

Case Studies: Great View


- Filtered Surface Water System, Serving 15,000 People, Using Direct Filtration
 - ☐ Where, when, & how many CFE samples should this system take?
 - ☐ What is the limit for the CFE 95th% value?
 - ☐ What is the system required to report to the state within 10 days?
 - ☐ Where & how many IFE samples should this system take?
 - ☐ Two consecutive IFE measurements are >1.0 NTU. What is the system required to do?

Case Study

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Where, when, & how many CFE samples should this system take?

- One per year at the source
- Five samples per month in the distribution system
- At least one sample every 4 hours from the combined filter effluent



Answer

- Where, when, & how many CFE samples should this system take?
 - ☐ At least one sample every 4 hours from the combined filter effluent


Case Study

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Direct Filtration System, serving 15,000

What is the limit for the CFE 95th% value?

- 1.2 mg/L
- 1.0 NTU
- ≤ 0.3 NTU
- None of the above



Answer

- What is the limit for the CFE 95th% value?
 - ☐ ≤ 0.3 NTU

Case Study

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Direct Filtration System, serving 15,000

What is the system required to report to the state within 10 days?

- Percentage of CFE measurements \leq 95th% limit
- Date and value of any CFE measurement that exceeded 1 NTU
- Total number of CFE measurements
- All of the above

Answer

- What is the system required to report to the state within 10 days?
 - All of the above

Where & how many IFE samples should this system take?

- 1 sample at the entry point to the distribution system
- 2 samples in the source water
- Continuously monitor every 15 minutes from the individual filter effluent
- At least every 4 hours at the entry point to the distribution system

Answer

- Where & how many IFE samples should this system take?
 - Continuously monitor every 15 minutes from the individual filter effluent

Two consecutive IFE measurements are >1.0 NTU. What is the system required to do?

- If the cause cannot be determined, produce a filter profile within 7 days
- Report filter number, turbidity value(s) and date by the 10th of the following month
- Report the cause, or report that a filter profile has been completed, by the 10th of the following month,
- All of the above

Answer

- Two consecutive measurements are >1.0 NTU. What is the system required to do?
 - All of the above.

Case Studies: Plain Valley

- Filtered GWUDI System, Serving 300 People, Using Slow Sand Filtration
 - What is the reduced monitoring frequency that the state can set for this system?
 - What is the maximum CFE limit?
 - What is the system required to report to the state within 10 days?
 - What are the removal/inactivation requirements for Viruses, *Giardia Lamblia*, and *Cryptosporidium* for this system?
 - How many IFE samples should this system take?

What is the reduced monitoring frequency that the state can set for this system?

- At least every 8 hours
- One sample per day
- Continuous monitoring every 2 hours
- Four samples per day

Answer

- What is the reduced monitoring frequency that the state can set for this system?
 - One sample per day

Case Study

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What is the maximum CFE limit?

- ≤ 1 NTU
- 5 NTU
- ≤ 0.3 NTU
- None of the above

Answer

- What is the maximum CFE limit?
 - 3 NTU

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What is the system required to report to the state within 10 days?

- Total number of monthly measurements
- Number and percent less than or equal to designated 95% turbidity limits
- Date and value exceeding 5 NTU
- All of the above

Answer

- What is the system required to report to the state within 10 days?
 - All of the above

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What are the removal/inactivation requirements for Viruses, *Giardia Lamblia*, and *Cryptosporidium* for this system?

- Viruses - 4-log removal/inactivation, *Giardia Lamblia* - 3-log removal/inactivation, *Cryptosporidium* - 2-log removal
- Viruses - 2-log removal/inactivation, *Giardia Lamblia* - 2-log removal/inactivation, *Cryptosporidium* - 3-log removal
- Viruses - 3-log removal/inactivation, *Giardia Lamblia* - 4-log removal/inactivation, *Cryptosporidium* - 4-log removal



GWUDI System,
serving 300 using
slow sand filtration

Answer

- What are the removal/inactivation requirements for Viruses, *Giardia Lamblia*, and *Cryptosporidium* for this system?
 - Viruses - 4-log removal/inactivation, *Giardia Lamblia* - 3-log removal/inactivation, *Cryptosporidium* - 2-log removal

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How many IFE samples should this system take?

- At least every 4 hours
- Continuous monitoring every 15 minutes
- Not required
- Once per day



GWUDI System,
serving 300 using
slow sand filtration

Answer

- How many IFE samples should this system take?
 - Not required.

Case Study

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