Environmental Protection Agency

§ 141.551 What strengthened combined filter effluent turbidity limits must my system meet?

Your system must meet two strengthened combined filter effluent turbidity limits.

(a) The first combined filter effluent turbidity limit is a “95th percentile” turbidity limit that your system must meet in at least 95 percent of the turbidity measurements taken each month. Measurements must continue to be taken as described in §141.74(a) and (c). Monthly reporting must be completed according to §141.570. The following table describes the required limits for specific filtration technologies.

<table>
<thead>
<tr>
<th>If your system consists of * * *</th>
<th>Your 95th percentile turbidity value is * * *</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Conventional Filtration or Direct Filtration</td>
<td>0.3 NTU.</td>
</tr>
<tr>
<td>(2) All other “Alternative” Filtration</td>
<td>A value determined by the State (not to exceed 1 NTU) based on the demonstration described in §141.552.</td>
</tr>
</tbody>
</table>

(b) The second combined filter effluent turbidity limit is a “maximum” turbidity limit which your system may at no time exceed during the month. Measurements must continue to be taken as described in §141.74(a) and (c). Monthly reporting must be completed according to §141.570. The following table describes the required limits for specific filtration technologies.

<table>
<thead>
<tr>
<th>If your system consists of * * *</th>
<th>Your maximum turbidity value is * * *</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Conventional Filtration or Direct Filtration</td>
<td>1 NTU.</td>
</tr>
<tr>
<td>(2) All other “Alternative” Filtration</td>
<td>A value determined by the State (not to exceed 5 NTU) based on the demonstration as described in §141.552.</td>
</tr>
</tbody>
</table>

§ 141.552 My system consists of “alternative filtration” and is required to conduct a demonstration—what is required of my system and how does the State establish my turbidity limits?

(a) If your system consists of alternative filtration (filtration other than slow sand filtration, diatomaceous earth filtration, conventional filtration, or direct filtration) you are required to conduct a demonstration (see tables in §141.551). Your system must demonstrate to the State, using pilot plant studies or other means, that your system’s filtration, in combination with disinfection treatment, consistently achieves:

- (1) 99 percent removal of Cryptosporidium oocysts;
- (2) 99.9 percent removal and/or inactivation of Giardia lamblia cysts; and
- (3) 99.99 percent removal and/or inactivation of viruses.

(b) [Reserved]

§ 141.553 My system practices lime softening—is there any special provision regarding my combined filter effluent?

If your system practices lime softening, you may acidify representative combined filter effluent turbidity samples prior to analysis using a protocol approved by the State.

INDIVIDUAL FILTER TURBIDITY REQUIREMENTS

§ 141.560 Is my system subject to individual filter turbidity requirements?

If your system is a subpart H system serving fewer than 10,000 people and utilizing conventional filtration or direct filtration, you must conduct continuous monitoring of turbidity for each individual filter at your system. The following requirements apply to continuous turbidity monitoring:

(a) Monitoring must be conducted using an approved method in §141.74(a);
(b) Calibration of turbidimeters must be conducted using procedures specified by the manufacturer;
(c) Results of turbidity monitoring must be recorded at least every 15 minutes;
(d) Monthly reporting must be completed according to §141.570; and