

## PART Env-Dw 710 MONITORING FOR RADIONUCLIDES

*Readopt Env-Dw 710.01 through Env-Dw 710.03, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 710.01 Purpose. The purpose of this part is to establish procedures and criteria for the monitoring of radionuclides in drinking water.

Env-Dw 710.02 Applicability.

- (a) The requirements of this part other than Env-Dw 710.05(c) shall apply to community water systems (CWS).
- (b) The requirements specified in Env-Dw 710.05(c) shall apply to non-transient non-community water systems.

Env-Dw 710.03 Definitions.

- (a) “Alpha particle” means a positively charged atomic particle consisting of 2 neutrons and 2 protons.
- (b) “Analytical gross alpha” means total gross alpha activity as measured by the EPA approved methodologies, as specified in 40 CFR 141.25, and includes, but is not be limited to, alpha particles from radium-226, uranium, thorium, and polonium.
- (c) “Beta particle” means an electron emitted from the nucleus of a radionuclide.
- (d) “Compliance gross alpha” means the analytical gross alpha activity minus the uranium activity.
- (e) “Radionuclides” means alpha particles, beta particles, or both.

*Readopt with amendment Env-Dw 710.04 and Env-Dw 710.05, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 710.04 Frequency and Sample Location for Radionuclides.

- (a) The ~~owner~~***O/O*** of a CWS shall collect a minimum of one water sample at each sampling point specified in the sampling schedule established pursuant to Env-Dw 708.01, at the frequency specified in the sampling schedule.
- (b) The CWS ~~owner~~***O/O*** shall collect each sample at the ~~same~~***specified*** sampling point unless the ~~owner~~***O/O*** requests, and the department approves, an alternative sampling point pursuant to Env-Dw 708.04.
- (c) If the CWS draws water from more than one source and the sources are combined before distribution, the CWS ~~owner~~***O/O*** shall sample the blended water, provided it meets the criteria established in Env-Dw 708.05.

Env-Dw 710.05 Radionuclide Monitoring Requirements for New Systems or Sources.

- (a) The ~~owner~~***O/O*** of a new CWS or an existing CWS using a new source of supply shall collect and analyze:
  - (1) One sample for radon prior to using water from the new source; and
  - (2) Quarterly samples for compliance gross alpha, combined radium-226 and radium-228, and uranium as specified in the schedule established pursuant to Env-Dw 708.
- (b) Initial monitoring shall:
  - (1) Begin within the first quarter that the new system or source first provides water to the system; and
  - (2) Be performed in accordance with Env-Dw 710.06.

(c) The ~~owner-O/O~~ of a new non-transient, non-community water system or an existing non-transient, non-community water system using a new source of supply shall collect and analyze one sample for compliance gross alpha, combined radium-226 and radium-228, and uranium prior to using water from the new source.

*Readopt with amendment Env-Dw 710.06, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 710.06 Initial Monitoring for Radionuclides.

(a) A CWS ~~owner-O/O~~ shall collect 4 consecutive quarterly samples for compliance gross alpha, combined radium-226 and radium-228, and uranium at all sampling points identified in the sampling schedule established pursuant to Env-Dw 708.01.

(b) The samples required by (a), above, shall be taken in the quarters designated in the sampling schedule established pursuant to Env-Dw 708.01 during each compliance period.

(c) If the results of the samples from the first 2 quarters are below the detection limits as specified in Env-Dw 710.12(d), the CWS ~~owner-O/O~~ may submit a written request to the department for the monitoring frequency to be reduced.

(d) A written request submitted pursuant to (c), above, shall contain the following:

- (1) The name of the CWS;
- (2) The PWS identifier for the CWS; and
- (3) A summary of the historical radionuclide data from the system and nearby systems, when available.

(e) Upon determination by the department that the results are all below the detection limits, as listed in Table 710-2, the final 2 quarters of the initial monitoring shall be dismissed and the monitoring frequency shall be as specified in Env-Dw 710.08.

*Readopt with amendment Env-Dw 710.07 through Env-Dw 710.09, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 710.07 Increased Monitoring for Radionuclides. If the running annual average of the initial monitoring results for radionuclides at any sampling point is above the applicable MCL, the CWS ~~owner-O/O~~ shall collect and analyze quarterly samples at that sampling point.

Env-Dw 710.08 Reduced Monitoring for Radionuclides.

(a) The monitoring frequency for radionuclides shall be based on the average of the results of the initial monitoring required pursuant to Env-Dw 710.06, as specified in Table 710-1 below:

Table 710-1: Monitoring Frequency Based on Radionuclide Concentrations

<b>Compliance Gross Alpha (pCi/L)</b>	
<b>Average Monitoring Result</b>	<b>Frequency</b>
13.5 to 15	Yearly
7.6 to 13.4	Every 3 years
3 to 7.5	Every 6 years
less than 3	Every 9 years

<b>Radium 226 plus Radium-228 (pCi/L)</b>	
<b>Average Monitoring Result</b>	<b>Frequency</b>
4.5 to 5	Yearly
2.6 to 4.4	Every 3 years

**Radium 226 plus Radium-228 (pCi/L)**

<b>Average Monitoring Result</b>	<b>Frequency</b>
1.0 to 2.5	Every 6 years
less than 1.0	Every 9 years

**Uranium (µg/L)**

<b>Average Monitoring Result</b>	<b>Frequency</b>
27 to 30	Yearly
15.5 to 26.5	Every 3 years
1 to 15.4	Every 6 years
less than 1	Every 9 years

(b) Subsequent sample results shall be used to establish future sampling schedules using the frequencies in Table 710-1.

(c) Based on review of the submitted results, the department shall modify the system's schedule in accordance with Table 710-1 and notify the CWS ~~owner~~*O/O* in writing of the new monitoring requirements.

Env-Dw 710.09 Monitoring and Compliance Requirements for Beta Particle and Photon Radioactivity for Vulnerable Systems. To determine compliance with the MCLs in Env-Dw 703.03 for beta particle and photon radioactivity, the CWS ~~owner~~*O/O* shall comply with 40 CFR 141.26(b).

*Readopt with amendment Env-Dw 710.10 and Env-Dw 710.11, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 710.10 Compliance Determinations for Radionuclides.

(a) The department shall determine compliance with Env-Dw 703 based on the analytical results obtained at each sampling point.

(b) Subject to (k) below, for a CWS at which the required monitoring is annual or less frequently, if the result of a sample from one sampling point exceeds an MCL, the CWS ~~owner~~*O/O* shall collect a confirmation sample within 14 days.

(c) The confirmation sample shall:

- (1) Be a new sample collected under the same contributing conditions and at the same sampling point as the original sample; and
- (2) Be analyzed within 45 days of collection.

(d) The results of the confirmation sample shall be averaged with the initial sample results and the average shall be used to determine compliance.

(e) If the average exceeds the MCL, the CWS shall be deemed in violation of the MCL.

(f) To determine compliance with the MCLs listed in Env-Dw 703, averages of data shall be used, rounded to the same number of significant figures as the MCL for the substance in question.

(g) For a CWS at which the required monitoring is more frequent than once per year, the department shall determine compliance with the MCL based on a running annual average at each sampling point, as follows:

- (1) If the running annual average of the sample results at any sampling point is greater than the MCL, then the CWS shall be deemed out of compliance with the MCL; and
- (2) If any sample result is more than 4 times the MCL at any sample point, the CWS shall be deemed out of compliance with the MCL immediately.

- (h) The CWS ~~owner~~***O/O*** shall include the results of all samples taken and analyzed to determine compliance, even if that number is greater than the minimum required.
- (i) If a sample result is less than the detection limit, the result shall be deemed to be zero for purposes of calculating the running annual average.
- (j) If the MCL for the radionuclides set forth in Env-Dw 703 is exceeded, the CWS ~~owner~~***O/O*** shall notify:
  - (1) The department, pursuant to Env-Dw 710.11; and
  - (2) The public, as required by Env-Dw 800.
- (k) If results from the sampling point or the contributing sources have historically demonstrated the presence of the radionuclide, then:
  - (1) A confirmation sample shall not be required; and
  - (2) The monitoring frequency for the approved sampling point shall be increased to quarterly for that contaminant.

Env-Dw 710.11 System Reporting and Recordkeeping.

- (a) A CWS ~~owner~~***O/O*** shall report the monitoring results for radionuclides to the department within the first 10 days following the month in which the results are received.
- (b) Any CWS ~~owner~~***O/O*** who fails to report monitoring results to the department within the first 10 days following the month in which the results are received shall notify the public as required by Env-Dw 800.
- (c) The CWS ~~owner~~***O/O*** shall submit the monitoring results in the same unit of measurement and number of significant figures in which the MCL is expressed, as set forth in Table 703-~~2~~***1***.

*Readopt with amendment Env-Dw 710.12, eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 710.12 Sample Collection Protocol and Laboratory Analytical Methods.

- (a) The sampling protocol for alpha and beta radionuclides shall be those set forth in 40 CFR 141, 142, or 143, as applicable.
- (b) Detection limits for radionuclides shall be those set forth in Table 710-~~4~~***2***, below:

Table 710-~~4~~***2***: Detection Limits for Radionuclides

<b>Contaminant</b>	<b>Detection Limit</b>
Analytical Gross Alpha	3 pCi/L
Cesium-134	10 pCi/L
Compliance Gross Alpha	3 pCi/L
Gross Beta	4 pCi/L
Iodine-131	1 pCi/L
Radium-226	1 pCi/L
Radium-228	1 pCi/L
Strontium-89	10 pCi/L
Strontium-90	2 pCi/L
Tritium	1,000 pCi/L
Uranium	1 µg/L
Other radionuclides	1/10 of the applicable limit

## PART Env-Dw 711 MONITORING FOR INORGANIC CHEMICALS

*Readopt with amendment Env-Dw 711.01 through Env-Dw 711.04, eff. 5-1-10 (doc. #9700), to read as follows:*

### Env-Dw 711.01 Applicability.

(a) The ~~owner~~***O/O*** of a community water system (CWS) or non-transient, non-community water system (NTNC) shall conduct monitoring to determine compliance with the MCLs for inorganics specified in Env-Dw 704.02.

(b) The ~~owner~~***O/O*** of a transient, non-community water system shall conduct monitoring to determine compliance with the nitrate and nitrite MCLs specified in Env-Dw 704.02, in accordance with Env-Dw 711.18 through Env-Dw 711.29.

### Env-Dw 711.02 Monitoring Location for Regulated Inorganics for Groundwater Systems.

(a) The sampling point for a PWS using groundwater (groundwater system) shall be at each entry point to the distribution system, ***as specified in the sampling schedule established pursuant to Env-Dw 708.01***, so as to be representative of each well after treatment.

(b) The ~~owner~~***O/O*** of a groundwater system shall collect each sample at the ~~same~~***specified*** sampling point. If the ~~owner~~***O/O*** believes that conditions make another sampling point more representative of each source or treatment plant, the ~~owner~~***O/O*** shall request a change in sampling point pursuant to Env-Dw 708.04.

### Env-Dw 711.03 Monitoring Location for Regulated Inorganics for Other Systems.

(a) The ~~owner~~***O/O*** of a PWS using surface water or a combination of surface water and groundwater shall take a minimum of one sample at each sampling point specified in the sampling schedule established pursuant to Env-Dw 708.01.

(b) The sampling points specified in the schedule shall include every entry point to the distribution system:

- (1) After any application of treatment; or
- (2) In the distribution system at a point which is representative of each source after treatment.

(c) The ~~owner~~***O/O*** of a system specified in (a), above, shall collect each sample at the ~~same~~***specified*** sampling point. If the ~~owner~~***O/O*** believes that conditions make another sampling point more representative of each source or treatment plant, the ~~owner~~***O/O*** shall request a change in the sampling point pursuant to Env-Dw 708.04.

### Env-Dw 711.04 Frequency of Monitoring for Regulated Inorganics.

(a) The ~~owner~~***O/O*** of a groundwater system shall collect one sample at each sample point during each 3-year compliance period.

(b) The ~~owner~~***O/O*** of a surface water system, or combined surface/groundwater system, shall collect one sample at each sample point annually.

(c) The frequency of monitoring for asbestos shall be as specified in Env-Dw 711.09 through Env-Dw 711.17.

(d) The frequency of monitoring for nitrate and nitrite shall be as specified in Env-Dw 711.18 through Env-Dw 711.26.

(e) The department shall waive the requirement ***for a community water system or non-transient, non-community water system*** to monitor for cyanide if the department determines that the PWS is not vulnerable to cyanide due to a lack of any industrial source(s) within the wellhead contributing area.

***(f) If the cyanide monitoring requirement is waived pursuant to (e), above, the O/O of each affected water system shall take not less than one sample every 9 years.***

*Readopt with amendment Env-Dw 711.05, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.05 ***Sampling Requirements When Concentrations of Regulated Inorganics are Greater Than or Equal To 50% of the MCL.***

(a) Subject to (k), below, if the concentration of any regulated inorganic in a representative sample is greater than or equal to 50% of the applicable MCL listed in Env-Dw 704, the PWS ~~owner~~***O/O*** shall collect a confirmation sample as specified in (b), below.

(b) The confirmation sample shall be:

(1) A new sample collected under the same contributing conditions and at the same sampling point as the original sample; and

(2) Collected within 14 days of the original sample and analyzed for the regulated inorganic(s) that triggered the requirement to collect the confirmation sample.

(c) The results of the confirmation sample shall be averaged with the initial sample results and the average shall be used to determine compliance with the MCL specified in Env-Dw 704.

(d) If the average is less than 50% of the MCL listed in Env-Dw 704, the monitoring requirements for that sampling point shall be as specified in Env-Dw 711.04.

(e) If the average is equal to or greater than 50% of the MCL, the monitoring frequency for that sampling point for that contaminant shall be revised to quarterly beginning in the next quarter.

(f) The revised monitoring schedule for each source pursuant to (e), above, shall continue until the concentration of the particular regulated inorganic is determined by the department to be reliably and consistently below the MCL as defined in Env-Dw 100.

(g) After a minimum of one year of quarterly sampling, the PWS ~~owner~~***O/O*** may submit in writing a request to the department for the monitoring frequency to be reduced.

(h) The written request shall include:

(1) The name of the PWS;

(2) The PWS identifier for the PWS;

(3) A summary of all quarterly sampling results and results of any additional sampling undertaken by the ~~owner~~***O/O***; and

(4) An explanation of whether the PWS is operating any type of treatment to reduce the amount of regulated inorganics.

(i) The department shall reinstate the monitoring frequency specified in Env-Dw 711.04 upon determining that:

(1) Based on 4 consecutive quarterly samples, the concentration of the regulated inorganic is reliably and consistently below the MCL; and

(2) The PWS is not operating any type of treatment to reduce the amount of the regulated inorganics.

(j) If the monitoring frequency is reduced pursuant to (i), above, subsequent samples shall be collected during the quarter(s) which previously resulted in the highest analytical result.

(k) If results from the sampling point or the contributing sources have historically demonstrated the presence of regulated inorganics, then:

(1) A confirmation sample shall not be required; and

(2) The monitoring frequency for the approved sampling point shall be increased to quarterly for that contaminant.

*Readopt with amendment Env-Dw 711.06, eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.06 Sample Collection Protocol for Regulated Inorganics. A system ~~owner~~**O/O** shall conduct sample collection for the regulated inorganics listed in Env-Dw 704 using the sample preservation, container, and maximum holding time procedures specified in 40 CFR 141, 142, or 143, as applicable.

*Readopt with amendment Env-Dw 711.07, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.07 Compliance Determination for Regulated Inorganics.

(a) For a system at which regulated inorganics are monitored at a frequency greater than annually, the department shall determine compliance with the MCL specified in Env-Dw 704 by a running annual average, as defined in Env-Dw 100, at each sampling point.

(b) If the department determines that the running annual average at any sampling point is greater than the MCL as specified in Env-Dw 704, then the system shall be deemed out of compliance.

(c) If any one sample is more than 4 times the MCL specified in Env-Dw 704, then the system shall be out of compliance.

(d) Any sample result which is below the detection limit shall be calculated as zero for the purpose of determining the running annual average.

(e) If a system is monitoring annually or less frequently, the system shall be deemed out of compliance with the MCLs if the level of a regulated inorganic at any sampling point is greater than the MCL. If confirmation samples are required by Env-Dw 711.05, the determination of compliance shall be based on the average of the initial and confirmation samples.

(f) If a PWS has a distribution system with portions that are hydraulically separate from other parts of the distribution system, then:

(1) Only that part of the system in which the MCL specified in Env-Dw 704 is exceeded shall be out of compliance; and

(2) The PWS ~~owner~~**O/O** may request approval from the department pursuant to Env-Dw 801.15 to limit the public notice to the users of only that portion of the system which is out of compliance.

*Readopt with amendment Env-Dw 711.08, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.08 Reporting for Regulated Inorganics. A PWS ~~owner~~**O/O** shall report regulated inorganics in accordance with Env-Dw 719.01.

*Readopt Env-Dw 711.09, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.09 Monitoring for Asbestos. Asbestos monitoring shall be in accordance with Env-Dw 711.11 through Env-Dw 711.17, unless a waiver is obtained pursuant to Env-Dw 711.10.

*Readopt with amendment Env-Dw 711.10, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.10 Waiver of Monitoring for Asbestos.

(a) A PWS ~~owner-O/O~~ may request a waiver of asbestos monitoring as specified in (b), below, if the ~~owner-O/O~~ believes the PWS is not vulnerable to asbestos contamination.

(b) To request a waiver, the ~~owner-O/O~~ shall submit to the department a written request containing the following information:

- (1) The name of the PWS;
- (2) The PWS identifier for the PWS; and
- (3) An explanation of why a waiver is warranted, based on the factors specified in (c), below, with documentation and data to support the explanation, as appropriate to the factor.

(c) A PWS shall be deemed vulnerable to asbestos contamination if the PWS:

- (1) Has a water source that is at risk for asbestos contamination, for instance due to proximity to an asbestos disposal site or other source of asbestos; or
- (2) Uses asbestos-cement pipe for finished water distribution and the water is corrosive.

(d) The department shall grant a waiver to a PWS if the department determines that the PWS is not vulnerable to asbestos.

(e) A waiver shall remain in effect for the remainder of the 3-year compliance period. At the end of the compliance period, the PWS ~~owner-O/O~~ may request another waiver.

*Readopt with amendment Env-Dw 711.11 and Env-Dw 711.12, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.11 Duration and Frequency of Routine Monitoring for Asbestos. The ~~owner-O/O~~ of each community water system and non-transient, non-community water system shall monitor once for asbestos during the 3-year compliance period that it begins operation and every 9 years thereafter.

Env-Dw 711.12 Monitoring Location for Asbestos.

(a) The ~~owner-O/O~~ of a PWS that is vulnerable to asbestos contamination due solely to corrosion of asbestos-cement pipe shall collect one sample at a tap served by asbestos-cement pipe under conditions where asbestos contamination is most likely to occur.

(b) The ~~owner-O/O~~ of a PWS that is vulnerable to asbestos contamination due solely to the potential for source water contamination shall monitor as for general regulated inorganics in accordance with Env-Dw 711.01 through Env-Dw 711.08.

(c) The ~~owner-O/O~~ of a PWS that is vulnerable to asbestos contamination both to corrosion of asbestos-cement pipe and the potential for source water contamination shall collect one sample at a tap served by asbestos-cement pipe under conditions where asbestos contamination is most likely to occur.

(d) The department shall establish the sampling point in the sampling schedule established pursuant to Env-Dw 708.01 after conferring with the PWS ~~owner-O/O~~ relative to appropriate factors such as the amount of asbestos cement pipe and the age of the pipe.



*Readopt with amendment Env-Dw 711.13, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.13 Monitoring When the MCL for Asbestos is Exceeded.

- (a) The ~~owner~~***O/O*** of a PWS which exceeds the MCL specified in Env-Dw 704 shall monitor for asbestos quarterly beginning in the next calendar quarter after the initial violation occurred.
- (b) The PWS ~~owner~~***O/O*** may submit to the department a written request to reduce the asbestos monitoring frequency after:
- (1) A minimum of one year of quarterly sampling for surface water systems; and
  - (2) A minimum of 2 quarters of sampling for groundwater systems.
- (c) A request submitted pursuant to (b), above, shall include:
- (1) The name of the PWS;
  - (2) The PWS identifier for the PWS;
  - (3) A summary of all quarterly sampling results; and
  - (4) An explanation of whether the PWS is operating any type of treatment to reduce the amount of asbestos.
- (d) The department shall decrease the quarterly monitoring requirement to the frequency specified in Env-Dw 711.11 only if the department determines that:
- (1) The PWS is not operating any type of treatment to reduce the amount of asbestos; and
  - (2) The amount of asbestos in the water being delivered to persons served by the system is reliably and consistently below the MCL as defined in Env-Dw 100.

*Readopt with amendment Env-Dw 711.14, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.14 Confirmation Sampling for Asbestos.

- (a) Where the results of sampling for asbestos indicate that the concentration of asbestos is greater than or equal to 50% of the MCL, the PWS ~~owner~~***O/O*** shall:
- (1) Collect a confirmation sample within 14 days after the initial sample was collected at the same sampling point and under the same contributing conditions; and
  - (2) Have the sample analyzed within 48 hours of collection, as required by 40 CFR 141.23(k)(2).
- (b) Where confirmation samples are taken, compliance shall be determined based on the average of the 2 samples.

*Readopt Env-Dw 711.15, eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.15 Collection Protocol for Asbestos. Samples to be analyzed for asbestos shall be collected in accordance with the protocol specified in 40 CFR 141.

*Readopt with amendment Env-Dw 711.16 through Env-Dw 711.18, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.16 Reporting for Asbestos. A PWS ~~owner~~***O/O*** shall report for asbestos in accordance with Env-Dw 719:~~04~~.

Env-Dw 711.17 Compliance for Asbestos.

(a) ~~A~~ Compliance determination for asbestos shall be made using the analytical monitoring results obtained at each sampling point.

(b) For systems conducting monitoring at a frequency greater than annually, the department shall determine compliance with the MCL for asbestos by analyzing a running annual average at each sampling point.

(c) If the average at any sample point is greater than the MCL, then the system shall be out of compliance.

(d) If any one sample in (c), above, would cause the running annual average to exceed the MCL, the system shall be out of compliance.

(e) For a system monitoring annually or less frequently, the system shall be out of compliance with the MCL for asbestos if the level of a contaminant at any sampling point is greater than the MCL. If confirmation samples are required by Env-Dw 711.14, the determination of compliance shall be based on the average of the initial and confirmation samples.

Env-Dw 711.18 Monitoring for Nitrate. The ~~owner~~***O/O*** of a community water system, non-transient non-community water system, or transient non-community water system shall:

(a) Monitor as specified in Env-Dw 711.19 through Env-Dw 711.22 to determine compliance with the MCL for nitrate specified in Env-Dw 704; and

(b) Report for nitrate as specified in Env-Dw 711.23.

*Readopt with amendment Env-Dw 711.19 and Env-Dw 711.20, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.19 Frequency of Monitoring for Nitrate; Confirmation Samples.

(a) The ~~owner~~***O/O*** of a community water system, non-transient non-community water system, or transient non-community water system served by groundwater shall monitor annually for nitrate.

(b) The ~~owner~~***O/O*** of a community water system, non-transient non-community water system, or transient non-community water system served by surface water shall monitor for nitrate quarterly for the initial 4 quarters of operation and annually thereafter, subject to (h), below, and Env-Dw 711.20.

(c) Subject to (d) below, if nitrate sampling results indicate an exceedance of the MCL and the system has no previous detections for nitrate, the system ~~owner~~***O/O*** shall collect a confirmation sample within 24 hours of the system's receipt of notification of the analytical results of the first sample.

(d) A system ~~owner~~***O/O*** unable to comply with the 24-hour sampling requirement shall:

(1) Immediately notify the consumers served by the system in accordance with Env-Dw 800; and

(2) Collect and analyze a confirmation sample within 7 days of notification of the analytical results of the first sample.

(e) If nitrate sampling results indicate an exceedance of the MCL and the system has previous detections for nitrate, no confirmation sample shall be necessary.

(f) Subject to (h), below, if nitrate results are 50% to 100% of the MCL the system ~~owner~~***O/O*** shall collect a confirmation sample within 7 days.

(g) If a confirmation sample is required pursuant to (c) or (f), above, the results of the initial and confirmation samples shall be averaged to determine compliance.

(h) If results from the sampling point or the contributing sources have historically demonstrated the presence of nitrate, then:

- (1) A confirmation sample shall not be required; and
- (2) The monitoring frequency for the approved sampling point shall be increased to quarterly for that contaminant.

Env-Dw 711.20 Revised Monitoring for Nitrate.

(a) The ~~owner~~***O/O*** of a community water system, non-transient non-community water system, or transient non-community water system using groundwater shall monitor for nitrate quarterly for at least one year following any one sample in which the concentration is greater than or equal to 50% of the nitrate MCL.

(b) After a minimum of one year of quarterly sampling, the system ~~owner~~***O/O*** may submit a written request to the department for the monitoring frequency to be reduced.

(c) The written request shall include:

- (1) The name of the PWS;
- (2) The PWS identifier for the PWS;
- (3) A summary of all quarterly sampling results; and
- (4) An explanation of whether the PWS is operating any type of treatment to reduce the amount of nitrate.

(d) The department shall approve a reduction in monitoring from quarterly to annually if the department determines that:

- (1) Based on 4 consecutive quarterly samples, the nitrate levels are reliably and consistently below the nitrate MCL; and
- (2) The PWS is not operating any type of treatment to reduce the amount of nitrate.

(e) A surface water system shall return to quarterly monitoring if any one sample is greater than or equal to 50% of the nitrate MCL.

(f) After the initial round of quarterly sampling is completed, each community water system, non-transient non-community water system, and transient non-community system shall collect subsequent annual samples during the quarter in which the highest analytical result was obtained.

*Readopt with amendment Env-Dw 711.21, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.21 General System Evaluation Nitrate Samples. Any nitrate sample collected in addition to the routine, ~~make-up~~ or confirmation samples for a PWS shall be used to determine compliance if the sample:

- (a) Is representative of water being supplied to consumers; and
- (b) Exceeds the MCL for nitrate as specified in Env-Dw 704.02.

*Readopt Env-Dw 711.22, eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.22 Collection Protocol for Nitrate. Collection protocol requirements for nitrate samples shall be as specified in 40 CFR 141, 142, or 143, as applicable.

*Readopt with amendment Env-Dw 711.23 and Env-Dw 711.24, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.23 Reporting and Compliance for Nitrate. A system ~~owner~~**O/O** shall report for nitrates in accordance with Env-Dw 719.04.

Env-Dw 711.24 Monitoring for Nitrite. The ~~owner~~**O/O** of a community water system, non-transient non-community water system, or transient non-community water system shall:

- (a) Monitor for nitrite in accordance with Env-Dw 711.25 through Env-Dw 711.28; and
- (b) Report for nitrite in accordance with Env-Dw 711.29.

*Readopt with amendment Env-Dw 711.25 and Env-Dw 711.26, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.25 Frequency of Monitoring for Nitrite; Confirmation Samples.

(a) The PWS ~~owner~~**O/O** shall initially monitor for nitrite once in each 3 year compliance period to determine compliance with the MCL for nitrite in Env-Dw 704.

(b) Subject to (c), below, if nitrite sampling results indicate an exceedance of the MCL and the PWS has no previous detections for nitrite, the PWS ~~owner~~**O/O** shall take a confirmation sample within 24 hours of receipt of notification of the analytical results of the first sample.

(c) A PWS ~~owner~~**O/O** unable to comply with the 24 hour sampling requirement shall:

- (1) Immediately notify the persons served by the system in accordance with Env-Dw 800; and
- (2) Collect and analyze a confirmation sample within 7 days of notification of the analytical results of the first sample.

(d) If the nitrite sampling results indicate an exceedance of the MCL and the system has previous detections for nitrite, no confirmation sample shall be necessary.

(e) Subject to (g), below if nitrite results are 50% to 100% of the MCL, the system ~~owner~~**O/O** shall collect a confirmation sample within 7 days.

(f) If a confirmation sample is required pursuant to (b) or (e), above, the results of the initial and confirmation samples shall be averaged in determining compliance.

(g) If results from the sampling point or the contributing sources have historically demonstrated the presence of nitrite, then:

- (1) A confirmation sample shall not be required; and
- (2) The monitoring frequency for the approved sampling point shall be increased to quarterly for that contaminant.

Env-Dw 711.26 Continued and Revised Monitoring for Nitrite.

(a) After the initial sample, a PWS for which the analytical result for nitrite is less than 50% of the MCL shall monitor for nitrite annually.

(b) The ~~owner~~**O/O** of a community water system, non-transient non-community water system, or transient non-community water system shall monitor for nitrite quarterly for at least one year following any one sample in which the concentration of nitrite is equal to or greater than 50% of the MCL.

(c) After a minimum of one year of quarterly sampling, the PWS ~~owner~~**O/O** may submit a written request to the department that the monitoring frequency be reduced.

- (d) The written request shall include:
  - (1) The name of the PWS;
  - (2) The PWS identifier for the PWS;
  - (3) A summary of all quarterly sampling results; and
  - (4) Confirmation that the PWS is not operating any type of treatment to reduce the amount of nitrite.
- (e) The department shall approve a reduction in monitoring from quarterly to annually if the department determines that:
  - (1) Based on 4 consecutive quarterly samples, the nitrite levels are reliably and consistently less than the nitrite MCL; and
  - (2) The PWS is not operating any type of treatment to reduce the amount of nitrite.
- (f) A PWS ~~owner~~***O/O*** who monitors annually shall collect each subsequent sample during the quarter(s) which previously resulted in the highest analytical results.

*Readopt with amendment Env-Dw 711.27, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.27 General System Evaluation Nitrite Samples. Any nitrite sample collected in addition to the routine, ~~make-up~~ or confirmation samples for a PWS shall be used to determine compliance if the sample:

- (a) Is representative of water being supplied to consumers; and
- (b) Exceeds the MCL for nitrite as specified in Env-Dw 704.02.

*Readopt Env-Dw 711.28, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 711.28 Collection Protocol for Nitrite. Collection protocol requirements for nitrite samples shall be as specified in 40 CFR 141, 142, or 143, as applicable.

*Readopt Env-Dw 711.29, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 711.29 Reporting and Compliance for Nitrite. The reporting requirements for nitrite shall be those specified in Env-Dw 719.04.

## PART Env-Dw 712 MONITORING FOR ORGANICS

*Adopt new Env-Dw 712.01 to read as follows:*

***Env-Dw 712.01 Definitions. For purposes of this part, the following definitions shall apply:***  
*{definitions previously at Env-Dw 712.19(a)}*

(a) ***“Pesticide application area” means any area that is treated with pesticides as defined in Pes 101.21, reprinted in Appendix C, within the past 3 years or are likely to be treated with pesticides within the next 3 years including, but not limited to, golf courses, lawn or landscaped areas, cemeteries, agricultural areas, athletic or recreational fields, commercial food crops, pesticide storage areas, rights-of-way, railroads, and large overhead power lines; and***

(b) ***“Source water protection area” means:***

***(1) For groundwater sources, the wellhead protection area as defined in RSA 485-C:2, XVIII, namely “the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield”; and***

***(2) For surface water sources, the surface area draining toward the intake within 4,000 feet of the intake as determined by topographic data and on-site verification.***

Readopt with amendment Env-Dw 712.01 through Env-Dw 712.03, eff. 5-1-10 (doc. #9700), and renumber as Env-Dw 712.02 through Env-Dw 712.04, to read as follows:

~~Env-Dw 712.0102~~ Monitoring Frequency for VOC Contaminants.

- (a) The ~~owner~~***O/O*** of a community water system or non-transient, non-community water system shall initially monitor for the health-related regulated volatile organic chemical (VOC) contaminants listed in Env-Dw 705.01 on a quarterly basis for one year.
- (b) If no contaminant listed in Env-Dw 705.01 is detected at a PWS during the first year, the ~~owner~~***O/O*** shall thereafter monitor annually.
- (c) If one or more contaminants monitored pursuant to (a), above, is detected during the first year, the ~~owner~~***O/O*** shall continue to monitor quarterly, subject to (d), below, and Env-Dw 712.0405.
- (d) If the monitoring conducted during the first year reveals variations in the source(s) or within the system, the ~~owner~~***O/O*** shall increase the monitoring frequency to the frequency that is necessary to accurately identify consumer exposure to the contaminants listed in Env-Dw 705.01.

~~Env-Dw 712.0203~~ Monitoring Location for VOC Contaminants.

- (a) The ~~owner~~***O/O*** of a groundwater system shall collect at least one sample at every entry point to the distribution system, which entry point shall be representative of each well after treatment, as specified in the sampling schedule established pursuant to Env-Dw 708.01.
- (b) The ~~owner~~***O/O*** of a system supplied by surface water or a combination of surface water and groundwater shall collect at least one sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment, as specified in the sampling schedule established pursuant to Env-Dw 708.01.
- (c) If the ~~owner~~***O/O*** believes that conditions make another sampling point more representative of a source, treatment plant, or distribution system, the ~~owner~~***O/O*** shall request a change in sampling location pursuant to Env-Dw 708.04.
- (d) If a system obtains water from more than one source and the sources are combined prior to entering the distribution system, the system ~~owner~~***O/O*** shall collect the samples at an entry point to the distribution system during periods of normal operating conditions, when water from all sources is being used.

~~Env-Dw 712.0304~~ Confirmation Sampling for VOC Contaminants.

- (a) If a VOC contaminant is detected in a representative sample at a level greater than or equal to the detection limit of 0.0005 mg/L, the PWS ~~owner~~***O/O*** shall:
  - (1) Collect a confirmation sample under the same contributing conditions within 14 days of being notified of the result; and
  - (2) Have the sample analyzed for the contaminant(s) detected.
- (b) If the concentration of the VOC contaminant in the confirmation sample is greater than or equal to the detection limit of 0.0005 mg/L, the monitoring requirement for those sources shall be that stated in Env-Dw 712.0405.
- (c) If the concentration of the VOC contaminant in the confirmation sample is below the detection limit, the monitoring requirements for those sources shall be that stated in Env-Dw 712.0402.

*Readopt with amendment Env-Dw 712.04 and Env-Dw 712.05, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.05 and Env-Dw 712.06, to read as follows:*

Env-Dw 712.~~0405~~ Revised Monitoring Frequency for VOC Contaminants.

- (a) If a VOC contaminant is detected in the confirmation sample at a level greater than or equal to the detection limit of 0.0005 mg/L, the sampling frequency for the representative sampling site shall be revised to quarterly.
- (b) The revised monitoring schedule pursuant to (a), above, shall continue until the concentration of the contaminant is reliably and consistently below the MCL at each sampling point.
- (c) After a minimum of one year of quarterly sampling pursuant to (b), above, the PWS ~~owner~~***O/O*** may submit a written request to the department in accordance with (d), below, for the monitoring frequency to be reduced.
- (d) The written request to reduce the VOC monitoring frequency shall contain the following:
  - (1) The name of the PWS;
  - (2) The PWS identifier for the PWS;
  - (3) A summary of all quarterly sampling results; and
  - (4) Whether any type of treatment to reduce VOC contaminants has been or is being used by the PWS.
- (e) The department shall reinstate annual monitoring for VOC contaminants in response to a request submitted pursuant to (d), above, upon determining that:
  - (1) Based on 4 consecutive quarterly samples, the level of VOC contaminant(s) previously detected is reliably and consistently below the MCL; and
  - (2) The PWS is not operating any type of treatment to reduce the amount of VOC contaminants.
- (f) The ~~owner~~***O/O*** of a PWS at which VOC contaminants are monitored annually shall monitor during the quarter which previously yielded the highest analytical result.
- (g) A PWS at which no VOC contaminants are detected in 3 consecutive annual samples may apply to the department for a waiver as specified in Env-Dw 712.~~4920~~.

Env-Dw 712.~~0506~~ Monitoring for Vinyl Chloride.

- (a) Subject to (e), below, the ~~owner~~***O/O*** of a community water system or non-transient non-community water system shall monitor quarterly for vinyl chloride if any of the following 2-carbon organic compounds is initially detected and subsequently confirmed in the water supply:
  - (1) Trichloroethylene;
  - (2) Tetrachloroethylene;
  - (3) 1,2-dichloroethane;
  - (4) 1,1,1-trichloroethane;
  - (5) Cis-1,2-~~d~~Dichloroethylene;
  - (6) Trans-1,2-~~d~~Dichloroethylene; or
  - (7) 1,1-dichloroethylene.

(b) The vinyl chloride samples collected pursuant to (a), above, shall be collected at each sampling point for each source at which any of the 2-carbon organic compounds was detected and confirmed.

(c) If the initial test results collected pursuant to (a), above, include analytical results for vinyl chloride, the results shall be counted as the first of 4 required quarterly samples.

(d) If vinyl chloride is not detected in the first quarterly sample, the department shall reduce the required monitoring for vinyl chloride to one sample during each compliance period.

(e) If monitoring frequency is not reduced pursuant to (d), above, then after a minimum of one year of quarterly sampling the system ~~owner~~**O/O** may submit a written request to the department as specified in (f), below, for the monitoring frequency be reduced.

(f) The written request shall contain the following:

- (1) The name of the PWS;
- (2) The PWS identifier for the PWS;
- (3) A summary of all quarterly sampling results; and
- (4) Whether any type of treatment to reduce vinyl chloride has been or is being used by the PWS.

(g) The department shall reinstate annual monitoring for vinyl chloride in response to a request submitted pursuant to (e), above, if the department determines that:

- (1) Based on 4 consecutive quarterly samples, the level of vinyl chloride is reliably and consistently below the MCL; and
- (2) The PWS is not operating any type of treatment to reduce the amount of vinyl chloride.

*Readopt Env-Dw 712.06, eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.07, to read as follows:*

~~Env-Dw 712.0607~~ **Laboratory Methods and Sampling Protocol for VOC Contaminants.**

(a) Analyses for VOC contaminants shall be conducted only by laboratories that are accredited by the department for such analyses pursuant to Env-C 300.

(b) The sampling protocol for VOC contaminants shall be as specified in 40 CFR 141.

*Readopt Env-Dw 712.07, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.08, to read as follows:*

~~Env-Dw 712.0708~~ **Compliance Determination for VOC Contaminants.**

(a) Compliance with Env-Dw 705.01 shall be determined based on the analytical results obtained at each sampling point identified in the sampling schedule established pursuant to Env-Dw 708.01.

(b) For a PWS at which monitoring is conducted at a frequency greater than annually, the following shall apply:

- (1) The department shall determine compliance based on a running annual average, as defined in Env-Dw 100, of all samples collected at each sampling point;
- (2) If the running annual average of any sampling point is greater than the MCL, the PWS shall be out of compliance; and
- (3) If any sample result is more than 4 times the MCL at any sample point, the PWS shall be out of compliance.



(c) For purposes of determining the running annual average, any sample below the detection limit shall be calculated as zero.

(d) If monitoring is conducted annually or less frequently, the PWS shall be out of compliance if the level of a VOC contaminant at any sampling point is greater than the MCL. If confirmation samples are required by Env-Dw 712.0304, the determination of compliance shall be based on the average of the initial and confirmation samples.

*Readopt with amendment Env-Dw 712.08, eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.09, to read as follows:*

Env-Dw 712.0809 Reporting for VOC Contaminants.

(a) A PWS ~~owner~~***O/O*** shall report VOC contaminants in accordance with Env-Dw 719.01.

(b) If a PWS has a distribution system with portions that are hydraulically separate from other parts of the distribution system, the PWS ~~owner~~***O/O*** may request approval from the department pursuant to Env-Dw 801 to limit the public notice to only that area hydraulically served by that portion of the PWS which is out of compliance.

*Readopt with amendment Env-Dw 712.09 and Env-Dw 712.10, eff. 5-1-10 (doc. #9700), and renumber as Env-Dw 712.10 and Env-Dw 712.11, to read as follows:*

Env-Dw 712.0910 Monitoring Location for SOCs.

(a) The ~~owner~~***O/O*** of a groundwater system shall collect at least one sample to be analyzed for ***SOCs the health-related regulated synthetic organic chemical (SOC) contaminants listed in Env-Dw 705.02*** at every entry point to the distribution system, which entry point is representative of each well after treatment, as specified in the sampling schedule established pursuant to Env-Dw 708.01.

(b) The ~~owner~~***O/O*** of a system supplied by surface water or a combination of surface water and groundwater shall collect at least one sample to be analyzed for SOCs at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment, as specified in the sampling schedule established pursuant to Env-Dw 708.01.

(c) If the ~~owner~~***O/O*** believes that conditions make another sampling point more representative of a source, treatment plant or distribution system, the ~~owner~~***O/O*** shall request a change in sampling location pursuant to Env-Dw 708.04.

Env-Dw 712.4011 Monitoring Frequency for SOCs.

(a) The ~~owner~~***O/O*** of a community water system or non-transient, non-community water system shall monitor for SOCs on an annual basis, except that monitoring shall not be required for aldicarb, aldicarb sulfoxide, or aldicarb sulfone.

(b) The ~~owner~~***O/O*** of a community water system or non-transient non-community water system at which no SOC listed in Env-Dw 705.02 is detected may apply to the department for a waiver from the requirement of this section as specified in Env-Dw 712.4921.

(c) The department shall reduce the sampling frequency to a minimum of one sample ~~during each successive every 3= years compliance period~~ ***or every 6 years*** if a waiver is granted pursuant to Env-Dw 712.4921.

*Readopt with amendment Env-Dw 712.11, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.12, to read as follows:*

Env-Dw 712.4412 Revised Monitoring for SOCs.

- (a) If any SOC listed in Env-Dw 705.02 is detected in any sample, the department shall revise the sampling requirements to quarterly for that contaminant at each representative sampling site.
- (b) The revised monitoring schedule for each source for the particular contaminant shall continue until the concentration of the contaminant in each source is reliably and consistently below the MCL.
- (c) The PWS ~~owner~~***O/O*** may submit a written request as specified in (d), below, for the monitoring frequency to be reduced after a minimum of 4 consecutive quarterly samples for surface water systems or 2 consecutive quarterly samples for groundwater systems.
- (d) A written request submitted pursuant to (c), above, shall contain:
- (1) The name of the PWS;
  - (2) The PWS identifier for the PWS;
  - (3) A summary of all sampling results; and
  - (4) Whether any type of treatment to reduce SOC contaminants has been or is being used by the PWS.
- (e) The department shall reinstate annual monitoring for SOC contaminants in response to a request submitted pursuant to (d), above, if the department determines that:
- (1) Based on 4 consecutive quarterly samples, ~~the level of SOC~~ the level of SOC contaminant(s) previously detected is reliably and consistently below the MCL; and
  - (2) The PWS is not operating any type of treatment to reduce the amount of SOC contaminants.
- (f) A PWS which monitors annually shall monitor during the quarter which previously yielded the highest analytical results.
- (g) A PWS which has 3 consecutive annual samples with no detection of an SOC may apply to the department for a waiver as specified in Env-Dw 712.~~4921~~.

*Readopt Env-Dw 712.12, eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.13, to read as follows:*

***Env-Dw 712.4213*** Laboratory Methods and Sample Protocol for SOCs.

- (a) Analysis for SOCs shall be conducted only by laboratories that are accredited by the department for such analyses pursuant to Env-C 300.
- (b) The sampling protocol for SOCs shall be as specified in 40 CFR 141.

*Readopt with amendment Env-Dw 712.13, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.14, to read as follows:*

***Env-Dw 712.4314*** Compliance Determination for SOCs.

- (a) Compliance with Env-Dw 705.02 shall be determined using the analytical results obtained at each sampling point which is an entry point to the distribution system, as specified in the sampling schedule established pursuant to Env-Dw 708.01.
- (b) For any PWS that conducts monitoring at a frequency greater than annually, the department shall determine compliance by calculating a running annual average of all samples collected at each sampling point. If the annual average of any sampling point is greater than the MCL, then the department shall identify the PWS as out of compliance.
- (c) If monitoring is conducted annually or less frequently, then the department shall identify the PWS as being out of compliance if the level of a contaminant at any sampling point is greater than the MCL.

(d) If a PWS has a distribution system with portions that are hydraulically separate from other parts of the distribution system, the PWS ~~owner-O/O~~ may request approval from the department pursuant to Env-Dw 801 to limit the notice to only that portion that is out of compliance.

*Readopt with amendment Env-Dw 712.14, eff. 5-1-10 (doc. #9700), and renumber as Env-Dw 712.15, to read as follows:*

Env-Dw 712.1415 Reporting for SOC~~s~~ Contaminants. A PWS ~~owner-O/O~~ shall report regulated synthetic organics in accordance with Env-Dw 719.04.

*Readopt with amendment Env-Dw 712.15, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.16, to read as follows:*

Env-Dw 712.1516 Monitoring for Endrin.

(a) Monitoring conducted by the ~~owner-O/O~~ of a CWS or NTNC for the pesticide endrin for purposes of determining compliance with the MCL shall be conducted in accordance with this section.

(b) The system ~~owner-O/O~~ shall collect samples to be analyzed for endrin if endrin has been used:

- (1) In the watershed of the surface water, for a system using surface water alone or in combination with groundwater; or
- (2) Within the recharge area of the system's well or wells, for a system using only groundwater.

(c) Samples shall be taken and analyzed during June through September, when contamination by pesticides is most likely to occur, at the intervals specified in the sampling schedule established pursuant to Env-Dw 708.01, which shall be no less frequently than at 3-year intervals.

(d) If the level of endrin exceeds the MCL, the system ~~owner-O/O~~ shall:

- (1) Report the exceedance to the department within 7 days; and
- (2) Conduct 3 additional analyses within one month.

(e) If the average of the original result and the 3 results obtained pursuant to (d), above, rounded to the same number of significant figures as the MCL, exceeds the MCL, the system ~~owner-O/O~~ shall:

- (1) Report to the department pursuant to Env-Dw 719.04; and
- (2) Give notice to the public pursuant to Env-Dw 800.

(f) After giving public notification pursuant to (e)(2), above, the system ~~owner-O/O~~ shall continue to monitor for endrin until the MCL has not been exceeded in 2 successive samples or until a monitoring schedule as a condition to a variance, exemption, or enforcement action becomes effective.

*Readopt with amendment Env-Dw 712.16 through Env-Dw 712.18, eff. 5-1-10 (doc. #9700), and renumber as Env-Dw 712.17 through Env-Dw 712.19, to read as follows:*

Env-Dw 712.1617 PCB Monitoring.

(a) The ~~owner-O/O~~ of a CWS or NTNC that is vulnerable to PCB contamination due to the current or historical presence of electrical transformers in which PCBs may be present shall collect one sample from the source during the pump test required by Env-Dw 301 or Env-Dw 302, as applicable, and analyze each sample using method 505 or 508 specified in 40 CFR 141.24.

(b) If PCBs, as one of 7 Aroclors, are detected in an initial pump test sample, the system ~~owner-O/O~~ shall reanalyze the sample using method 508A specified in ~~Env-C 306.05-40~~ ***CFR 141.24***.

(c) The department shall determine compliance with the PCB MCL based on the quantitative results of analyses using method 508A.

Env-Dw 712.~~4718~~ Monitoring and Compliance Determination for Disinfection Byproducts.

(a) The ~~owner~~***O/O*** of a community water system shall monitor for disinfection byproducts as specified in Env-Dw 715.

(b) Compliance with the disinfection byproduct monitoring requirements shall be as specified in Env-Dw 715.

Env-Dw 712.~~4819~~ Monitoring for Acrylamide and Epichlorohydrin. Each PWS ~~owner~~***O/O*** shall certify annually in writing to the department that when acrylamide and epichlorohydrin are used in drinking water systems, the combination of dose and monomer level does not exceed the levels specified in Env-Dw 705.05.

*Readopt with amendment Env-Dw 712.19, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), and renumber as Env-Dw 712.20 through Env-Dw 712.22, to read as follows:*

Env-Dw 712.~~4920~~ VOC and SOC Chemical Monitoring Waivers.

(a) ~~For purposes of this section, the following definitions shall apply:~~ *{definitions now at Env-Dw 712.01}*

(1) ~~“Source water protection area” means:~~

a. ~~For groundwater sources, the wellhead protection area as defined in RSA 485-C:2, XVIII, namely “the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield”; and~~

b. ~~For surface water sources, the surface area draining toward the intake within 4,000 feet of the intake as determined by topographic data and on-site verification; and~~

(2) ~~“Pesticide application area” means any area that is treated with pesticides or fertilizers that contain pesticides, as defined in Pes 101.21, within the past 3 years or are likely to be treated with pesticides within the next 3 years including, but not limited to, golf courses, lawn or landscaped areas, cemeteries, agricultural areas, athletic or recreational fields, commercial food crops, pesticide storage areas, rights of way, railroads, and large overhead power lines.~~

(~~ba~~) The ~~owner~~***O/O*** of a community water system or a non-transient non-community water system who wishes to request a waiver or reduction in monitoring requirements for one or more volatile organic compound (VOC) contaminants ~~or synthetic organic chemical (SOC) contaminants~~, where authorized by Env-Dw 712.~~0102~~, shall submit the following information in writing to the department ~~on forms supplied in the paper or electronic format provided~~ by the department ***to facilitate the submission of the information:***

(1) The name of the PWS;

(2) The location, including street address, of the PWS;

(3) The PWS identifier for the PWS;

(4) The name, mailing address, ~~and~~ daytime telephone number ***including area code, and email address or fax number*** of the PWS owner ***and operator***;

(5) The name, ~~and~~ daytime telephone number ***including area code***, and, ~~if available,~~ the e-mail address ***or fax number*** of the individual who completed the application;

(6) The name, ***mailing address, daytime telephone number including area code, and email address or fax number*** of the individual responsible for distributing educational materials on behalf of the PWS;

(7) For each system source, the type and location of the source;

(8) The results of all VOC ~~and SOC~~ analyses for each source within one year of the waiver request; and

(9) Source water protection area information including:

a. The maximum daily withdrawal volume;

b. Identification of known and potential contamination sources, as defined in Env-Dw 301.03(s) ~~305.12~~, within the source water protection area; and

c. Identification of land uses for the following areas:

1. For wells, within the sanitary protective area established in accordance with Env-Dw 301, Env-Dw 302, Env-Dw 405, or Env-Dw 406, as applicable, or predecessor rules in Env-Ws 378, Env-Ws 379, Env-Ws 372, or Env-Ws 373, respectively; and

2. For surface water sources, within the source water ***intake*** protection area.

(~~eb~~) The request shall be signed by the individuals identified pursuant to (~~ba~~) ***(4) and (5)***, above. Such signatures shall constitute certification that the information provided is true, complete, and not misleading to the individual's ***signer's*** knowledge and belief.

(~~dc~~) No request shall be granted if the PWS:

(1) Has not resolved ***or does not have or is not implementing a corrective action plan approved pursuant to Env-Dw 720.11 for*** each significant deficiency identified by the department in accordance with ~~Env-Ws 306 or successor rules in~~ ***Env-Dw 717 or*** Env-Dw 720;

(2) Has not corrected ***or is not in the process of correcting*** each deficiency or violation identified in an administrative order or letter of deficiency issued by the department;

(3) Does not have an active primary water system operator as required by Env-Dw 502;

(4) Has not paid its permit-to-operate fee as specified in Env-Dw 501;

(5) Is not in compliance with the lead and copper requirements specified in ~~Env-Ws 381 or successor rules in~~ Env-Dw 714;

(6) Is not in compliance with the emergency plan requirements specified in ~~Env-Ws 360.15 or successor rules in subtitle~~ Env-Dw ***503.21***, if applicable;

(7) Is not in compliance with the consumer confidence report requirements specified in ~~Env-Ws 352 or successor rules in~~ Env-Dw 811, if applicable;

(8) Is not in compliance with the monitoring requirements specified in ~~Env-Ws 707 through 713 and Env-Dw 719~~ ***Env-Dw 710 through Env-Dw 713; or***

(9) Has submitted an incomplete request or a request that contains false information; ***or***

***(10) Has received a new well approval letter from the department that states the system is not eligible for a VOC waiver pursuant to Env-Dw 305.29(e).***

(~~ed~~) No VOC ***monitoring*** waiver shall be granted if:

(1) ***Within the sanitary protective area*** ~~There is:~~

a. Any structure of any size or type ~~within the sanitary protective area~~ from which there is a discharge to the ground or groundwater of any substance other than potable water from hydrants, blow-offs, sampling taps, or other such structures;

~~(2)~~***b.*** There is ~~any~~ structure of any size or type, other than the pump house, ~~within the sanitary protective area~~ in which regulated substances as defined in Env-Wq 401 are stored, used, or handled, other than chemicals or other substances necessary for treatment processes in the pump house;

~~(9)~~***c.*** The sanitary protective area contains any ***One or more*** disposal systems for solid waste or wastewater, such as dumpsters or septic tanks, grease traps, or effluent disposal areas; ***or***

~~(10)~~***d.*** The sanitary protective area contains any ***One or more above-ground storage tanks (ASTs) or underground storage tanks (USTs)*** for hazardous chemicals or petroleum products such as oil, gasoline, propane, or natural gas, other than:

***a1.*** A tank used exclusively to store potable water treatment chemicals;

***b2.*** An ***interior*** home heating oil tank located within an intact concrete structure such as a basement;

***e3.*** An ***exterior*** home heating oil tank located on an impervious surface with a roof, secondary containment, and protected ***edion*** from collision; or

***d4.*** An ~~above-ground tank~~ ***AST*** used to store propane or natural gas only, ***that is in compliance with Env-Or 300, if applicable, or applicable fire safety requirements;***

~~(32)~~ The well ***or surface water intake*** is ~~situated~~ within 50 feet of a parking lot;

~~(43)~~ The well is ~~situated~~ within 25 feet of a trail used by off-highway recreational vehicles as defined in RSA 215-A:1, VI (OHRV), or snowmobiles as defined in RSA 251-A:1, XIII, or both;

~~(54)~~ The surface water intake is ~~situated~~ within 200 feet of a trail used by OHRV or snowmobiles, or both;

~~(65)~~ There is a known source of contamination within the source water protection area that has not been designated as closed or inactive by the department;

~~(76)~~ The PWS is on mandatory VOC sampling ***pursuant to Env-Dw 712.05(a) or an administrative order;***

~~(87)~~ The source has had a ~~confirmed~~ detection of a regulated VOC within the previous 3 years;

*{(9)-(10) moved, renumbered as (1)c.-d., above}*

~~(118)~~ There is an on-site VOC treatment system;

~~(129)~~ ***Within 1,000 feet of the well or surface water intake and within the source water protection area,*** ~~There is:~~

***a.*** An auto salvage yard; as defined in RSA 236:112; or

***b.*** ***One or more ASTs or USTs*** ~~underground storage tank~~ that contain(s) petroleum products or other regulated substances, except propane, ~~within 1,000 feet of the source or intake and within the source water protection area;~~ or

~~(1310)~~ There is confirmed detection of MTBE at any level in ***any public or private drinking or monitoring wells*** located within 1,000 feet of the ~~source~~ ***well or surface water intake*** within the past 3 years.

~~(f-e)~~ The department shall grant a 3-year VOC waiver if none of the disqualifying conditions identified in ~~(d-c)~~ or ~~(e-d)~~, above, are present.

***Env-Dw 712.21 SOC Monitoring Waivers.***

***(a) The O/O of a community water system or a non-transient non-community water system who wishes to request a waiver or reduction in monitoring requirements for one or more synthetic organic chemical (SOC) contaminants, where authorized by Env-Dw 712.11(b), shall submit the following information in writing to the department in the paper or electronic format provided by the department to facilitate the submission of the information:***

- (1) The information required by Env-Dw 712.20(a)(1)-(7) and (9); and***
- (2) The results of all SOC analyses for each source within one year of the waiver request.***

***(b) The request shall be signed by the individuals identified pursuant to Env-Dw 712.20(a)(4) and (5). Such signatures shall constitute certification that the information provided is true, complete, and not misleading to the signer's knowledge and belief.***

***(g) No SOC monitoring waiver shall be granted if:***

- (1) Any of the circumstances specified in Env-Dw 712.20(c)(1)-(9) are present;***
- (2) The PWS O/O has received a new well approval letter from the department that states the system is not eligible for an SOC waiver, pursuant to Env-Dw 305.29(e);***
- ~~***(4) The PWS is on a mandatory SOC sampling program pursuant to Env-Dw 712.12(a);***~~
- ~~***(4) There is an on-site SOC treatment system; or***~~
- (5) There is a solid waste facility as regulated under RSA 149-M and subtitle Env-Sw within the source water protection area; or***
- ~~***(6) The source has had a confirmed detection of a regulated SOC within the previous 3 years.***~~

***(d) The department shall grant a 6-year SOC waiver if none of the disqualifying conditions identified in (c), (g), or (h)(2) above, are present, and the well or surface water intake is not:***

- ~~***(h)(2)a.(1) The source is wWithin a pesticide application area;***~~
- ~~***(h)(2)b.(2) The source is lLocated under a power line unless an agreement and consent for joint use with the power line company and system to not use SOCs in the sanitary protection area (SPA) has been obtained; or***~~
- ~~***(h)(2)c.(3) The source is wWithin 50 feet of an active railroad.***~~

***(h) The department shall grant a 3-year SOC waiver if:***

- (1) None of the disqualifying conditions identified in (c) or (g), above, are present; and***
- (2) Any of the following conditions exist: If the source is located under a power line, the O/O has obtained an agreement and consent for joint use with the owner of the power line to not use SOCs in the sanitary protective area.***

*{a. - c. moved, renumbered as (d)(1)-(3), above}*

***Env-Dw 712.22 VOC and SOC Monitoring Waivers: Duration, Conditions, Renewal, Revocation.***

***(j) A waiver shall be valid for the applicable time established in (f), (h), or (i), above, Env-Dw 712.20(e) or Env-Dw 712.21(d) or (e), as applicable, from the date of the most recent sampling for the contaminant for which the waiver is granted.***

~~(f), (h), or (i), above~~ ***(kb)*** As a condition of any waiver granted under ~~Env-Dw 712.20(e) or Env-Dw 712.21(d) or (e), as applicable~~, the PWS ~~owner~~ ***O/O*** shall distribute educational materials provided by the department within ~~90-30~~ days of ***the date of the*** waiver approval and at least once every 3 years thereafter to:

- (1) Residents within the source water protection area; and
- (2) Owners of known and potential contamination sources within the source water protection area.

***(c)*** ***If requested by the PWS O/O, the department shall grant an extension of the time limit established in (d), above, for not more than 45 days.***

~~(d)~~ The PWS ~~owner~~ ***O/O*** shall certify to the department that the educational materials have been distributed as required by ~~(kb)~~, above, before the due date ~~stated in the application approval letter~~ ***established pursuant to (b) or (c), above, as applicable.***

~~(me)~~ As a condition of any waiver granted under this section for sources producing greater than 57,600 gpd and for systems that serve ~~greater than~~ 1,000 people ***or more***, the PWS ~~owner~~ ***O/O*** shall conduct inspections of all potential contamination sources to ensure compliance with the best management practices specified in Env-Wq 401 at least once every 3 years and ~~prior to~~ ***within 6 months of*** the renewal due date.

***(f)*** ***If a PWS O/O wishes to continue to operate under a VOC waiver or an SOC waiver, the O/O shall, prior to the expiration of the existing waiver, submit to the department:***

***(1)*** ***A request for renewal that includes the information specified in Env-Dw 712.20(a) or Env-Dw 712.21(a), as applicable; and***

~~(n2)~~ The PWS ~~owner~~ shall certify to the department ***A certification*** that the inspections ***required by (e), above, if applicable,*** have been completed ~~with the renewal application~~.

***(g)*** ***The department shall initiate an adjudicative proceeding in accordance with the relevant sections of RSA 541-A and Env-C 200 to revoke a waiver if:***

***(1)*** ***The department receives SOC or VOC samples with detections after the waiver has been granted;***

***(2)*** ***Any of the criteria in Env-Dw 712.20(c) are met;***

***(3)*** ***The department receives credible information that public health could be compromised by reduced sampling, for example because a contaminant covered by the waiver has been detected on adjacent property; or***

***(4)*** ***The educational mailing required by (b), above, has not been undertaken by the deadline established in the waiver request approval letter or the O/O has not provided the certification required by (f)(2), above, by the established deadline.***

## PART Env-Dw 713 MONITORING FOR SECONDARIES

Readopt with amendment Env-Dw 713.01 through Env-Dw 713.03, eff. 5-1-10 (doc. #9700), to read as follows:

Env-Dw 713.01 Monitoring for Regulated Secondary MCLs. The ~~owner~~ ***O/O*** of a community water system or non-transient, non-community water system shall monitor to determine compliance with the secondary MCLs specified in Env-Dw 706, as applicable, in accordance with this part.

### Env-Dw 713.02 Monitoring Location.

(a) The ~~owner~~ ***O/O*** of a system served by groundwater shall collect at least one sample at every entry point to the distribution system which is representative of each well after treatment, as specified in the sampling schedule established pursuant to Env-Dw 708.01.



(b) The ~~owner~~***O/O*** of a system served by surface water shall collect at least one sample at every entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment, as specified in the sampling schedule established pursuant to Env-Dw 708.01.

(c) If the system ~~owner~~***O/O*** believes that conditions make a sampling point other than that established in the sampling schedule more representative of each source or treatment plant, the ~~owner~~***O/O*** shall request a change in sampling location pursuant to Env-Dw 708.04.

(d) If a system draws water from more than one source and the sources are combined before distribution, the system ~~owner~~***O/O*** shall sample at an entry point to the distribution system during periods of normal operating conditions, when water is representative of all sources being used.

Env-Dw 713.03 Monitoring Frequency. The system ~~owner~~***O/O*** shall monitor for the SMCLs listed in Env-Dw 706 once every 3 years.

*Readopt Env-Dw 713.04, eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 713.04 Sample Collection Protocol. Samples shall be collected using the sample preservation, container, and maximum holding time procedures specified in 40 CFR 141 or 143, as applicable.

*Readopt with amendment Env-Dw 713.05, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 713.05 Increased Monitoring after an Exceedance. The ~~owner~~***O/O*** of a system where the SMCL is exceeded and consumer complaints have been documented shall monitor based on a schedule established by the department in accordance with Env-Dw 708.

*Readopt with amendment Env-Dw 713.06, eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 713.06 Annual Fluoride Public Notice for Secondary MCL Exceedance.

(a) The ~~owner~~***O/O*** of a system where the SMCL for fluoride is exceeded shall provide annual public notice as specified in Env-Dw 800.

(b) The public notice shall list the most recent sample result(s) used to determine compliance.

*Readopt with amendment Env-Dw 713.07, eff. 5-1-10 (doc. #9700), to read as follows:*

Env-Dw 713.07 Reporting. Reporting shall comply with Env-Dw 719.~~04~~.

*Readopt with amendment Env-Dw 713.08, eff. 5-1-10 (doc. #9700), as amended eff. 2-1-15 (doc. #10771), to read as follows:*

Env-Dw 713.08 Sodium.

(a) The ~~owner~~***O/O*** of a community water system or non-transient non-community water system shall collect and analyze one sample per plant at the entry point of the distribution system, as specified in the sampling schedule established pursuant to Env-Dw 708.01, for the determination of sodium concentration levels.

(b) Samples shall be collected and analyzed:

(1) Annually, for systems using surface water sources in whole or in part; and

(2) Subject to (c), below, once every 3 years for systems using groundwater only.

(c) The department shall establish a more frequent monitoring schedule for a system using groundwater only if a source is in a location where the sodium content is variable.

(d) Subject to (e), below, the system ~~owner~~***O/O*** shall report the results of the analyses for sodium to the department within the earlier of:

- (1) The first 10 days of the month following the month in which the sample results were received; or
- (2) The first 10 days following the end of the required monitoring period.

(e) If more than annual sampling is required, the system ~~owner~~***O/O*** shall report the average sodium concentration within 10 days of the month following the month in which the analytical results of the last sample used for the annual average was received.

(f) Subject to (g), below, the system ~~owner~~***O/O*** shall send:

- (1) A written notice of the sodium levels to appropriate local and state public health officials by direct mail within 3 months; and
- (2) A copy of each notice required to be provided by (1), above, to the department within 10 days of its issuance.

(g) The system ~~owner~~***O/O*** shall not be required to send the notice required by (f), above, if the department provides such notices in lieu of the supplier pursuant to Env-Dw 801.

**APPENDIX A - STATUTES/REGULATIONS IMPLEMENTED**

<b>Rule Section(s)</b>	<b>State Statute(s) Implemented</b>	<b>Federal Regulation(s) Implemented</b>
Env-Dw 710.01	RSA 485:3, I	40 CFR 141.26
Env-Dw 710.02	RSA 485:3, I	40 CFR 141.66
Env-Dw 710.03 - 710.11	RSA 485:3, I; RSA 485:41, I & IV	40 CFR 141.26
Env-Dw 710.12	RSA 485:41, IV	40 CFR 141 Subpart C, Appendix A; 40 CFR 142 & 143
Env-Dw 711.01 - 711.07	RSA 485:3, I(c)	40 CFR 141.23(a); 40 CFR 142 & 143
Env-Dw 711.08	RSA 485:41, IV	40 CFR 141.31
Env-Dw 711.09 - 711.15	RSA 485:3, I(c)	40 CFR 141.23(b)
Env-Dw 711.16	RSA 485:41, IV	40 CFR 141
Env-Dw 711.17	RSA 485:3, I	40 CFR 141.23(b)
Env-Dw 711.18 - 711.22	RSA 485:3, I	40 CFR 141.23; 40 CFR 142 & 143
Env-Dw 711.23	RSA 485:41, IV	40 CFR 141.31
Env-Dw 711.24 - 711.28	RSA 483:3, I	40 CFR 141.23
Env-Dw 711.29	RSA 485:41, IV	40 CFR 141.31
Env-Dw 712.01 - 712.03	RSA 485:3, I	40 CFR 141.40
Env-Dw 712.04	RSA 485:3; RSA 485:41	40 CFR 141.24
Env-Dw 712.05	RSA 485:3, I	
Env-Dw 712.06	RSA 485:3, I	40 CFR 141.24 (f)
Env-Dw 712.07 - 712.08	RSA 485:3, I	40 CFR 14.23 (k)
Env-Dw 712.09	RSA 485:41, IV	40 CFR 141.23
Env-Dw 712.10 - 712.11	RSA 485:3, I	40 CFR 141.24 (f)
Env-Dw 712.12 - 712.14	RSA 485:3, I	
Env-Dw 712.15	RSA 485:41, IV	40 CFR 141.31
Env-Dw 712.16 - 712.17	RSA 485:3, I	
Env-Dw 712.18	RSA 485:3, I(c)	40 CFR 141.132
Env-Dw 712.19	RSA 485:3, I	40 CFR 141.30

<b>Rule Section(s)</b>	<b>State Statute(s) Implemented</b>	<b>Federal Regulation(s) Implemented</b>
Env-Dw 712.20 - 712.22	RSA 485:3, I	40 CFR 141.24(e)(6); 40 CFR 141.30
Env-Dw 713.01 - 713.05	RSA 485:3, II	40 CFR 143.4
Env-Dw 713.06	RSA 485:3, I(c)	
Env-Dw 713.07	RSA 485:41, IV	40 CFR 141.31
Env-Dw 713.08	RSA 485:3, II	

**APPENDIX B - FEDERAL DEFINITIONS**

[NONE FOR PARTS ENV-DW 710-713]

**APPENDIX C: DEFINITION OF PESTICIDE**

Pes 101.21 “Pesticide” means:

(a) Any chemical or biological agent used to control a pest including but not limited to the following materials:

- (1) Acaricides or miticides;
- (2) Insecticides;
- (3) Nematocides;
- (4) Herbicides;
- (5) Desiccants;
- (6) Defoliant;
- (7) Fungicides;
- (8) Molluscicides;
- (9) Repellents;
- (10) Algaecides;
- (11) Rodenticides;
- (12) Disinfectants; and
- (13) Fumigants; and

(b) Any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any insects, rodents, fungi, weeds or other forms of plant or animal life or viruses which the board declares to be a pest, except viruses on or in living man or other animals, and any substances or mixture of substances intended for use as a plant regulator, defoliant or desiccant.