**Section 611.955 Combined Filter Effluent Turbidity Limits**

a) Applicability. A Subpart B system supplier that serves fewer than 10,000 persons, which is required to filter, and which utilizes filtration other than slow sand filtration or diatomaceous earth filtration must meet the combined filter effluent turbidity requirements of subsections (b) through (d). If the supplier uses slow sand or diatomaceous earth filtration the supplier is not required to meet the combined filter effluent turbidity limits of this Subpart X, but the supplier must continue to meet the combined filter effluent turbidity limits in Section 611.250.

b) Combined Filter Effluent Turbidity Limits. A supplier must meet two strengthened combined filter effluent turbidity limits.

1) The first combined filter effluent turbidity limit is a "95th percentile" turbidity limit that a supplier must meet in at least 95 percent of the turbidity measurements taken each month. Measurements must continue to be taken as described in Sections 611.531 and 611.533. Monthly reporting must be completed according to Section 611.957(a). The following are the required limits for specific filtration technologies:

A) For a system with conventional filtration or direct filtration, the 95th percentile turbidity value is 0.3 NTU.

B) For a system with any other alternative filter technology, the 95th percentile turbidity value is a value (not to exceed 1 NTU) to be determined by the Agency, by a SEP, based on the demonstration described in subsection (c).

2) The second combined filter effluent turbidity limit is a "maximum" turbidity limit that a supplier may at no time exceed during the month. Measurements must continue to be taken as described in Sections 611.531 and 611.533. Monthly reporting must be completed according to Section 611.957(a). The following are the required limits for specific filtration technologies:

A) For a system with conventional filtration or direct filtration, the maximum turbidity value is 1 NTU.

B) For a system with any other alternative filter technology, the maximum turbidity value is a value (not to exceed 5 NTU) to be determined by the Agency, by a SEP, based on the demonstration described in subsection (c).

c) Requirements for an Alternative Filtration System

1) If a supplier's system consists of alternative filtration (filtration other than slow sand filtration, diatomaceous earth filtration, conventional filtration, or direct filtration) the supplier is required to conduct a demonstration (see tables in subsection (b)). The supplier must demonstrate to the Agency, using pilot plant studies or other means, that its system's filtration, in combination with disinfection treatment, consistently achieves the following:

A) 99 percent removal of Cryptosporidium oocysts;

B) 99.9 percent removal or inactivation of Giardia lamblia cysts; and

C) 99.99 percent removal or inactivation of viruses.

2) This subsection (c)(2) corresponds with 40 CFR 141.552(b), which USEPA has designated as "reserved". This statement maintains structural correspondence with the corresponding federal regulation.

d) Requirements for a Lime-Softening System. If a supplier practices lime softening, the supplier may acidify representative combined filter effluent turbidity samples prior to analysis using a protocol approved by the Agency.

BOARD NOTE: Derived from 40 CFR 141.550 through 141.553.

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