

Seasonal System Requirements



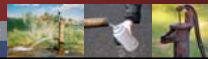
November 2015

Seasonal Systems

- A seasonal system is a NCWS, not operated as a PWS on a year-round basis, that starts up/shuts down at the beginning & end of each operating season
- State may exempt seasonal systems from requirements for seasonal systems if the distribution system remains pressurized

40 CFR 141.2, 40 CFR 141.8540(b)(3), 40 CFR 141.856(a)(4) & 141.857(a)(4)

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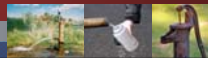
Primacy Considerations: Seasonal Systems

State must describe how it will:

- 1) identify seasonal systems,
- 2) determine when systems monitoring less than monthly must monitor,
- 3) start up procedures must be completed

40 CFR 141.860(b)(2) & (d)(3), 142.16(a)(2)(vii)

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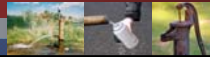


Primacy Considerations: Identifying Seasonal Systems

Options:

- Use of State database
- Reviewing historic TCR sampling data
- Outreach to systems for self identification
- Sanitary Surveys

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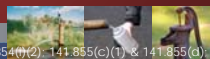


Monitoring Frequency – Seasonal GW Serving ≤ 1,000 People

System Type	Baseline	Reduced	Transition to the RTCR
Seasonal NCWS	1 / month	1 / quarter or 1 / year	<p>For quarterly – identify vulnerable period for monitoring</p> <p>For annual – identify vulnerable period for monitoring & site visit or voluntary Level 2 assessment in 1st & subsequent years</p>

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40 CFR 141.854(c)(1), 141.854(e), 141.854(f), 141.854(m)(2), 141.855(c)(1) & 141.855(d)



Reduced Monitoring Criteria - Seasonal GW Systems ≤ 1,000 people

Monthly to Quarterly

Approved siting plan that designates the time period for monitoring

- Monitors during highest vulnerability period or highest demand or other time period based on site-specific conditions

Within last 12 months, have site visit by state or sanitary survey or voluntary Level 2 assessment

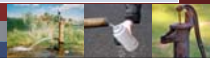
Free of sanitary defects or corrected all sanitary defects

Protected water source

Clean compliance history for a minimum of 12 months

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40 CFR 141.854(c) & 141.854(f)(2)(i)



Reduced Monitoring Criteria - Seasonal GW Systems ≤ 1,000 people

Monthly/Quarterly to Annually

All criteria for reduced monitoring from monthly to quarterly

Has an annual site visit by the state and corrects all identified sanitary defects or substitutes a voluntary Level 2 assessment by a party approved by the state

One of the following additional barriers to contamination:

- Cross connection control program
- Certified operator provisions
- Continuous disinfection entering distribution and residual in distribution in accordance with criteria specified by state
- 4-log demonstration of removal or inactivation of viruses under 40 CFR 141.403(b)(3)
- Other equivalent enhancements approved by the state

40 CFR 141.854(h) & 141.854(i)(2)

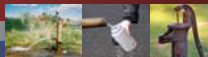


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Increased Monitoring – Seasonal GW NCWS Serving ≤ 1,000 People

- Increases from annual to quarterly the quarter after the system has one RTCR monitoring violation
- Increases from quarterly or annual to monthly the month following any of these events:
 - Triggered Level 2 assessment or a 2nd Level 1 assessment in a rolling 12 months
 - *E. coli* MCL violation
 - Coliform TT violation, including failure to complete a state-approved start-up procedure
 - Two RTCR monitoring violations, or one RTCR monitoring violation and one Level 1 assessment, in a rolling 12 months, for a system on quarterly monitoring

40 CFR 141.854(f) and 141.860(b)(2)

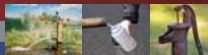


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Primacy Considerations: Determining when systems on reduced monitoring must monitor

Considerations:

- Periods of highest demand
- When source is most vulnerable to contamination (wet season)
- Periods of highest water age / stagnation
- After potential sources of contamination are introduced



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Start-up Procedures

- Beginning April 1, 2016, all seasonal systems must demonstrate completion of a state-approved start-up procedure before serving water to the public
- States have the flexibility to determine what start-up procedures are appropriate for a particular system based on site-specific considerations
- States may require one or more TC samples as part of the required start-up procedures

40 CFR 142.16(q)(2)(vii); 141.856(a)(4)(i); 141.857(a)(4)

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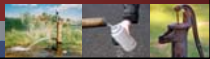
Primacy Considerations: Start-up Procedures

Which of the following is your state considering as requirements for seasonal systems' start-up procedures?:

- A. Disinfection and Flushing
- B. Sampling for total coliform/*E. coli*
- C. Minimum disinfectant residual in distribution system
- D. Site visit by state or state-approved third party
- E. Verification that any current or historical sanitary defects from previous operational period have been corrected
- F. Drain storage tank

G. Flush all taps
 H. Self-inspection of all water system components
 States have discretion to allow any combination of these procedures or additional procedures not listed here.

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Seasonal Systems

TCR	RTCR
Seasonal PWS has the same requirements as other systems of the same size & type	All seasonal PWSs must demonstrate (certify) completion of a state-approved start-up procedure. Routine (baseline) monitoring is monthly. For reduced monitoring:
	<ul style="list-style-type: none"> Seasonal PWSs must meet the same criteria as other systems of its size and type Sample site plan must designate the time period for monitoring based on high demand or vulnerability
	State may exempt seasonal system from requirements (e.g., start-up procedure) if the entire distribution system remains pressurized. Systems monitoring less than monthly must still monitor during the designated vulnerable period.

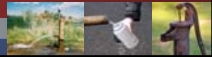
40 CFR 141.856(a)(4); 141.857(a)(4)

Pop Quiz

TRUE OR FALSE: Failure by a non-community seasonal system to complete state-approved start-up procedures prior to serving water to the public is a TT violation.

- A. True
- B. False

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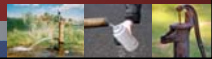


Answer

TRUE OR FALSE: Failure by a non-community seasonal system to complete state-approved start-up procedures prior to serving water to the public is a TT violation.

- A. True**
- B. False

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Implementing Seasonal System Provisions

- How will the state identify seasonal systems?
- How will the state determine when systems on less than monthly monitoring must monitor?
- What start-up procedures will the state require?

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