



EPA Region 8 – Sanitary Survey Basics

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WARWS Conference – April 18, 2023

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Overview

- Sanitary survey overview
- Significant deficiencies
- Pre and post survey timeline
- Example photos
- Cybersecurity



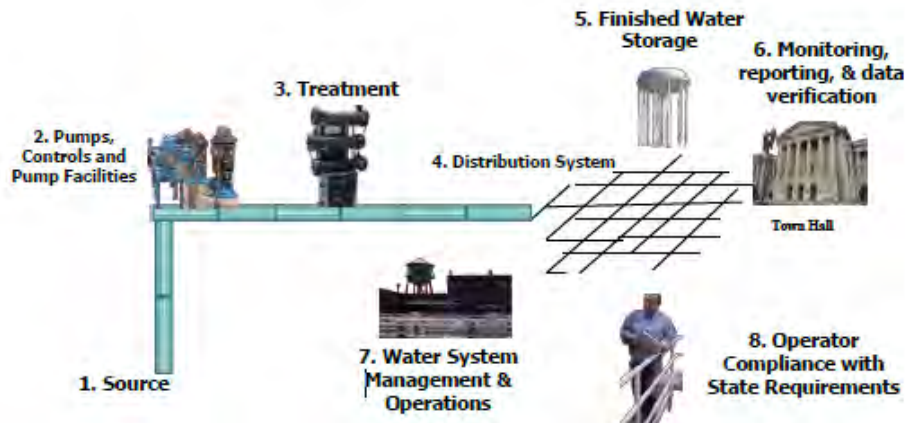
Sanitary Survey Definition

- A sanitary survey is an on-site review of a public water system's:
 - Water source(s)
 - Facilities
 - Equipment
 - Operation and maintenance
- Sanitary surveys assess a system's capability to provide safe drinking water
- Every 3 years for community systems, 5 years for non-community systems



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Sanitary Survey Elements



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Significant Deficiencies (SDs)

- GWR – Ground Water Rule
- SWTR – Surface Water Treatment Rule
- Significant deficiencies (SDs) include, but are not limited to, defects in the design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that EPA determines to be causing or have the potential for causing the introduction of contamination into the water delivered to consumers.

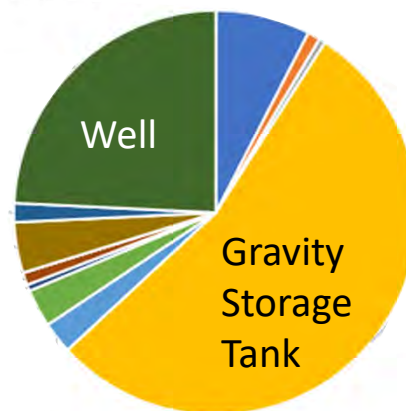


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Open SDs at R8 Systems by Type – ALL Water Systems

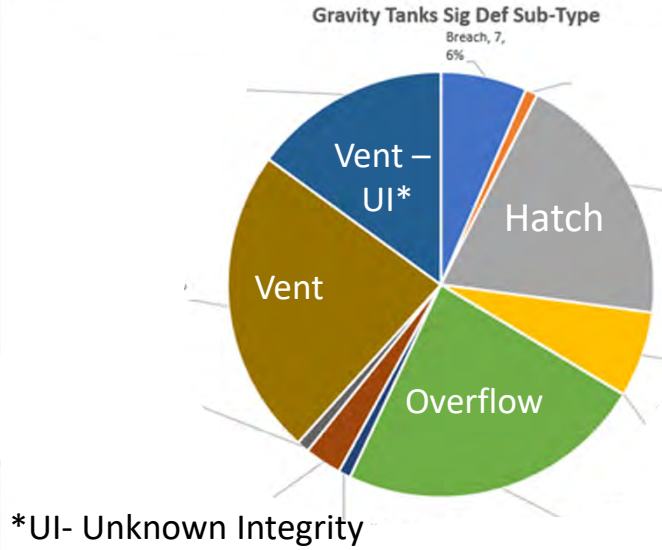
239 open Wyoming Significant Deficiencies at ALL Wyoming water systems

Combined GW & SWTR Open SigD



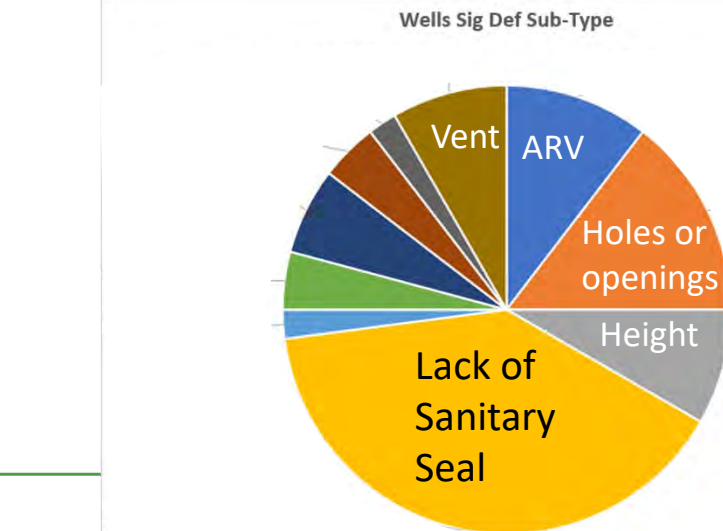
Open SDs at R8 Systems by Type –Gravity Storage Tanks

Gravity Storage Tank - Wyoming Significant Deficiencies



Open SDs at R8 Systems by Type - Wells

Wells - open Wyoming Significant Deficiencies



Preparing for a Sanitary Survey

- Each system to be surveyed will receive an email months prior to the survey
- Review the email and attachments to prepare for the survey
- 2-page checklist

Preparing for Your Drinking Water Sanitary Survey

EPA Region 8 Contact: Lucien Gassie • 303 312-6620 • gassie.lucien@epa.gov

A Sanitary Survey has been scheduled at your public water system
Complete the checklist below PRIOR to the sanitary survey to aid in preventing significant deficiencies from being identified at your system

Sanitary Survey Preparation Checklist

Who should attend your sanitary survey?

- Operator(s)
- Owner
- Administrative contact

Please prepare for questions about general operations, management, security, and specific technical questions.

Sanitary survey scheduling

Records Checklist—have these records available for the surveyor

- Previous sanitary survey report: be prepared to discuss findings and resolution of deficiencies
- System population, number of service connections (commercial and residential)
- Water use records for systems that are required to treat (plant output in gal/day—design, summer avg, winter avg, and max)
- List of all new facilities put on-line since last survey (e.g., tanks, wells, pumping stations)
- Monitoring Plans, updated with all recent system modifications
 - Bacteriological Sample Siting Plan and Lead/Copper Sampling Plan with maps
 - Stage 2 DBP Monitoring Plan and EPA approval letter (if applicable)
- Latest storage tank cleaning/inspection report (and date of last tank cleaning for all tanks)
- Water treatment chemical info: manufacturer, product name, location chemical(s) added, max dose used in past 12 months
- Other paperwork: depending on system type (e.g., water hauling records, consecutive system agreement)
- List of certified operators, levels of certification, and expiration dates OR contract operator agreement



Survey Checklist

- For rooftop and inaccessible system components, the water system must provide photos to the surveyor or EPA Region 8 after the sanitary survey to avoid an Unknown Integrity significant deficiency
- Checklists for these components are provided in the pre-survey email

EPA Region 8 Drinking Water Unit Unknown Integrity of Finished-Water Storage Tank Checklist	
Fill out one checklist per storage tank & submit labeled photos of each tank component the sanitary surveyor was unable to access and completely evaluate with this form	
PWS Name: <input type="text"/>	PWS ID: <input type="text"/>
Tank Name: <input type="text"/>	Tank ID: <input type="text"/>
Proposed Inspection Date: <input type="text"/>	Actual Inspection Date: <input type="text"/>
Name of Person Filling Out Form: <input type="text"/>	Title of Person Filling Out Form: <input type="text"/>
I certify that this information is complete and accurate: <input type="checkbox"/> Date: <input type="text"/>	

Overall Tank Condition			
Significant Deficiency	Required Correction	Proposed Completion Date	Actual Completion Date
<input type="checkbox"/> Yes <input type="checkbox"/> No Does the tank appear to be structurally sound?	If no, what repairs are suggested by the tank inspector? <input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> Yes <input type="checkbox"/> No Are there any unprotected openings in the tank (breaches, leaks, daylight coming through tank in spots, etc)	If yes, indicate type of breach and how it should be repaired. <input type="text"/>	<input type="text"/>	<input type="text"/>

Access Hatch			
Significant Deficiency	Required Correction	Proposed Completion Date	Actual Completion Date
<input type="checkbox"/> Yes <input type="checkbox"/> No Is the hatch raised at least 4" above		<input type="text"/>	<input type="text"/>



After the Sanitary Survey

- The draft survey documents prepared by the surveyor are reviewed by EPA Region 8
- The water system will receive a final survey report at some time after the sanitary survey
- A 6-month initial timeframe is allotted to correct any significant deficiencies identified in the sanitary survey – extensions may be requested if the system needs more time
- If the water system doesn't respond to the EPA within 6 months of receiving SDs, a notice of violation will be sent



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Survey Photos



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Photo #: 11

Subject:

Top of tank that doesn't have ladder access.

Comments:

Recommendations have been made to install an OSHA acceptable access to both tanks. This is an owner provided photo showing the method used to access the roof of the second tank, which appears to be a loose ladder.



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Photo #: 21

Subject:

Clearwell Storage Tank (ST02)

Comments:

The Clearwell is covered by boards and plywood, partially lined with plastic. The operator indicated venting is achieved through the space between planks.

There is no hatch typical of a tank. Access to the tank is achieved by removing boards this area of boards.



Photo #: 1

Subject:

Well #3 (WL01)

Comments:

Well cap partially opened to allow wire into the casing. Bolts loose, nuts missing, and gasket missing.



Photo #: 4

Subject:

Well #1 WL01 Well Cap
And Seal

Comments:

The well did not have a sanitary seal. Tin foil was used in an attempt to seal the casing. The cap was loose and just sitting on top of the casing and tin foil.



Subject:

Storage Tank #2 (18K-Gal) ST02 Access Hatch

Comments:

Grass and weeds floating on the top of the water that is in storage tank #2.



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Cybersecurity

- Cybersecurity Memo distributed by EPA HQ in March 2023
 - Memo, fact sheet, checklist, guidance document
- Systems with Operational Technology, such as SCADA or PLC controllers, will be required to undergo cybersecurity assessments
 - Must be at least as frequent as the sanitary survey
- Will not be implemented in WY in survey year 2023
- More news coming later this year



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Questions?

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Resource: How To Prepare For A Sanitary Survey document
(Internet search term: how to prepare for a sanitary survey EPA region 8)

