
Survey Deficiency Follow-up for ground water systems

Spring Training
May 10, 2022



Public Health Division
Drinking Water Services

Outline

- What is a significant deficiency and a rule violation
- Protocol for following up on significant deficiencies
- Public notice requirement as a tool for compliance
- Tracking significant deficiencies

Definition

- "Significant Deficiency" means a defect in design, operation, or maintenance, or a malfunction of the source(s), treatment, storage, or distribution system that has been determined to cause or have the potential for causing the introduction of contamination into the water delivered to consumers.
- Priority deficiencies are a 'sub-set' of significant deficiencies.
- Oregon added "and other rule violations as determined by the Authority" to corrective action authority.

Source Deficiencies:

Well Construction Deficiencies:

- ⊕ Sanitary seal and casing not watertight
- ⊕ Does not meet setbacks from hazards
- ⊕ Wellhead not protected from flooding
- ⊕ No raw water sample tap
- ⊕ No treated sample tap (if applicable)
- ⊕ No screen on existing well vent

Spring Source Deficiencies:

- ⊕ Springbox not impervious durable material
- ⊕ No watertight access hatch/entry
- ⊕ No screened overflow
- ⊕ Does not meet setbacks from hazards
- ⊕ No raw water sample tap
- ⊕ No treated sample tap (if applicable)

Treatment Deficiencies/Violations:

Surface Water Treatment Deficiencies:

- + Turbidity standards not met - 0030(3)
- + Turbidimeters not calibrated per manufacturer or at least quarterly - 0036(5)(b)(A)(ii)
- ⊕ Incorrect location for turbidity monitoring
- ⊕ If serving > 3,300 people no alarm or auto plant shut off for low chlorine residual
- + For conventional or direct filtration: No alarm or plant shut off for high turbidity
- ⊕ For conventional filtration: Settled water not measured daily
- ⊕ For conventional or direct filtration: Turbidity profile not conducted on individual filters at least quarterly
- ⊕ For cartridge filtration: Filters not changed according to mfg. rec. pressure differential
- ⊕ For cartridge filtration: No pressure gauges before and after cartridge filter
- + For membrane filtration: Direct integrity testing does not meet requirements under -0036(5)(d)(B)
- + For membrane filtration: Indirect integrity testing does not meet requirements under -0036(5)(d)(C)
- ⊕ For diatomaceous earth filtration: Body feed not added with influent flow.

Disinfection Deficiencies/Violations:

- + DPD/EPA approved method not used - 0036(9)(e)
- + Free chlorine residual not maintained - 0032(3/5)
- + Chlorine not measured & recorded - 0036(9)
- + Minimum CT required not met all times - 0032(3/5)
- ⊕ No means to adequately determine flow rate on contact chamber effluent line
- + pH, Temperature, and chlorine residual not measured daily at first user - 0036(5)(a/b)

- ⊕ Failure to calculate CT values correctly
- ⊕ No means to adequately determine disinfection contact time under peak flow and minimum storage conditions

UV Disinfection Violations (OAR 333-0050(5)(k)):

- + Bypass around UV system
- + Lamp sleeve not cleaned
- + Lamp not replaced per manufacturer
- + No intensity sensor with alarm or shut-off

Other Treatment Violations:

- + Non-NSF approved chemicals - 0087(6)
- + Corrosion control parameters not met - 0034

Distribution System Violations:

- + System pressure < 20 psi - 0025(7)

Cross Connection (OAR 333-061-0070):

- + No ordinance or enabling authority (CWS)
- + Annual Summary Report not issued (CWS)
- + Testing records not current (CWS, NTNC, TNC)
- + No Cross Connection Control Specialist (CWS ≥ 300 connections)

Finished Water Storage Deficiencies:

- ⊕ Hatch not locked or adequately secured
- ⊕ Roof and access hatch not watertight
- ⊕ No flap valve, screen, or equivalent on drain
- ⊕ No screened vent

Monitoring Violations:

- + Monitoring not current - 0025(1)
- + Unaddressed MCL violations or LCR AL exceedances - 0030
- + No Coliform Sampling Plan - 0036(6)(a)(1)

Management & Operations Violations:

- + No operations and maintenance manual - 0065(4)
- + Emergency response plan not completed (CWS, NTNC) - 0064
- + Major modifications not approved (plan review) - 0050
- + Master plan not current (≥ 300 con.) - 0060(5)
- + Annual CCR not distributed (CWS) - 0043(1)(a)
- + PNC or out of compliance with AO
- + Public notice not issued as required - 0042

Operator Certification Violations:

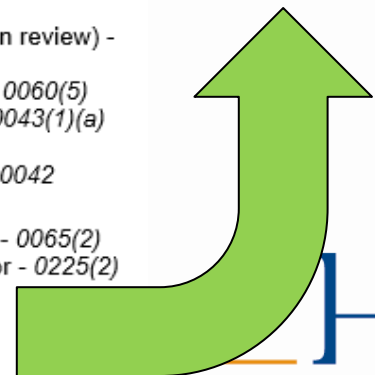
- + No certified operator at required level - 0065(2)
- + No protocol for under certified operator - 0225(2)

Other Rule Violations:

- ⊕ Significant deficiency per OAR 333-061-0076 + Rule violation per OAR 333-061-XXX

Black-dotted items on the survey forms = significant deficiency

⊕ Significant deficiency per OAR 333-061-0076 + Rule violation per OAR 333-061-XXX



Subject:	Procedure for Follow-up of Deficiencies identified in the Water System Survey	Date:	8/6/12
Unit:	Tech services & DMCE (CM, TS, KS, CL) MB	Revised:	8/20/15, 3/4/2020
Purpose & Scope: The purpose of this procedure is to provide guidance on actions to be taken in the follow-up to deficiencies identified in the water system survey.			

1. This procedure is preceded by the Water System Survey procedure, which includes details on how to conduct the survey and necessary information for the cover letter.
2. Significant Deficiencies and rules violations listed on the survey forms will be referred to as "deficiencies" in this document.



11. Priority deficiencies are as follows. These are generally categorized as a direct pathway for contamination or inability to determine treatment effectiveness.

- Well: Sanitary seal or casing not watertight
- Well: No screen on existing well vent
- Spring: No screen on overflow
- Spring: Spring box not impervious durable material
- Spring: Access hatch / entry not watertight
- Storage: No screened vent
- Storage: Roof and access hatch not watertight
- Storage: No flap valve, screen, or equivalent on overflow
- Treatment (UV): No intensity sensor with alarm or shut-off
- Treatment (SW): Incorrect location for compliance turbidity monitoring
- Treatment (Conventional/Direct filtration): No alarm or plant shut off for high turbidity
- Treatment (Cartridge filtration): No pressure gauges before and after cartridge filter
- Treatment (Cartridge filtration): Filters not changed according to manufacturer's recommended pressure differential
- Treatment (Membrane filtration): Direct integrity testing not done at least daily
- Treatment (DE filtration): Body feed not added with influent flow

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

Deficiency Protocol

Ground water systems

- Groundwater systems are required to respond within 30 days of the date of the cover letter.
 - Purpose: water systems acknowledge they received the survey and understand their responsibility to correct the deficiencies on or before the 120-day deadline.
- 30 days pass with no contact, recommend calling to check on the progress for deficiency corrections.
 - Be sure to document conversation in a contact report. Ask if they need help or if resources are needed: templates, web resources, circuit rider assistance, water system needs more time and needs to submit a written revised corrective action plan.

Deficiency Protocol

Ground water systems cont.

- Discuss deficiencies cited in the survey report and remind water system of the 120-day deadline (18 weeks) to correct all deficiencies or have an approved correction action plan in place.
- The corrective action plan is submitted to the regulating agency. If the corrective action plan is acceptable, submit documentation to DMCE by sending an email to Compliance.DW@dhsosha.state.or.us that lists the following:
 - The water system name and ID#
 - Each deficiency (or “all” if applicable), the status and following date:
 - corrected deficiencies: the date you were notified by the system.
 - approved corrective action plan: the approved due date.

Deficiency Protocol

Ground water systems cont.

- DMCE will send a reminder 2 weeks prior to the deficiency correction due date.
- Recommend emailing or calling the survey contact person and ask for an update on the survey deficiencies. Inform them of the 'failure to action' letter and the Tier 2 public notice. These two actions can be used to try to gain compliance for the correction of the deficiencies.

-On occasion the survey is not sent to the same person who attended the survey, and they are not aware of the required time frame for corrections.



Deficiency Protocol

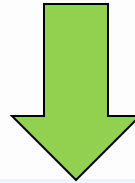
Ground water systems cont.

- The 120-day deadline has past, and the deficiencies have not been corrected or a correction action plan has not been submitted then:
 - A 'Failure to take action' letter should be sent to the water system and:
 - A Tier 2 notice posted within 30 days for missing the deadline.
- Once letter is issued and public notice posted, check in with water system to see if significant deficiencies have been corrected. If not, consult with DMCE on enforcement about the priority deficiencies of concern.

Deficiency Protocol

Ground water systems cont.

- Public notice should be submitted to partners and DMCE
- DMCE does not create a schedule or issue a violation for not reporting a public notice. When the public notice is sent in then it will be displayed as below:



PWS ID: [00130](#) ---- BOARDMAN, CITY OF

Public notices are displayed for the last 5 years only.

Public Notices							
Violation # or View Details	Group	Reason for Public Notice	Effective Period		Date Distributed	Date Received	Date Due
			Begin	End			
		failure to correct significant deficiencies on time			*	Jun 24, 2019	*

* For this public notice, only "Date Received" is noted because a schedule and due date were not created.

Month Date, Year

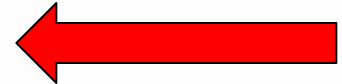
[PWS CONTACT]
[PWS ADDRESS]

Re: **Water System Survey Significant Deficiencies/Rule Violations**
[PWS NAME], [PWS NUMBER]

Dear [PWS CONTACT]:

A water system survey was completed for [PWS NAME] on [SURVEY DATE] identifying significant deficiencies and rule violations to be corrected. A letter and copy of the survey report were mailed to your attention on [SURVEY LETTER DATE]. Oregon Administrative Rule (OAR) 333-061-0076(6) and OAR 333-061-0032(6)(e) requires water systems that use groundwater sources to have completed corrective action or be in compliance with a Department-approved corrective action plan within 120 days of receiving written notice of a significant deficiency.

‘Failure to take
action’ letter



IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

[Water System Name] Failed to Correct a Significant Deficiency

Our water system recently violated a drinking water requirement. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did **OR** are doing to correct this situation.

A routine inspection conducted on [date] by the [primacy agency] i.e. DWP, county, Department of Agriculture, etc. found [describe significant deficiency] in our water system. **OR**

As required by the Ground Water Rule [OAR 333-061-0032(6)(f)], we were required to take action to correct this deficiency **OR** address the fecal-indicator positive source sample. However, we failed to take this action by the deadline established by the [primacy agency] i.e. DWP, county, Department of Agriculture, etc.



Tier 2 public
notice

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](#)

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

- OAR -0032(6) information on the 30- and 120-day timelines.
- OAR -0076 identifies significant deficiencies
- OAR -0042(2)(b)(F) information of public notice requirements

Tracking deficiencies



Welcome to **Data Online**, [Oregon's Drinking Water Services](#) data access site.

Here you can access a fair amount of data on public water systems in Oregon. You can find data such as coliform testing, chemical testing, contacts, violations, enforcements, public notices, and basic system information.

Use the [Water System Search](#) page to find a water system. You can enter the water system ID number if you know it, or you can search by water system name or location.

Data shown here is "live" data. That means it's as current as the reports we have in our system. This is the same data that Drinking Water Services (DWS) staff see and use. If something is missing, that usually means it has not been reported to us or we have not entered it yet. If you (water system personnel, county staff, lab staff, etc.) find a report is missing, please forward a copy to us at: **DWS, PO BOX 14350, Portland, OR 97293**.

For questions or updates regarding water system sampling, inventory, or compliance please contact Drinking Water Services at 971-673-0405 or Info.DrinkingWater@dhsosha.state.or.us.

[Search Options](#) is where you'll find the various queries to view data we currently have. The choices are explained there.

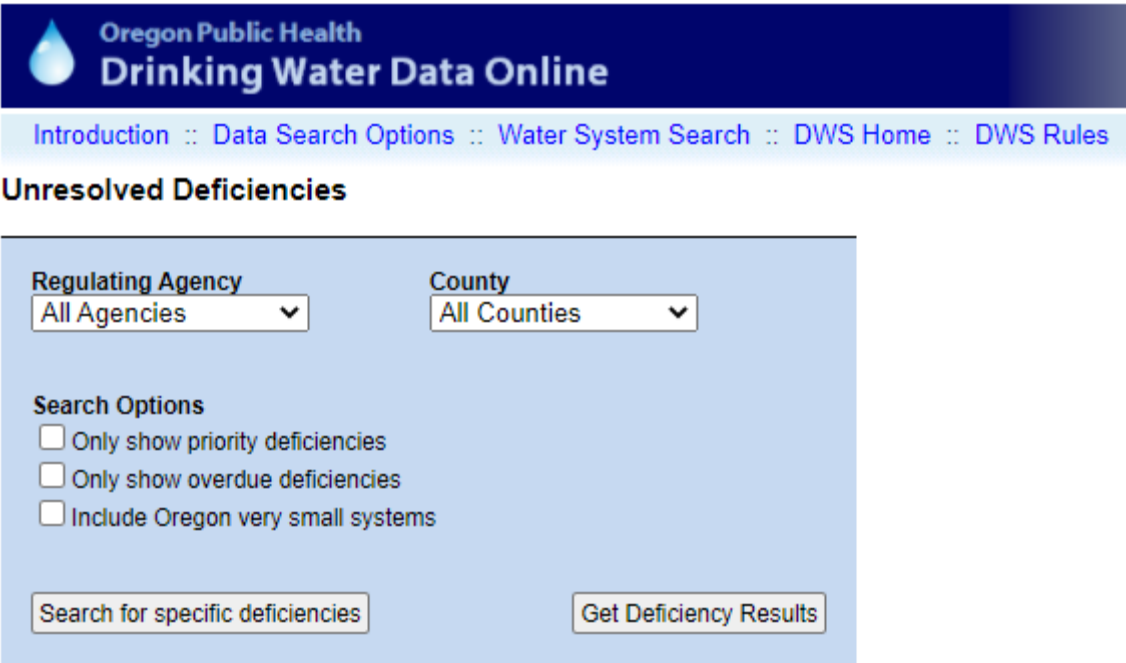
Information by county:

[Inventory](#) :: [Surface Water Systems](#) :: [Water System Surveys](#) :: [Outstanding Performers](#) :: [Plan Reviews](#) :: [System Scores](#) :: [Exceedances](#)
[Alerts](#) :: [Violations](#) :: [Compliance & Enforcement](#) :: [Significant Deficiencies](#) :: [Cross Connection ASRs](#) :: [Treatment Plant Inspections](#) :: [Fluoride](#)
[Water Advisories](#) :: [Contact Reports](#) :: [Cyanotoxins](#) :: [PFAS](#) :: [Post-wildfire VOCs](#)

[Inventory List](#) for all Oregon Drinking Water Systems in Excel or printable screen format

[Tools for Laboratories](#) :: [Staff/Partner Login](#)

Tracking deficiencies



Oregon Public Health
Drinking Water Data Online

[Introduction](#) :: [Data Search Options](#) :: [Water System Search](#) :: [DWS Home](#) :: [DWS Rules](#)

Unresolved Deficiencies

Regulating Agency: County:

Search Options

- Only show priority deficiencies
- Only show overdue deficiencies
- Include Oregon very small systems

Unresolved deficiencies list

[Search Again](#)

Unresolved Deficiencies

Regulating Agency: State
 County: Lincoln
 Search Options: Oregon very small systems excluded.
 Results: 3 unresolved deficiencies found for 2 systems

[Hide deficiencies](#)

Regulating Agency	County Served	PWS	PWS Name	Survey Date	Earliest Due Date	Number of Deficiencies	System Type	System Score
REGION 2	Lincoln	00603	PANTHER CREEK WD	Jun 27, 2017	Oct 05, 2017	2	C	0
	<u>Category:</u>		<u>Deficiency:</u>		<u>Due Date:</u>			
	Management & Operations		Master plan not current (≥ 300 con.)		Oct 05, 2017 <i>Overdue</i> §			
	Disinfection		No means to adequately determine disinfection contact time under peak flow and minimum storage conditions		Oct 05, 2017 <i>Overdue</i> §			
REGION 2	Lincoln	92061	SAWYERS LANDING RV PARK	Mar 07, 2022	May 19, 2022	1	NC	0
	<u>Category:</u>		<u>Deficiency:</u>		<u>Due Date:</u>			
	Cross Connection		Testing records not current (CWS, NTNC, TNC)		May 19, 2022			

REGION 2	Coos	90861	CAMP MYRTLEWOOD	Mar 17, 2022	May 25, 2022	7	NC	2
	<u>Category</u>		<u>Deficiency</u>		<u>Due Date</u>			
	Finished Water Storage		Roof and access hatch not watertight		May 25, 2022			
	Finished Water Storage		No screened vent		May 25, 2022			
	Management & Operations		Major modifications not approved (plan review)		May 25, 2022			
	Monitoring & Reporting		No coliform sampling plan		May 25, 2022			
	Disinfection		Chlorine not measured & recorded as required		May 25, 2022			
	Disinfection		Failure to calculate CT values correctly		May 25, 2022			
	Surface Water Treatment		Turbidimeters not calibrated per manufacturer or at least quarterly		May 25, 2022			
REGION 2	Coos	00213	COQUILLE, CITY OF	Mar 10, 2022	Jun 06, 2022	4	C	10
	<u>Category</u>		<u>Deficiency</u>		<u>Due Date</u>			
	Management & Operations		No operations and maintenance manual		Jun 06, 2022			
	Monitoring & Reporting		Monitoring not current		Jun 06, 2022			
	Surface Water Treatment		Turbidimeters not calibrated per manufacturer or at least quarterly		Jun 06, 2022			
	Surface Water Treatment		For conventional or direct filtration: Turbidity profile not conducted on individual filters at least quarterly		Jun 06, 2022			
REGION 2	Coos	94557	COOS CO PKS - LAVERNE	Aug 10, 2021	Jul 31, 2022	4	NC	1
	<u>Category</u>		<u>Deficiency</u>		<u>Due Date</u>			
	Management & Operations		Emergency response plan not completed		Jul 31, 2022			
	Disinfection		No means to adequately determine disinfection contact time under peak flow and minimum storage conditions		Jul 31, 2022			
	Surface Water Treatment		For membrane filtration: Direct integrity testing not done at least daily		Jul 31, 2022			
	Surface Water Treatment		For membrane filtration: Direct integrity testing does not meet rule requirements		Jul 31, 2022			
REGION 2	Coos	94558	COOS CO PKS - WEST LAVERNE	Aug 10, 2021	Jul 31, 2022	3	NC	0
	<u>Category</u>		<u>Deficiency</u>		<u>Due Date</u>			
	Management & Operations		Emergency response plan not completed		Jul 31, 2022			
	Surface Water Treatment		For membrane filtration: Direct integrity testing not done at least daily		Jul 31, 2022			
	Surface Water Treatment		For membrane filtration: Direct integrity testing does not meet rule requirements		Jul 31, 2022			



DWS Web Forms

[Contact Report Instructions \(PDF\)](#)

Last modified: November 14, 2019

[View Your Profile](#)

Contact Reports

Water Advisories

Update Deficiencies

- Record completion dates and revised due dates from corrective action plans

Water System Contact Info



Water System Search

Search by water system name or number:

[Search](#)

You can enter all or part of the water system's name. Only exact matches will be returned.

[Clear Search](#)

Search results:

1 system found. *Select water system by clicking on its row.*

PWS ID	Water System Name	Regulating Agency	County Served	System Type	Activity Status
00603	PANTHER CREEK WD	REGION 2	Lincoln	C	Active

Water System Survey Deficiencies - Update

Start Over

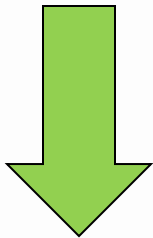
PWS NUMBER: OR41 [00603](#) - PANTHER CREEK WD

SURVEY DATE: Jun 27, 2017 ▼



Pick a survey date from the dropdown list

Go To Next Step



Water System Survey Deficiencies - Update

Start Over (Cancel Changes)

PWS NUMBER: OR41 [00603](#) - PANTHER CREEK WD

SAVE CHANGES

SURVEY DATE: Jun 27, 2017

Category	Deficiency	Initial Due Date (from letter)	Failure to Correct Deficiencies Letter Sent	Revised Due Date (corrective action plan)	Resolved Date
Disinfection	No means to adequately determine disinfection contact time under peak flow and minimum storage conditions	10/5/2017	1/9/2018		
Management & Operations	Major modifications not approved (plan review)	10/5/2017			1/23/2018
Management & Operations	Master plan not current (≥ 300 con.)	10/5/2017	1/9/2018		

Amy Bleekman, REHS
OREGON HEALTH AUTHORITY
Public Health Division
Drinking Water Services
541-751-3154

Amy.Bleekman2@dhsoha.state.or.us
<https://yourwater.oregon.gov/>
<https://healthoregon.org/dwp>