**Section 611.1010 Treatment Technique Requirements: Bin Classification for Filtered System Suppliers**

a) Following completion of the initial round of source water monitoring required under Section 611.1001(a), a filtered system supplier must calculate an initial Cryptosporidium bin concentration for each plant for which monitoring was required. Calculation of the bin concentration must use the Cryptosporidium results reported under Section 611.1001(a) and must follow the appropriate of the procedures set forth in subsection (b).

b) Bin Concentration Calculation Procedures

1) For a supplier that collects a total of at least 48 samples, the bin concentration is equal to the arithmetic mean of all sample concentrations.

2) For a supplier that collects a total of at least 24 samples, but not more than 47 samples, the bin concentration is equal to the highest arithmetic mean of all sample concentrations in any 12 consecutive months during which Cryptosporidium samples were collected.

3) For a supplier that serves fewer than 10,000 people and which monitors for Cryptosporidium for only one year (i.e., collect 24 samples in 12 months), the bin concentration is equal to the arithmetic mean of all sample concentrations.

4) For a supplier with plants operating only part of the year that monitors fewer than 12 months per year under Section 611.1001(e), the bin concentration is equal to the highest arithmetic mean of all sample concentrations during any year of Cryptosporidium monitoring.

5) If the monthly Cryptosporidium sampling frequency varies, a supplier must first calculate a monthly average for each month of monitoring. A supplier must then use these monthly average concentrations, rather than individual sample concentrations, in the applicable calculation for bin classification in subsections (b)(1) through (b)(4).

c) A filtered system supplier must determine its initial bin classification according to subsections (c)(1) through (c)(5), subject to the limitations of subsection (c)(6), and using the Cryptosporidium bin concentration calculated under subsections (a) and (b).

1) For a supplier that is required to monitor for Cryptosporidium under Section 611.1001 and which has a Cryptosporidium bin concentration of less than 0.075 oocysts/ℓ, the bin classification is Bin 1.

2) For a supplier that is required to monitor for Cryptosporidium under Section 611.1001 and which has a Cryptosporidium bin concentration of 0.075 oocysts/ℓ or more, but less than 1.0 oocysts/ℓ, the bin classification is Bin 2.

3) For a supplier that is required to monitor for Cryptosporidium under Section 611.1001 and which has a Cryptosporidium bin concentration of 1.0 oocysts/ℓ or more, but less than 3.0 oocysts/ℓ, the bin classification is Bin 3.

4) For a supplier that is required to monitor for Cryptosporidium under Section 611.1001 and which has a Cryptosporidium bin concentration of 3.0 oocysts/ℓ or more, the bin classification is Bin 4.

5) For a supplier that that serves fewer than 10,000 people and which is not required to monitor for Cryptosporidium under Section 611.1001(a)(4), the bin classification is Bin 1.

6) The Cryptosporidium concentration is based on the applicable of the calculations set forth in subsection (a) or (d).

d) Following completion of the second round of source water monitoring required under Section 611.1001(b), a filtered system supplier must recalculate its Cryptosporidium bin concentration using the Cryptosporidium results reported under Section 611.1001(b) and following the applicable of the procedures set forth in subsections (b)(1) through (b)(4). A supplier must then redetermine its bin classification using this bin concentration and subsection (c).

e) Reporting the Bin Classification

1) A filtered system supplier must report its initial bin classification under subsection (c) to the Agency for approval no later than six months after the supplier is required to complete initial source water monitoring based on the applicable schedule set forth in Section 611.1001(c).

2) A supplier must report its bin classification under subsection (d) to the Agency for approval no later than six months after the supplier is required to complete the second round of source water monitoring based on the applicable schedule set forth in Section 611.1001(c).

3) The bin classification report to the Agency must include a summary of source water monitoring data and the calculation procedure used to determine bin classification.

f) A failure to comply with the conditions of subsection (e) is a violation of the treatment technique requirement.

BOARD NOTE: Derived from 40 CFR 141.710.

(Source: Amended at 44 Ill. Reg. 6996, effective April 17, 2020)