements pertaining to *Cryptosporidium* protection. Water systems must keep:
 - (A) Results from the source water monitoring prescribed by OAR 333-061-0036(5)(e) for three years after bin classification in accordance with OAR 333-061-0032(4)(f) for filtered systems, or determination of the mean *Cryptosporidium* level in accordance with OAR 333-061-0032(2)(c) for unfiltered systems for the particular round of monitoring.
 - (B) Any notification to the Authority that they will not conduct source water monitoring due to meeting the criteria specified in OAR 333-061-0036(5)(e)(D) for three years.
 - (C) The results of treatment monitoring associated with microbial toolbox options as prescribed by OAR 333-061-0032(13) through (17) and with uncovered finished water reservoirs in accordance with OAR 333-061-0032(11)(b), as applicable, for three years.
- (m) IDSE reports (including Authority modifications) must be kept for at least 10 years. IDSE standard monitoring plans and IDSE system specific study plans must be retained at least as long as the IDSE report or any Authority modifications, whichever is longer. IDSE reports and any Authority modification must be made available for review by the Authority or the public.

- (n) Water systems must retain a complete copy of any 40/30 certification submitted to the EPA for 10 years after the date the certification was submitted. The certification, all data upon which the certification is based, and any EPA notification must be available for review by the Authority or the public.
- (o) Water suppliers must maintain any coliform investigation form, regardless of who conducts the investigation, and documentation of corrective actions completed as a result of those investigations, or other available summary documentation of the sanitary defects and corrective actions taken as specified in OAR 333-061-0078 for Authority review. This record must be maintained for a period not less than five years after completion of the coliform investigation or corrective action, whichever is later.
- (p) Water suppliers must maintain a record of any repeat sample collected that meets Authority criteria for an extension of the 24-hour period for collecting repeat samples as provided for in OAR 333-061-0036(6)(g).

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 448.150 & 448.273