
Examples of Significant Deficiencies for GW Systems and Survey Prep Tips

DWS Partner Spring training

May 10, 2022

Kent Downs, REHS



PUBLIC HEALTH DIVISION
Drinking Water Services

Presentation outline

- Identifying significant deficiencies for:
 - Wells
 - Storage tanks
- Preparing for the survey

Significant Deficiencies for GW Systems

Wells – Deficiencies

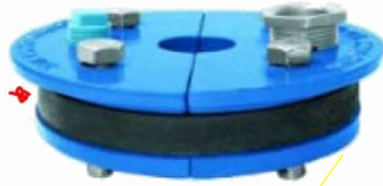
Easy to spot:

- Sanitary seal and casing not watertight.
- No screen on existing well vent.

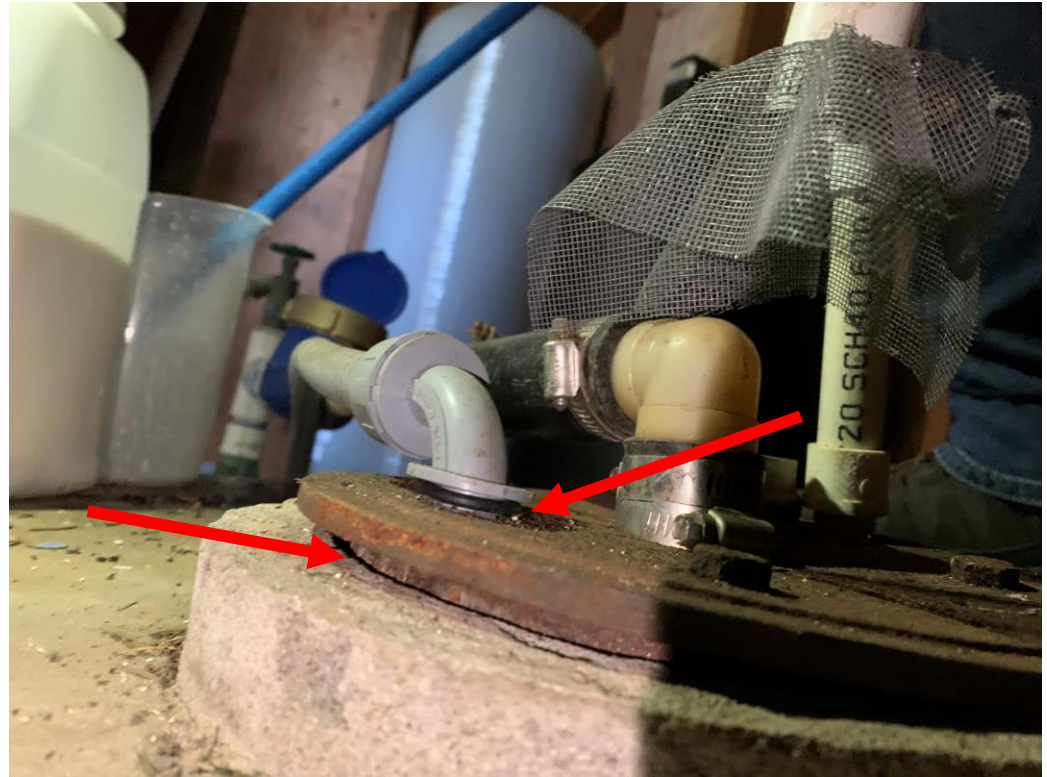


Significant Deficiencies for GW Systems

Well cap



Well casing not watertight



Priority Deficiencies for GW Systems

- ✓ No screen on well vent



Significant Deficiencies for GW Systems

Storage tanks – Deficiencies

Vent cap



Significant Deficiencies for GW Systems

Storage tanks – Corrective Actions

Screened
vent cap



Significant Deficiencies for GW Systems

Storage tanks – Corrective Actions



Hatch adequately secured

Significant Deficiencies for GW Systems

Storage tanks – Deficiencies



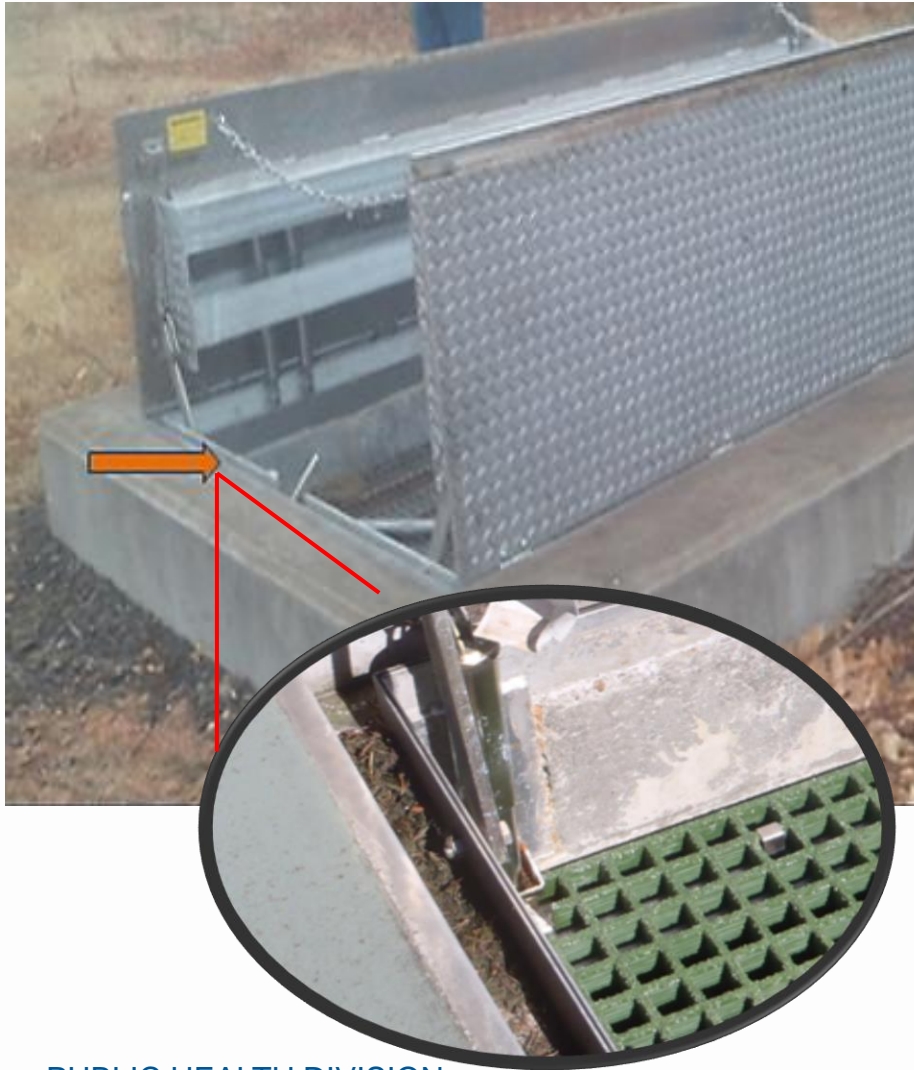
Overlapping lid?



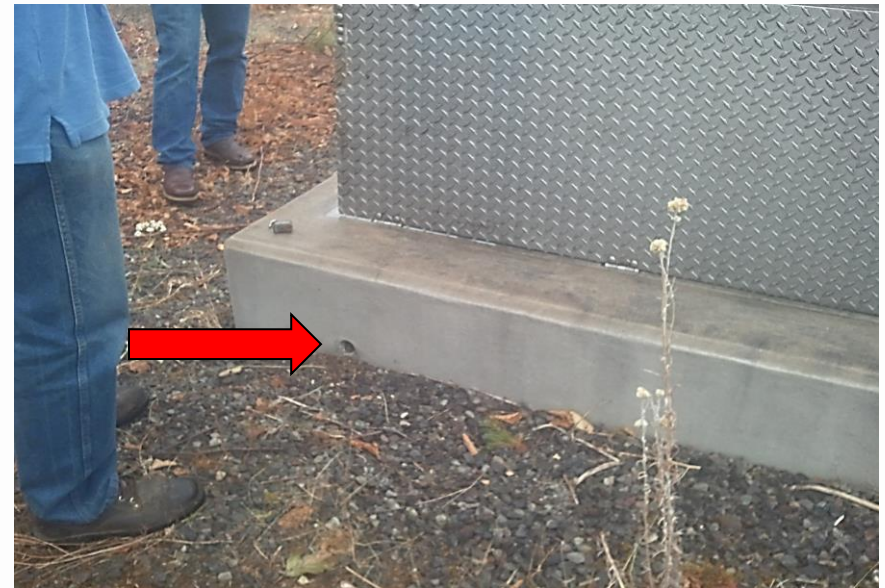
Hole in
the hatch?

Significant Deficiencies for GW Systems

Storage tanks – Deficiencies



Gutter style hatch and drain



Significant Deficiencies for GW Systems

Storage tanks – Corrective Actions

Clean gutter-drain



Preparing for the survey

- Contact the water system operator at least 3 weeks in advance:
 - Schedule a site visit
 - Pre-survey phone call.

[illegible]

Preparing for the survey

- Send outlook invite or snail mail notification letter. Include:
 - * Previous survey cover letter
 - * Survey report deficiency page
 - * Water system schematic
 - * Power Point slide deck with pics of storage tanks
- * Discuss during pre-survey phone call.

Preparing for the survey

Examples of storage pics for the operator

Storage Tank [Haiku Tank]

Location: 1025 Pauwela Street or 20° 55'32"N 156°18'58"W

Tank Built in: 06/1991

Storage Capacity: 1 MG



Pic shows the protective flap on drain lines



Pic shows the screened vent



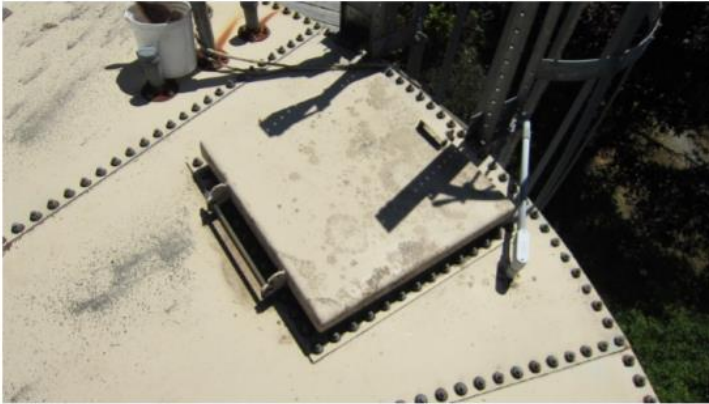
Pic shows tank exterior

Preparing for the survey

Examples of storage pics for the operator

Storage Tank [Haiku Tank]

Location: 1025 Pauwela Street or 20° 55'32"N 156°18'58"W



Hatch access to inside of the storage tank - hatch in closed position. Note the ladder on the upper right. View to the southwest.



Hatch access to inside of the storage tank - hatch in open position. View to the southwest.



Drain/overflow protected with screen

Preparing for the survey

Examples of storage pics for the operator

Storage Tank [name or #]

Location: address



Screened vent

Tank Built in: MM/YRS

Storage cap: xxxxx gallons





Hatch is secured with lock
and watertight


Preparing for the survey

- Before the pre-survey call:


Survey Form Templates

- About Survey Template Packets
- Survey Template Instructions
- Instructions for adding an On/Off toggle switch for Word forms
- Outstanding Performer Template:  MS Word -or-  MS Publisher

The following MS Word documents are **password protected**:

- 
- Packet 1: C-NTNC Groundwater Survey Template - revised 3/16/2022
 - Packet 2: C-NTNC Surface Water Survey Template - revised 3/16/2022
 - Packet 3: TNC-OVS Survey Template - revised 3/16/2022

Survey Notification Letter and Cover Letter Templates in MS Word format

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- Survey Notification Letter with COVID precautions - new 8/10/2020
 - Community Groundwater Systems - includes outstanding performer information language
 - NTNC, TNC, and OVS Groundwater Systems
 - Community Surface Water Systems - includes outstanding performer information language
 - NTNC, TNC, and OVS Surface Water Systems

Survey Deficiency Follow-up

- Procedure for Follow-up of Deficiencies Identified in a Water System Survey - Updated 3/4/2020
- Failure to Take Corrective Action Template for Groundwater Systems (MS Word)
- Failure to correct significant deficiencies following a water system survey:
 - For Groundwater System (Tier 2): MS Word -or- PDF
 - For Surface Water/GWUDI System (Tier 2): MS Word -or- PDF

➤ Download the survey form and cover letter

Link:

<https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENT/DRINKINGWATER/PARTNERS/Pages/surveys.aspx>

Preparing for the survey

- Before the pre-survey call:
 - Review Data Online system information.
 - Contact info
 - Last Consumer confidence Report received by DWS
 - Cross Connection Backflow ASR
 - Chemical Schedule Details
 - Coliform results
 - Violations
 - Plan review

Preparing for the survey

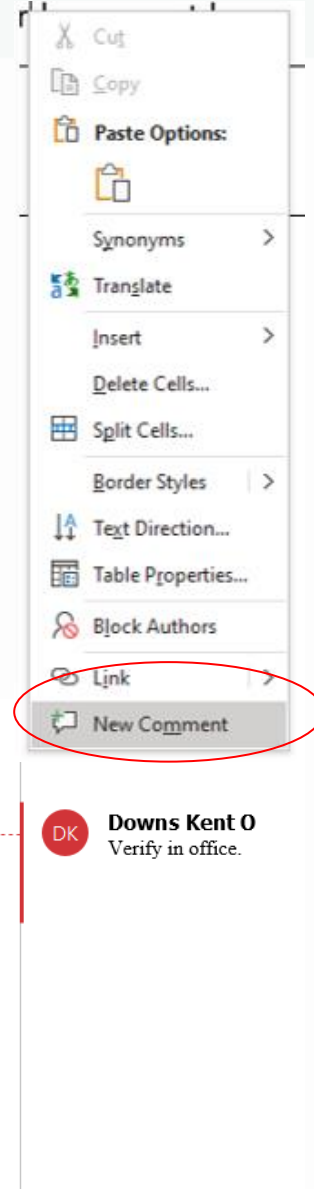
- Before the pre-survey call:
 - Highlight survey questions you plan to ask during the phone call.

Health Authority		Water System Survey OHA Drinking Water Services		Survey Date: 05/05/2022	
Page 3 of 16					
Inventory and Narrative					
<input type="checkbox"/> Outstanding Performer					
Type:		Status	Size	Season:	<input checked="" type="checkbox"/> All year <input type="checkbox"/> Seasonal
<input checked="" type="checkbox"/> Community (C)		Population:	1500	Begins: (mm/dd)	/
<input type="checkbox"/> Non-Transient Non-Community (NTNC)		Connections:	579	Ends: (mm/dd)	/
<input type="checkbox"/> Transient Non-Community (TNC)					
<input type="checkbox"/> Non-EPA (NP)					
License:	<input checked="" type="checkbox"/> Not Lic. <input type="checkbox"/> Health Dept. <input type="checkbox"/> Ag	Service Area Characteristics:		RA	
Responsible Agency:	<input type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> Ag	Owner Type:		4	
Minimum WS Certification Requirements:	WD: 1 WT: 1 <input type="checkbox"/> FE <input type="checkbox"/> Small WS <input type="checkbox"/> N/A				
Primary Administrative Contact (Mailing Address):					

Preparing for the survey

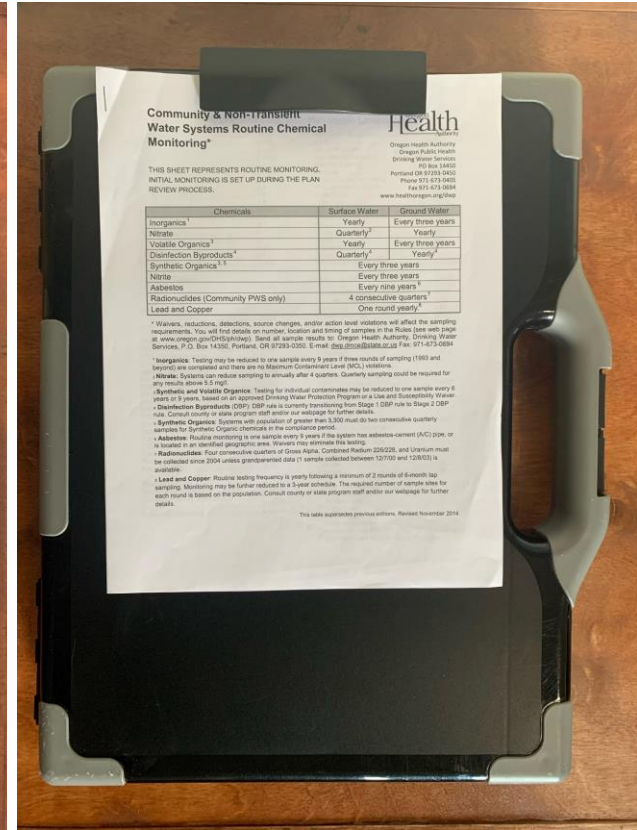
- Before the pre-survey call:
 - Using the comment box to highlight what survey questions you want to verify during the pre-survey call and add personal comments or additional follow up questions for the site visit.

Emergency Systems Available:			
Name:	None.	PWS ID#:	41
Narrative:			
<p>Hookipa WD is a community water system serving a rural residential area 7 miles north of Maui, Oregon. The source of water is a well located on a gravel bar adjacent to the Kapia creek, approximately 1400 ft. north of Kaluanui Stream on West Bank Rd. Water is chlorinated for residual maintenance only and treated with soda ash for corrosion control. Water is distributed through approximately 23.6 miles of piping. Water storage consists of 19 storage tanks with booster pump stations. Pressure is maintained by gravity flow. Water usage is predominantly residential with some commercial use.</p>			



The screenshot shows a context menu with various options. The 'New Comment' option is highlighted with a red circle. Below the menu, there is a red circle with the letters 'DK' and the text 'Downs Kent O' and 'Verify in office.'

Preparing for the survey



Clipboard storage box

PUBLIC HEALTH DIVISION
Drinking Water Services

Preparing for the survey



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<https://yourwater.oregon.gov/>

<https://healthoregon.org/dwp>