

## EPA Region 8 – How to Prepare for a Sanitary Survey

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### Presentation Overview

- Sanitary survey overview
- Preparation Checklist
- Significant Deficiencies
- Cybersecurity



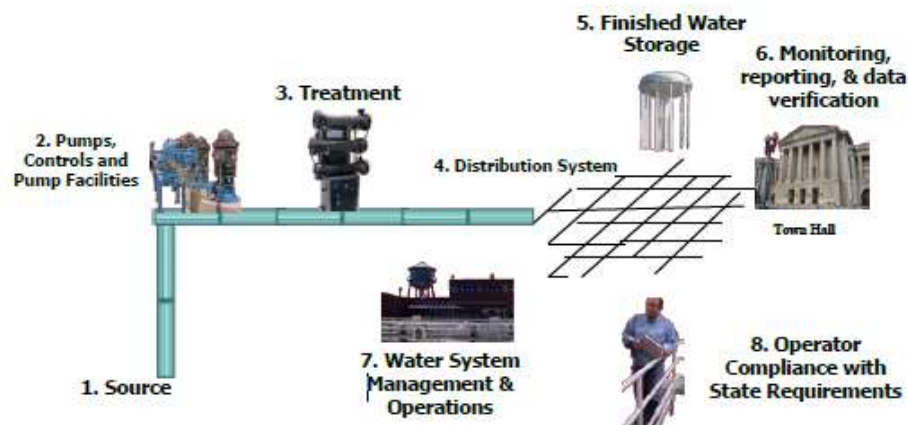
## Sanitary Survey (SS) Overview

- 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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## SS Elements



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## Preparing for a SS

- 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 (Wyoming)			
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Your public water system is due for a sanitary survey this year. Completing the checklist below prior to the sanitary survey may prevent significant deficiencies from being identified during the survey.			
<b>General Information</b>		<b>Preparation Checklist</b>	
<b>Who should attend your sanitary survey?</b>		<b>Records</b>	
At least one system representative who is an operator, owner, or administrative contact. Please prepare for questions about general operations, management, security, and specific technical questions.		<input type="checkbox"/> Prior sanitary survey report – ensure all deficiencies have been addressed <input type="checkbox"/> System population and number of service connections <input type="checkbox"/> Water use records (flow rates/volume distributed) <input type="checkbox"/> Applicable monitoring plans <ul style="list-style-type: none"> <li>• Revised Total Coliform Rule &amp; Lead/Copper Rule sampling plans w/maps</li> <li>• Disinfection byproduct monitoring plan</li> </ul> <input type="checkbox"/> Date of most recent tank cleanings and tank cleaning/inspection reports <input type="checkbox"/> Water treatment chemical information (product, dosage) <input type="checkbox"/> Other paperwork as applicable based on system type (for example, O&M plan for point of use systems, SWTR records for the past 3 years for surface water and ground water under the direct influence of surface water systems) <input type="checkbox"/> List of operators, certification levels and expiration dates (if applicable)	



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## Preparing for a SS

### To avoid an "unknown integrity" significant deficiency:

Surveyors are not required to climb above ground or elevated storage tanks. Please check with your surveyor prior to the site visit to determine if you will need to arrange to have system staff or contractors climb your storage tanks to allow for inspection of rooftop components. If your surveyor will not be climbing storage tanks, please have recent (within 1-year) photos of rooftop components available during the survey for review. These photos must include hatch height, hatch gasket (entire perimeter of the hatch), vent height, and vent screening (with a measurement reference in the screen photo).

### The surveyor will evaluate the following:

Element	Description
Water source(s)	Evaluate water sources to ensure proper source protection
Treatment facilities	Evaluate treatment processes, facilities, components, and techniques
Distribution system	Evaluate the reliability and safety of the distribution system
Finished water storage	Evaluate the reliability and integrity of finished water storage tanks
Pumps and pump facilities	Evaluate operation and maintenance of water system pumps and pumping facilities
Monitoring, reporting, and data verification	Review paperwork, monitoring plans, and regulatory compliance
System management and operation	Review paperwork and plans to demonstrate that adequate maintenance is performed, and system operational needs are being met
Operator compliance	Review operator status to ensure operator certifications are current and at the appropriate levels



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## Preparing for a SS

- Have records available for answering survey questions and surveyor review
  - Number of connections/customers
  - Sample plans
  - SCADA data/water flow rates and volumes
  - Storage tank cleaning records
  - O&M plans
  - ERP
- Make sure all facilities can be accessed and are clean and operational



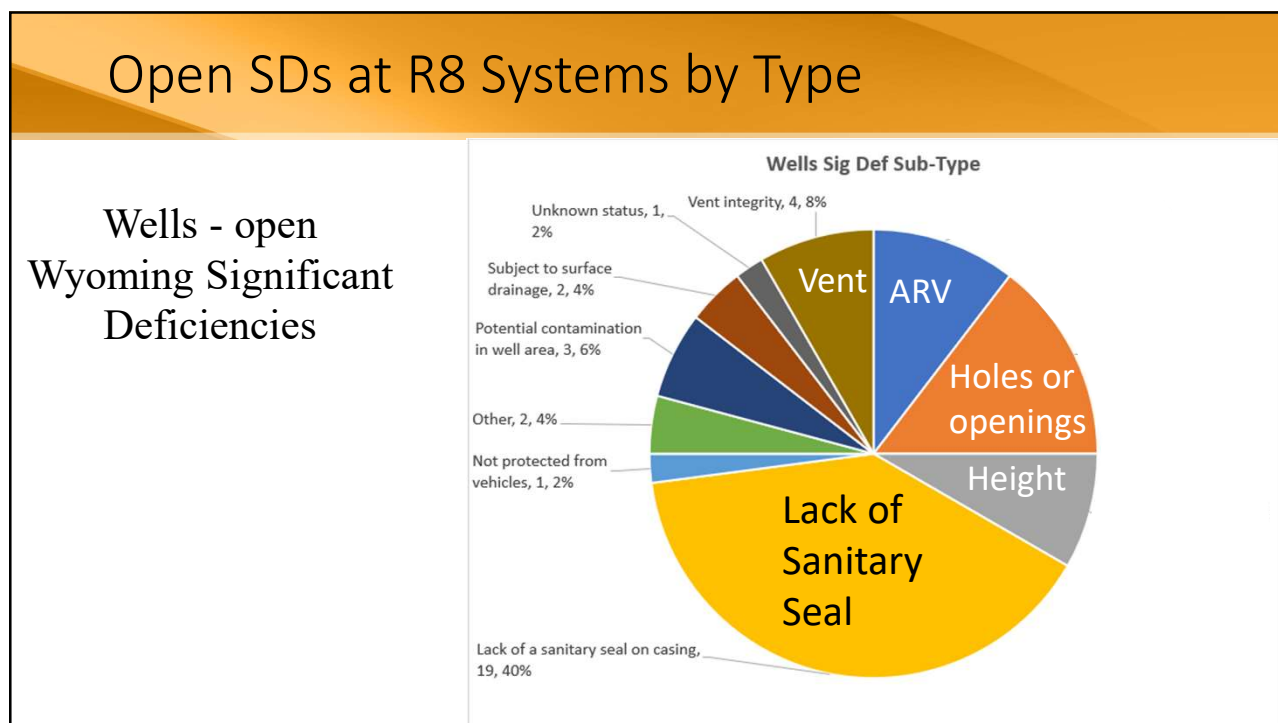
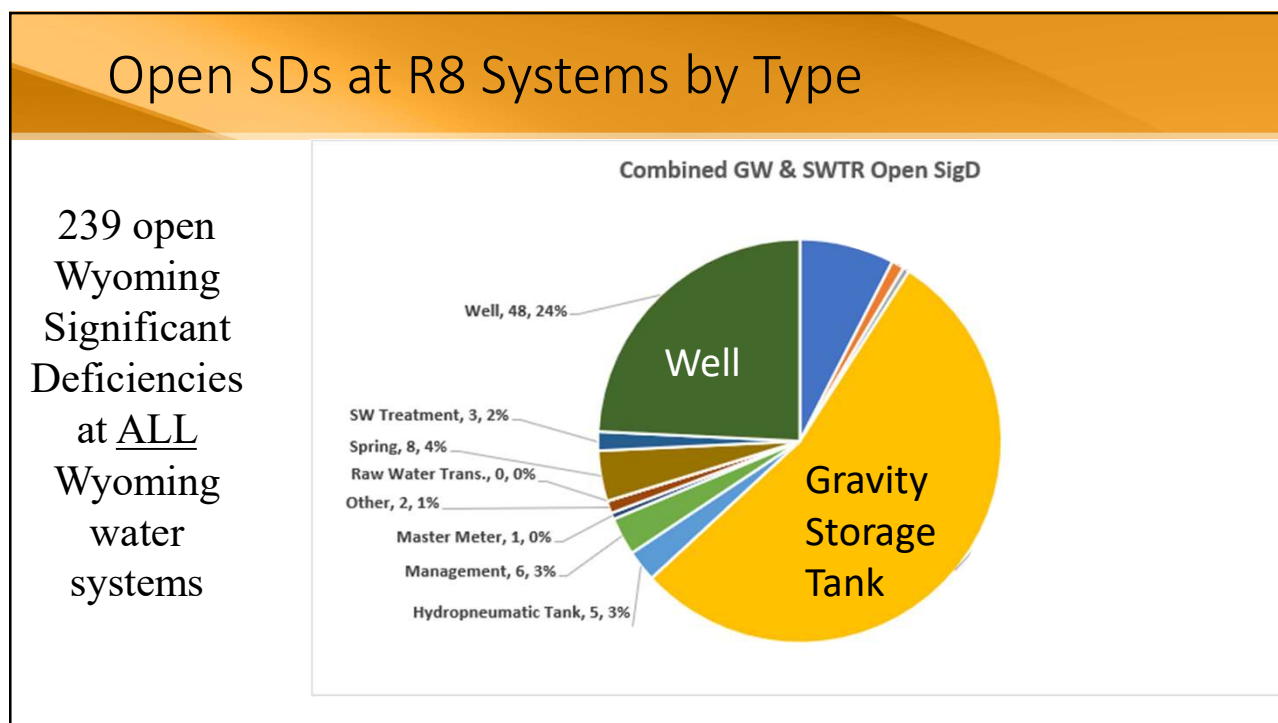
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## Significant Deficiencies (SDs)

- GWR – Groundwater Rule (<https://www.epa.gov/dwreginfo/ground-water-rule>)
- SWTR – Surface Water Treatment Rule ([.../surface-water-treatment-rules](https://www.epa.gov/dwreginfo/surface-water-treatment-rules))
- 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.

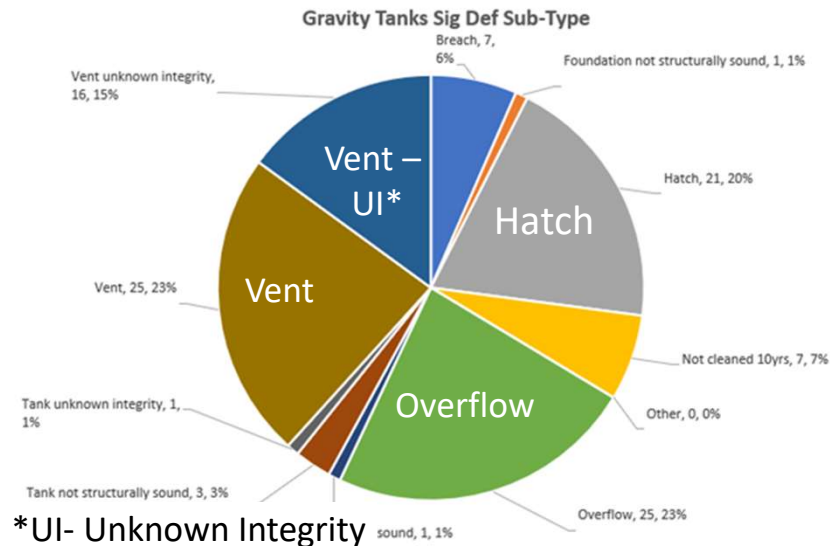


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## Open SDs at R8 Systems by Type

Gravity  
Storage Tank -  
Wyoming  
Significant  
Deficiencies



## After the SS

- 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





## Cybersecurity

- Systems with Operational Technology, such as SCADA or PLC controllers, should undergo cybersecurity assessments on a frequency that matches their Sanitary Surveys

- ☐ Reduce Exposure to Public-Facing Internet
- ☐ Conduct Regular Cybersecurity Assessments
- ☐ Change Default Passwords Immediately
- ☐ Conduct an Inventory of OT/IT Assets
- ☐ Develop and Exercise Cybersecurity Incident Response and Recovery Plans
- ☐ Backup OT/IT Systems
- ☐ Reduce Exposure to Vulnerabilities
- ☐ Conduct Cybersecurity Awareness Training



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## SS Photos



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## SS Photos



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Questions?

## EPA Region 8 Drinking Water Websites

Drinking Water Online: <https://www.epa.gov/region8-waterops/>

Drinking Water Watch: <https://sdwisdww.epa.gov/DWWR8WY>



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**THANK YOU!**

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