**Section 611.250 Filtration**

A supplier using a surface water source or a groundwater source under the direct influence of surface water must provide both disinfection treatment, as Section 611.242 specifies, and filtration treatment complying with subsection (a), (b), (c), (d), or (e) within 18 months after the Agency issues a SEP requiring the supplier to apply filtration treatment. Failing to apply filtration treatment before the time the Agency provides in a SEP violates a treatment technique.

a) Conventional Filtration Treatment or Direct Filtration

1) For a supplier using conventional filtration or direct filtration, the turbidity level of its filtered water must not exceed 0.5 NTU in more than five percent of the measurements each month under Sections 611.531(a) and 611.533(a). However, if the Agency issues a SEP determining that the supplier can achieve at least 99.9 percent removal or inactivation of Giardia lamblia cysts at some turbidity level higher than 0.5 NTU in at least 95 percent of the measurements each month, the Agency must substitute this higher turbidity limit in the SEP. However, the Agency must not approve a turbidity limit allowing more than 1 NTU in more than five percent of the samples each month under Sections 611.531(a) and 611.533(a).

2) The turbidity level of representative samples of a supplier's filtered water must never exceed 5 NTU.

3) A supplier serving 10,000 or more persons must comply with the turbidity in Section 611.743(a).

4) A supplier serving fewer than 10,000 people must comply with the turbidity in Section 611.955.

b) Slow Sand Filtration

1) For a supplier using slow sand filtration, the turbidity level of its filtered water must not exceed 1 NTU in more than five percent of the measurements each month under Section 611.531(a) and 611.533(a). However, if the Agency issues a SEP determining that there is no significant interference with disinfection at a higher level, the Agency must substitute the higher turbidity limit in the SEP.

2) The turbidity of a supplier's filtered water must never exceed 5 NTU, measured as Sections 611.531(a) and 611.533(a) specify.

c) Diatomaceous Earth Filtration

1) For a supplier using diatomaceous earth filtration, the turbidity level of its filtered water must not exceed 1 NTU in more than five percent of the measurements each month under Sections 611.531(a) and 611.533(a).

2) The turbidity level of representative samples of a supplier's filtered water must never exceed 5 NTU under Sections 611.531(a) and 611.533(a).

d) Other Filtration Technologies. The Agency may issue a SEP allowing a supplier to use a filtration technology not included in subsections (a) through (c) if the supplier demonstrates, using pilot plant studies or other means, that the alternative filtration technology, in combination with disinfection treatment complying with Section 611.242, consistently achieves 99.9 percent removal or inactivation of Giardia lamblia cysts and 99.99 percent removal or inactivation of viruses. Subsection (b) applies to a supplier making this demonstration. A supplier serving 10,000 or more persons must comply with Section 611.743(b). A supplier serving fewer than 10,000 people must comply with Section 611.955.

BOARD NOTE: This Section derives from 40 CFR 141.73.

(Source: Amended at 47 Ill. Reg. 16486, effective November 2, 2023)