

August 24, 2018

Peter Olson, PE  
Keller Associates, Inc.  
707 13th Street SE, #208  
Salem, OR 97301

**Re: City of Amity (PWS #00041) Corrosion Control Chemical Feed System  
Final Approval (PR#87-2012)**

Dear Mr. Olson,

Plans for the corrosion control treatment were received and conditionally approved on August 4, 2016. You completed a checklist (received 5/2/17), which addressed the conditions in my Conditional Approval letter (dated 8/4/16). Other conditions in my May 5, 2017 letter have also been addressed. The soda ash treatment was placed into use on April 28, 2017 to address copper action level exceedances which occurred in 2013 and 2015. Based upon results from three 6-month rounds of lead and copper tap sampling completed in June and December 2017 and June 2018 being well below the lead and copper action levels, **the corrosion control treatment is granted Final Approval.** A minimum pH of 7.5 and a minimum alkalinity level of 30 mg/l as CaCO<sub>3</sub> have been established based on pH and alkalinity data gathered during lead and copper tap sampling and continuing through July 2018 (received 8/21/18). **Sampling requirements and minimum water quality parameters are outlined as follows:**

Lead and copper tap sampling:

1. Based on the results of the three 6-month rounds (shown below and last received 6/29/18), lead and copper tap sampling may be reduced to once every 3 years.
2. The number of tap sample sites may also be reduced from 20 down to 10 sites sampled every 3 years.
3. Sampling needs to be done at Tier 1 sites between June 1<sup>st</sup> and September 30<sup>th</sup> and the customers at the Tier 1 sites must be provided their individual results along with required educational materials each time sampling is completed.
4. The next round of lead and copper sampling will need to be done sometime between June 1<sup>st</sup> and September 30<sup>th</sup> of 2020.

Action Levels: Lead = 0.015 mg/L; Copper = 1.3 mg/L

[All detailed results](#)

Lead and Copper 90 <sup>th</sup> Percentile Summary Results and Consumer Notices*						
Sample Dates	Date Received	Sample Count	Duration	Lead (mg/L)	Copper (mg/L)	Consumer Notice Date*
May 30, 2018 - Jun 13, 2018	Jun 29, 2018	20	6M	0.0000	0.1420	
Dec 05, 2017 - Dec 27, 2017	Jan 08, 2018	20	6M	0.0010	0.7180	12/27/2017
Jun 13, 2017 - Jun 27, 2017	Jul 07, 2017	20	6M	0.0000	0.2350	

As previously stated customers who take lead and copper tap samples must be notified of their results and be provided with certain public education materials within 30 days of receipt of the tap sample results. Documentation also needs to be sent to our office regarding how and when the notice was distributed as well as a sample copy of one of the the consumer notices actually sent out. Please refer to the monitoring templates available on-line at the links below and the certification template included with this letter.

<https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/MONITORING/Pages/monitoring.aspx#pbcr>

Water quality parameter sampling (pH and alkalinity):

The minimum pH and alkalinity parameters and sampling that will have to be met are outlined as shown below and were based on distribution and entry point data collected in 2017 and 2018 with the most recent data for June and July 2018 received on August 21, 2018. The sampling shown below is required, effective as of the date of this letter.

Water Quality Parameter	Minimum Required level (entry point and distribution)	Location of sampling	Number of samples required	Frequency of sampling	Additional Requirements
pH	7.5	Entry Point (after treatment)	1	Once every 2 weeks	Calibrate pH meter prior to sampling. Report results on OHA provided forms by the 10 <sup>th</sup> of the month following the month in which sampling is conducted.
		Distribution System (coliform sample sites may be used)	2 sample sites for each of two sampling events (a total of 4 samples)	2 sites sampled twice during the time of lead and copper tap sampling, which will result in a total of 4 sample results in all.	
Alkalinity	30 mg/l as CaCO <sub>3</sub>	Entry Point (after treatment)	1	Once every 2 weeks	Send one comparative (paired) sample to a qualified lab once each year to verify field measurement. Report results on OHA provided forms by the 10 <sup>th</sup> of the month following the month in which sampling is conducted.
		Distribution System (coliform sample sites)	2 sites, 4 samples	2 sites sampled twice during lead and copper tap sampling.	Send one comparative (paired) sample to a qualified lab to verify field measurement. Report by the 10 <sup>th</sup> of the month following sampling.

Completion of this plan review was required under a Bilateral Compliance Agreement (BCA) between the City and the Oregon Health Authority. The table below shows the dates for each of seven actions to completed as part of the BCA and related extensions.

Type of Action	Date Issued	Due Date	Closed Date
<a href="#">Bilateral Compliance Agreement</a> (Extension Granted)	Jan 05, 2017		Open
<a href="#">Bilateral Compliance Agreement</a> (Extension Granted)	Nov 30, 2016		Open
<a href="#">Bilateral Compliance Agreement</a> (Original BCA Issued)	Jul 01, 2016		Open
1) SUBMIT CONSTRUCTION PLANS		Jul 31, 2016	Aug 04, 2016
2) PLAN REVIEW		Aug 14, 2016	Aug 04, 2016
3) COMPLETE CONSTRUCTION		Apr 30, 2017	Apr 28, 2017
4) LCR M&R		Jul 10, 2017	Jul 06, 2017
5) LCR M&R		Jan 10, 2018	Jan 08, 2018
6) SUBMIT EACH EP WATER QUALITY PARAMETER		Mar 10, 2018	Aug 21, 2018
7) REVIEW OF CORROSION CONTROL TREATMENT		Jun 10, 2018	Aug 24, 2018

More information on the treatment installed and how conditions in my May 5, 2017 letter were addressed as well as how minimum water quality parameters were established is contained in the following pages of this letter.

Thank you for your efforts in helping to resolve the BCA by installing and demonstrating effective corrosion control treatment and in cooperating throughout the plan review process. If you have any questions or would like this information in an alternate format, please do not hesitate to contact me at any time at 971-673-0419 or [evan.e.hofeld@state.or.us](mailto:evan.e.hofeld@state.or.us).

Sincerely,



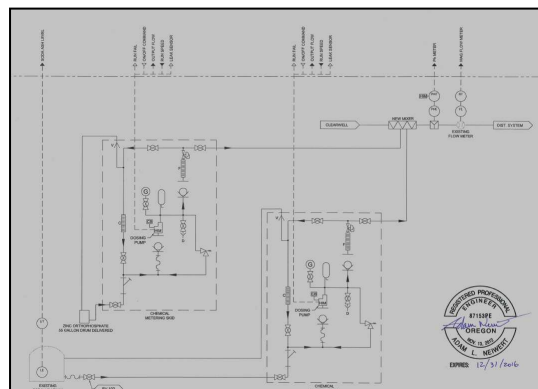
Evan Hofeld, P.E. OHA - Drinking Water Services

Cc: Justin Hogue, City of Amity

### **Plan Review Project Description**

A plan for corrosion control treatment titled *City of Amity 2012 Corrosion Control Plan* and dated May 30, 2012 developed by Keller & Associates was received by the Authority on May 30, 2012. The Corrosion Control Plan called for a multi-phased approach to raise the pH to first 7.8 and perhaps as high as 8.5 using soda ash (initial and secondary copper control strategies) or, if soda ash did not work, install zinc phosphate (tertiary copper control strategy). The Authority initially approved the Corrosion Control Plan on June 6, 2012 and granted a Conditional Approval for the project assigned Plan Review #87-2012.

The plans received and conditionally approved on August 4, 2016 (Section 11305 - Corrosion Control Chemical Feed System, Section 17300 - SCADA Control Strategy, and Supplement P&ID EI-701) showed the installation of two chemical metering skids, one of which was for soda ash and the other was for zinc orthophosphate as shown in the chemical dosage process and instrumentation diagram at right.



### **Installed Treatment System Description**

The treatment system installed consists of soda ash injection for the control of copper corrosion, which was placed into service on April 28, 2017. It is understood that orthophosphate is not being used, however, orthophosphate would be considered depending upon how effective the soda ash is in reducing copper levels.

Conditions in my letter dated May 5, 2017 were resolved as described below:

1. Documentation that the soda ash being used complies with NSF Standard 60 was verified at the time of the water system survey on July 11, 2017 as shown in the survey photo to the right.
2. Documentation that the City has the proper equipment needed to measure water quality parameters (pH and alkalinity) was verified at the time of the water system survey on July 11, 2017 and with receipt of the City of Amity Water Treatment Plant SOP Manual on 8/12/18 .



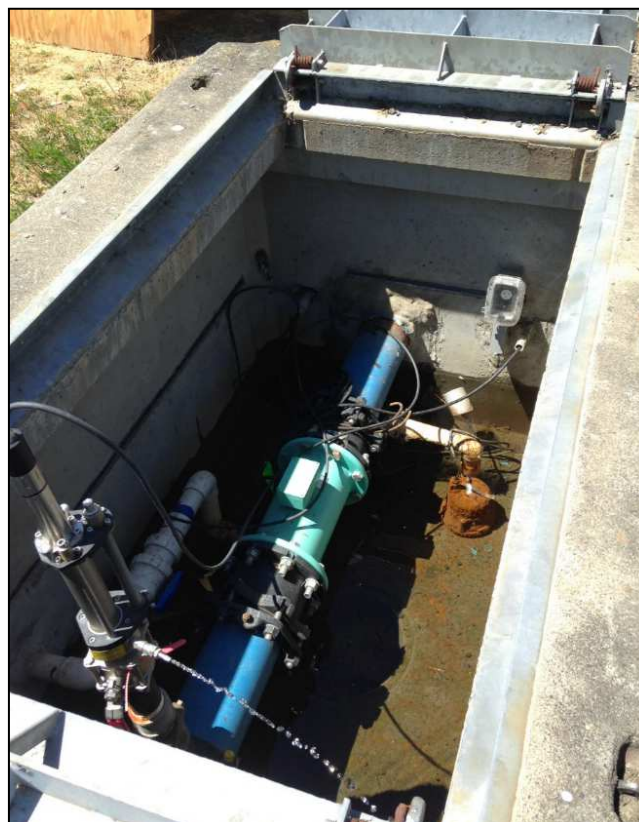
A SensION+ pH 1 probe is inserted on the line leaving the clearwells. A calibratable, temperature compensated Hach SensION 4 Benchtop pH meter is used for pH grab sample measurements.

Alkalinity determination is documented in the City's SOP Manual as shown in the excerpt below:

Alkalinity test	
1.	Rinse all glassware with water to be used in test.
2.	Use graduated cylinder (on drying rack) to measure 25 ml of water to be tested.
3.	Place stir bar in Erlenmeyer flask (dishwasher), pour 25 ml sample in.
4.	Place on magnetic stirrer, begin stirring gently (approximately setting 5).
5.	Add 75 ml of distilled water to water sample.
6.	Add 1 packet Bromcresol Green Methyl Red solution (also in cupboard).
7.	Place bulb on a 5 ml pipette and fill pipette to 0 line with 0.02 N Sulfuric Acid.
8.	Add drops of acid to flask one at a time until color changes from green to blue/grey and stays that way.
9.	Read level of acid in pipette to nearest tenth. Multiply by .4 to get mg/L alkalinity (CaCO <sub>3</sub> equivalent).
10.	Record.

*Photos taken July 11, 2017 during water system survey:*

Sension+ pH 1 probe inserted  
In the line leaving the clearwells =>

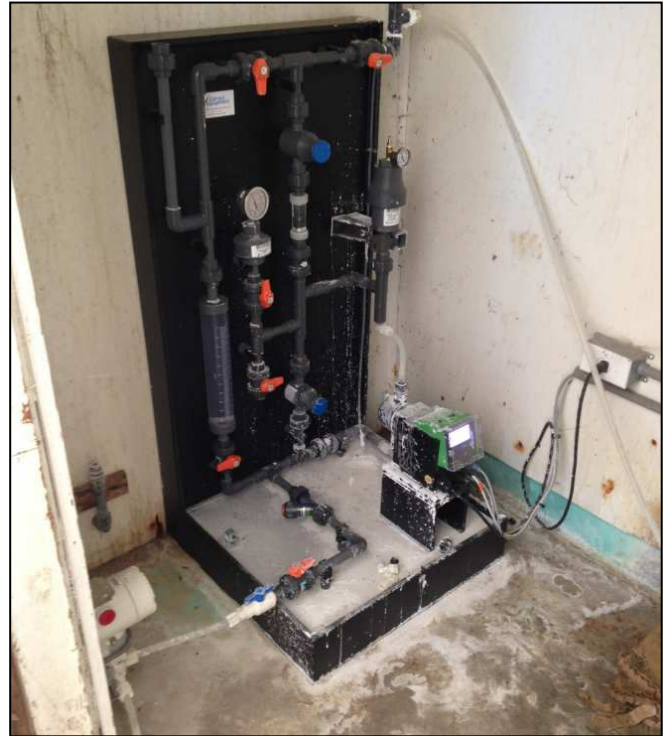


^ Local display of on-line pH and temp



*Photos taken July 11, 2017 during water system survey (continued):*

Soda ash dosing skid and HMI =>



3. Documentation an operation and maintenance (O&M) manual has been provided to the operators. A copy of the City of Amity Water Treatment Plant SOP Manual (Version 1, July 26, 2018) was received on 8-12-18.



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**CITY OF AMITY  
WATER TREATMENT PLANT SOP MANUAL**

Version: 1.0  
Date: July 26, 2018

Plan Review Checklist Received May 2, 2017:

**Corrosion Control Treatment (PR#87-2012)**  
**(PWS ID#00041)**  
**AMITY, CITY OF**

*Plan Review Checklist*

	YES	NO	DATE
1. Was the project undertaken? If so, what was the starting date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>8/18/16</u> <i>Quotes solicited for equipment</i>
2. If project was not undertaken, has the project been abandoned?	<input type="checkbox"/>	<input type="checkbox"/>	
3. Was the project completed? If so, when? If project not complete, estimated completion date:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>4/26/16</u>
4. If completed, was the work accomplished in conformance with all conditions listed in the Conditional Approval letter and DWP Construction Standards, Oregon Administrative Rule (OAR) 333-061-0050? Please make it clear how all conditions specified in the Conditional Approval letter were met on plans or on a separate sheet(s).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. If the project was completed, were there any differences between what is shown on the plans and what was actually installed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. If the completed project is different from what is shown on the plans, were the plans modified to show as-built conditions?	<input type="checkbox"/>	<input type="checkbox"/>	
7. Have as-builts been sent to Drinking Water Program?	<input type="checkbox"/>	<input type="checkbox"/>	
8. Are the facilities operating? If so, starting when?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>4/28/16</u>

**RECEIVED**  
**MAY 02 2017**  
Data Mgmt & Compliance  
Drinking Water Program

Signature of Engineer: PETER OLSEN Date: 5/1/17  
Name: PETER OLSEN Phone: 503-364-2002  
Title: CITY ENGINEER  
Firm: KELLER ASSOCIATES

Comments: only Soda Ash is connected and currently being injected. Zinc orthophosphate will not be injected unless sampling/testing results indicate the need.

### **Setting Minimum Water Quality Parameters (ph and alkalinity)**

Setting minimum water quality parameters is based on the results of lead and copper tap sampling and the levels of pH and alkalinity measured at the entry point and in the distribution system during that tap sampling. Data needs to demonstrate that the corrosion control treatment is capable of sustaining pH and alkalinity at levels that minimize lead and copper corrosion.

Three 6-month rounds of lead and copper tap sampling from 20 tap sample sites were reported as shown in the table below:

PWS ID: [00041](#) ---- AMITY, CITY OF

#### **Lead and Copper Compliance Actions**

- No lead and copper schedules found.

Action Levels: Lead = 0.015 mg/L; Copper = 1.3 mg/L

[All detailed results](#)



Lead and Copper 90 <sup>th</sup> Percentile Summary Results and Consumer Notices*						
Sample Dates	Date Received	Sample Count	Duration	Lead (mg/L)	Copper (mg/L)	Consumer Notice Date*
May 30, 2018 - Jun 13, 2018	Jun 29, 2018	20	6M	0.0000	0.1420	
Dec 05, 2017 - Dec 27, 2017	Jan 08, 2018	20	6M	0.0010	0.7180	12/27/2017
Jun 13, 2017 - Jun 27, 2017	Jul 07, 2017	20	6M	0.0000	0.2350	

Three rounds of sampling were required because distribution water quality parameter monitoring was not completed for the 2<sup>nd</sup> round of sampling in December of 2017. Please note that customers who take lead and copper tap samples must be notified of their results and be provided with certain public education materials within 30 days of receipt of the tap sample results. Documentation also needs to be sent to our office regarding how and when the notice was distributed as well as a sample copy of one of the the consumer notices actually sent out.

Please refer to the monitoring templates available on-line at the links below and the certification template included with this letter.

<https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/MONITORING/Pages/monitoring.aspx#pbcr>

#### **• Consumer Notification Forms for Community Water Systems**

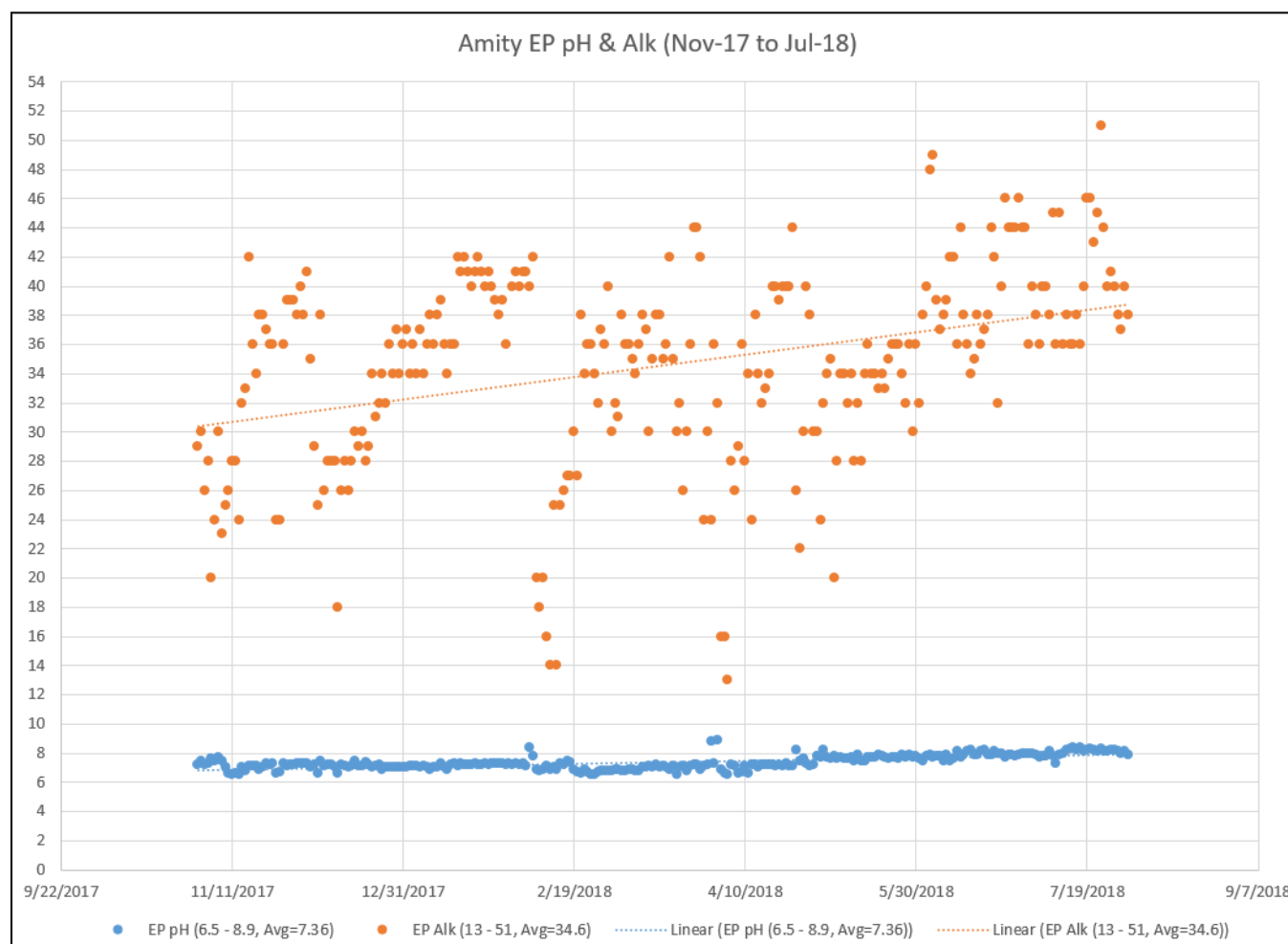
- When the individual tap and the entire water system are **below** the action level (AL) at a community water system ( [fillable MS Word](#))
- When the individual tap and entire water system **exceed** the AL at a community water system ( [fillable MS Word](#))



- When the individual tap is **below** the AL but the entire water system **exceeds** the AL at a community water system ([fillable MS Word](#))
- When the individual tap **exceeds** the AL but the entire water system is below the AL at a community water system ([fillable MS Word](#))
- **Certification** to Drinking Water Services that consumer notification has been completed - [fillable MS Word](#)

Entry point pH and alkalinity sampling was conducted before, during and after each 6-month round. This data is shown below:

Entry Point WQP - Nov 2017 - July 2018		
Statistic	pH	Alkalinity (mg/l as CaCO <sub>3</sub> )
Average	7.36	34.58
Min	6.5	13
Max	8.9	51



pH and alkalinity results from a single sampling event at distribution system sites in June 2017 are shown below.

**Oregon Health Authority** Water Quality Parameter Monitoring Form  
**Lead & Copper Rule Corrosion Control**

ID #	Sample Location	pH	Alk	PO4	other	Y/N
607 Getchell		7.6	48			
306 E 2nd St		7.6	48			
TP		7.4	50			

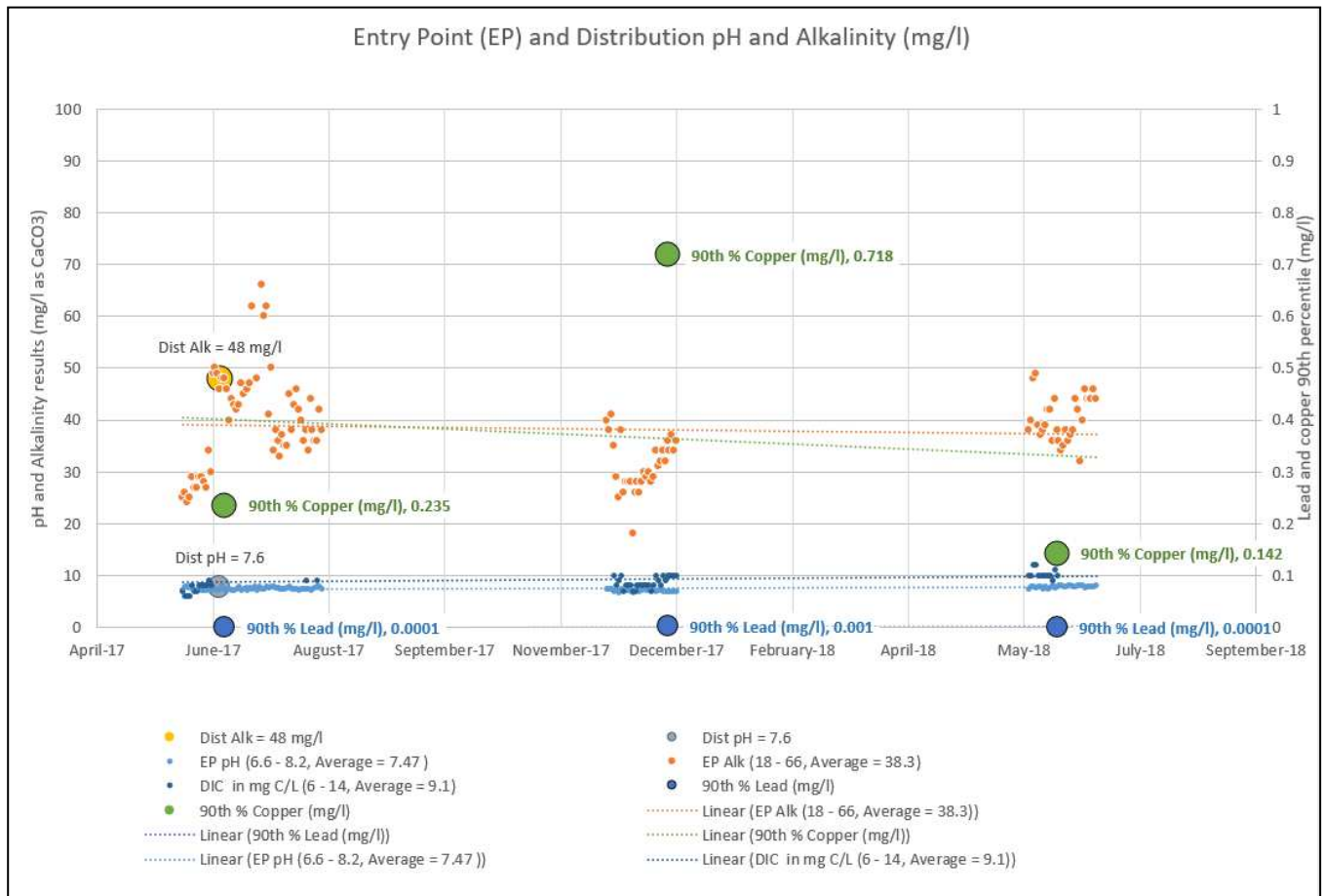
<Has sample met the minimums? **DISTRIBUTION**

PWS ID: 41 **00041**

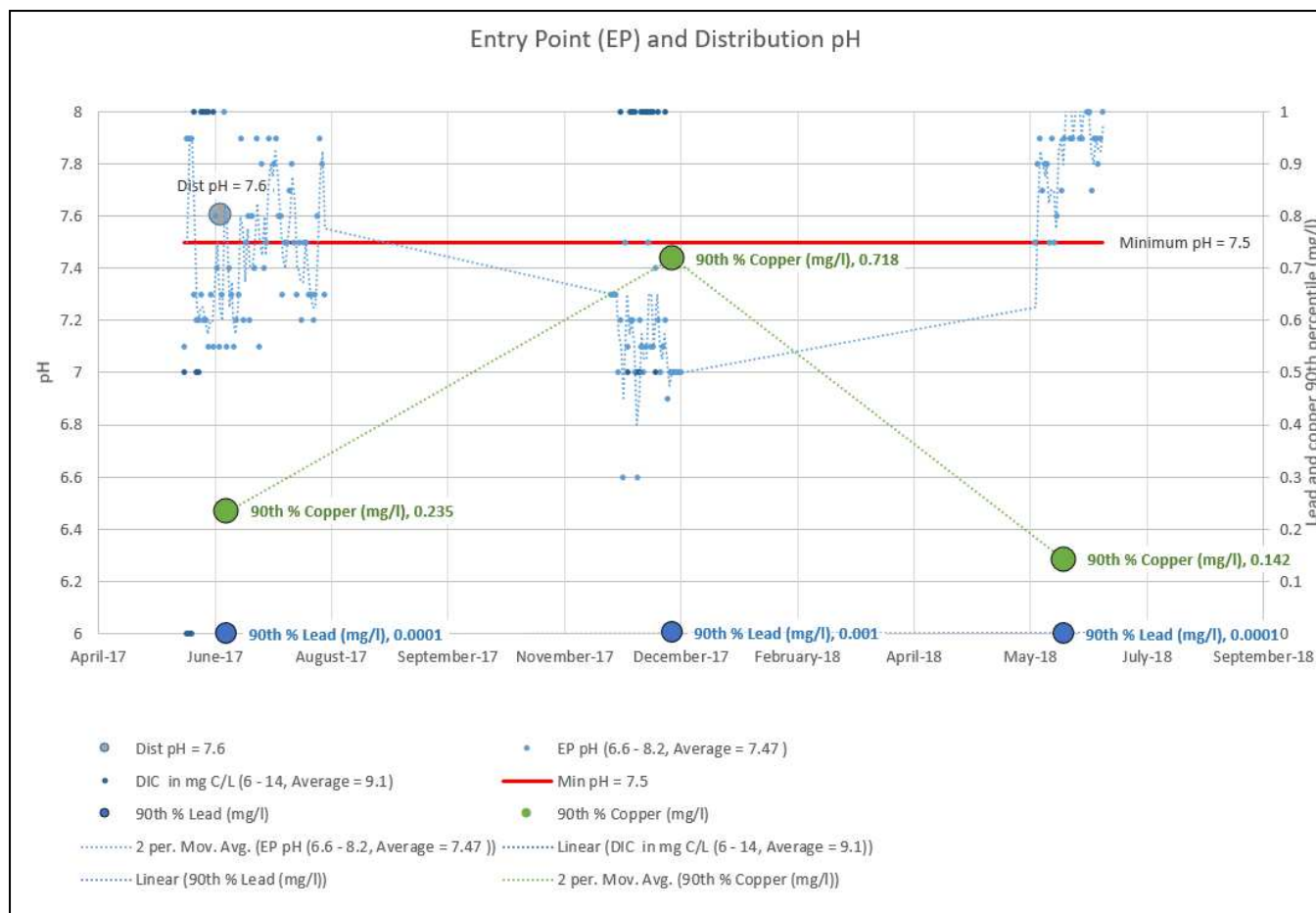
System Name: \_\_\_\_\_

Sample Period: **6/17**  
 Month/Year

Data plotted with the lead and copper results shown below demonstrated that both lead and copper levels increased when pH dropped much below 7.5.



The impact of pH on copper levels is more evident when data is plotted showing only the pH and lead and copper results as shown below:



***Table showing individual tap sample results contributing to copper action level exceedances in 2013 and 2015:***

Copper Sample Site	May-13	Nov-13	Jun-14	Dec-14	Aug-15	Nov-15	June-16	Dec-16
510 Nursery St (7)	0.064	0.215		0.088	0.108	0.234	0.052	0.114
570 Nursery St (1)			0.101					
410 Wolfe (3) - resample May'13 = ND	0.247	0.465	0.288					
<b>4116 SE Amity (8)</b>	0	0.007	0	0.031	0.054	0.06	0.010	0.006
5435 SE Amity (7)		0.255	0.12	0.034	0.181	0.741	0.081	0.097
<b>306 2nd St (8)</b>	0.529	1.47	0.818	0.654	0.137	1.412	0.187	0.147
803 Goucher St (8)	0.021	0.038	0.024	0.083	0.044	0.097	0.011	0.037
210 Sherman St (7)	1.19	1.76	0.926	0.736	0.744		0.158	1.21
<b>3601 SE Rice Ln (8)</b>	1.008	0.171	0.072	0.081	0.043	0.072	0.048	0.100
607 Getchell (7)		0.934	0.109	0.157	0.201	0.305	0.028	0.033
707 Getchell (6)			0.0094	0.006	0.011	0.018	0	0.024
412 Wolfe (6)	0.024	0.041	0.023	0.056	0.027			0.069
Methodist Church (2)	0.347	1.47						
1216 Jellison (7)	0.432	0.225	0.135		0.071	0.351	0.024	0.120
<b>101 Jellison (8)</b>	0.464	0.219	0.287	0.129	0.115	0.257	0.023	0.101
<b>903 Jellison (8)</b>	0.026	0.041	0.026	0.016	0.068	0.174	0.018	0.057
212 Woodson (6)	0.097	0.125	0.168		0.104	0.173		0.063
390 N Trade (7)	0.093	0.078	0.077	0.105	0.074		0.100	0.067
404 Getchell (4)	0.691	0.71	0.735	0.983				
408 Getchell (4)					0.134	0.107	0.018	0.062
<b>107 S Trade (8)</b>	0.476	0.691	0.377	0.287	0.327	0.284	0.089	0.369
212 Woodson #A (2)				0.047			0.039 (Aug)	
1217 S Jellison (1)				0.246				
<b>109 Getchell (8)</b>	0.274	1.1	0.618	0.949	1.1	2.091	0.098	0.554
<b>911 S Jellison (8)</b>	0.194	0.42	0.573	0.248	0.229	0.266	0.086	0.261
505 Getchell (1)	0.03							
408 Wolfe (5)				0.052	0.037	0.059	0.013	0.035
100 First St (1)							0.282	
415 Nursery St (1) Lead pigtail removed in Feb 2016. Pre-removal sample on 1/27/16. (pre-removal results were 0.0015 mg/l for lead and 0.188 mg/l for copper)							0.188 (1/27/16)	



## Example Form 141-A to Add or Indicate a Change to Tier 1 Sites

### Monitoring Guidance for Public Water Systems

Form 141-A

Page 1 of 3

#### SAMPLE SITE IDENTIFICATION AND CERTIFICATION

System's Name:	City of Amity	Type:	<input checked="" type="checkbox"/> CWS	<input type="checkbox"/> NTNCWS
Address:	Attn: Mark Gunter PO BOX 159 Amity, OR 97101	Size:	<input type="checkbox"/> >100,000 <input type="checkbox"/> 10,001 to 100,000 <input type="checkbox"/> 3,301 to 10,000 <input checked="" type="checkbox"/> 501 to 3,300 <input type="checkbox"/> 101 to 500 <input type="checkbox"/> ≤100	
Telephone Number:	(503) 835-4181			
System ID#:	00041			
Contact Person:	Mark Gunter			

#### CERTIFICATION OF SAMPLING SITES

##### LEAD SOLDER SITES

- # of single-family structures with copper pipes with lead solder installed after 1982 or lead pipes and/or lead service lines (Tier 1) \_\_\_\_\_
- # of multi-family structures with copper pipes with lead solder installed after 1982 or lead pipes and/or lead service lines (Tier 1) \_\_\_\_\_
- # of buildings containing with copper pipes with lead solder installed after 1982 or lead pipes and/or lead service lines (Tier 2) \_\_\_\_\_
- # of sites that contain copper pipes with lead solder installed before 1983 (to be used only if other conditions have been exhausted) (Tier 3) \_\_\_\_\_

TOTAL

The following sources have been explored to determine the number or structures which have interior lead pipe or copper pipe with lead solder.

- ☐ Plumbing and/or building codes
- ☐ Plumbing and/or building permits
- ☐ Contacts within the building department, municipal clerk's office, or state regulatory agencies for historical documentation of the service area development
- ☐ Water Quality Data

##### Other Resources Which PWS May Utilize

- ☐ Interviews with building inspectors
- ☐ Survey of service area plumbers about when and where lead solder was used from 1982 to present
- ☐ Survey residents in sections of the service area where lead pipe and/or copper pipe with lead solder is suspected to exist
- ☐ Interviews with local contractors and developers

Explanation of Tier 2 and Tier 3 sites (attach additional pages if necessary)

**Monitoring Guidance for Public Water Systems**

Form 141-A (continued)

Page 2 of 3

**SAMPLE SITE IDENTIFICATION AND CERTIFICATION**

**CERTIFICATION OF SAMPLING SITES**

**LEAD SERVICE LINE SITES**

# of samples required to be drawn from lead service line sites

# of samples actually drawn from lead service line sites

Difference (explain differences other than zero)

The following sources have been explored to determine the number of lead service lines in the distribution system.

- ☐ Distribution system maps and record drawings
- ☐ Information collected for the presence of lead and copper as required under §141.42 of the Code of Federal Regulations
- ☐ Capital improvement plans and/or master plans for distribution system development
- ☐ Current and historical standard operating procedures and/or operation and maintenance (O&M) manuals for the type of materials used for service connections
- ☐ Utility records including meter installation records, customer complaint investigations and all historical documentation which indicate and/or confirm the location of lead service connections
- ☐ Existing water quality data for indications of 'troubled areas'

**Other Resources Which PWS Utilized**

- ☐ Interviews with senior personnel
- ☐ Conduct service line sampling where lead service lines are suspected to exist but their presence is not confirmed
- ☐ Review of permit files
- ☐ Community survey
- ☐ Review of USGS maps and records
- ☐ Interviews with pipe suppliers, contractors, and/or developers

Explanation of fewer than 50% LSL sites identified (attach additional pages if necessary):

**CERTIFICATION OF COLLECTION METHODS**

I certify that:

Each first draw tap sample for lead and copper is one liter in volume and has stood motionless in the plumbing system of each sampling site for at least six hours.

Each first draw sample collected from a single-family residence has been collected from the cold water kitchen tap or bathroom sink tap.

Each first draw sample collected from a non-residential building has been collected at an interior tap from which water is typically drawn for consumption.

Each first draw sample collected during an annual or triennial monitoring period has been collected in the months of June, July, August or September.

Each resident who volunteered to collect tap water samples from his or her home has been properly

Instructed by (insert water system's name)

in the proper methods for collecting lead and copper samples. I do not challenge the accuracy of those sampling results. Enclosed is a copy of the material distributed to residents explaining the proper collection methods and a list of the residents who performed sampling.

## Monitoring Guidance for Public Water Systems

Form 141-A (continued)

Page 3 of 3

## SAMPLE SITE IDENTIFICATION AND CERTIFICATION

## RESULTS OF MONITORING

**THE RESULTS OF LEAD AND COPPER TAP WATER SAMPLES MUST BE ATTACHED TO THIS DOCUMENT**

# of samples required	20	# of samples submitted		90 <sup>th</sup> Percentile Pb	
				90 <sup>th</sup> Percentile Cu	

**THE RESULTS OF WATER QUALITY PARAMETER SAMPLES MUST BE ATTACHED TO THIS DOCUMENT**

# of samples required	2	# of tap samples submitted	
# of entry point samples required	1 (2/mo)	# of entry point samples submitted	

### CHANGE OF SAMPLING SITES

Original site address:

New site address:

Distance between sites (approximately):

Targeting Criteria:	NEW:	OLD:
---------------------	------	------

Reason for change (attach additional pages if necessary):

## SIGNATURE

NAME

TITLE

DATE \_\_\_\_\_

**Example Table to indicate Tier Level of Sites**

Copper Sample Site	Tier 1	Tier 2	Tier 3
510 Nursery St (7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
570 Nursery St (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
410 Wolfe (3) - resample May'13 = ND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4116 SE Amity (8)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5435 SE Amity (7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>306 2nd St (8)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
803 Goucher St (8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
210 Sherman St (7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3601 SE Rice Ln (8)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
607 Getchell (7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
707 Getchell (6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
412 Wolfe (6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Methodist Church (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1216 Jellison (7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>101 Jellison (8)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>903 Jellison (8)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
212 Woodson (6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
390 N Trade (7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
404 Getchell (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
408 Getchell (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>107 S Trade (8)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
212 Woodson #A (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1217 S Jellison (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>109 Getchell (8)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>911 S Jellison (8)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
505 Getchell (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
408 Wolfe (5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
100 First St (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
415 Nursery St (1) Lead pigtail removed in Feb 2016.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**LEAD SOLDER SITES**

# of single-family structures with copper pipes with lead solder installed after 1982 or lead pipes and/or lead service lines (Tier 1)

# of multi-family structures with copper pipes with lead solder installed after 1982 or lead pipes and/or lead service lines (Tier 1)

# of buildings containing with copper pipes with lead solder installed after 1982 or lead pipes and/or lead service lines (Tier 2)

# of sites that contain copper pipes with lead solder installed before 1983 (to be used only if other conditions have been exhausted) (Tier 3)

TOTAL



## **Lead and Copper Water Quality Parameter Monitoring Forms:**

**LEAD AND COPPER RULE (LCR)--CORROSION CONTROL  
WATER QUALITY PARAMETER (WQP) MONITORING & REPORTING (M/R)  
INSTRUCTIONS AND BACKGROUND  
(rev. 3/31/11)**

### **GENERAL:**

1. All systems that have installed chemical corrosion control must complete regular WQP M/R reporting.
2. The agency (County, State, or Dept of Ag) responsible for the system will designate the minimum WQP(s) for the system based on type of treatment and water chemistry.
3. Once a minimum WQP is established, the system will be sent current, pre-printed forms with their specific minimum WQP(s) listed. Two standardized forms for WQP M/R are in use: (1) Entry Point, and (2) Distribution. All minimum WQP(s) that have been set will be shown at the bottom right of the form.
4. Systems must maintain a minimum WQP to maintain compliance with the LCR.
5. The system must include the name of the person who filled out the WQP form and date of completion.

### **ENTRY POINT FORM:**

1. Systems must measure their designated WQP(s) at least once every two weeks at each entry point (EP), and report the results monthly by the 10th of the following month (same as coliform results).
2. For each WQP reading at each EP, the system must either enter a single measurement for that day, or compute an averaged daily value. Only one reading per day should be provided on the form.
3. The system must record whether their individual readings met the minimum WQP previously established for compliance.
4. The system must total the number of times that their WQP fell below their established minimum (excursions) and record it in the box at the bottom of the page.

### **DISTRIBUTION FORM:**

1. Systems need to complete this form when they complete their routine lead and copper tap samples. The form needs to be reported to the state by the same due date as these samples (January 10 or July 10). The frequency is the same as the system's Lead and Copper schedule and is based on the system population. The number required is pre-printed on your forms.
2. Distribution readings are generally collected at representative drinking water sites within the Distribution system (e.g. Coliform sites)
3. A separate Distribution Minimum WQP level is set (however, most of the time it will be the same as that set for the Entry Point).



## Water Quality Parameter Monitoring Form Lead & Copper Rule Corrosion Control

Day	pH	Alk	Phos	Other	Y/N
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

(No = N = Excursion) Total N's   

<<Have minimums been met for this day?

**ENTRY POINT**  
 PWS ID: 41 00041  
 System Name: City of Amity  
 Entry Point: EP-D  
 Sample Period: \_\_\_\_\_  
Month/Year

**Number of excursions\* during this month:** \_\_\_\_\_  
*(Count the number of days when any WQP was less than the minimum required)*

**Total excursions during the previous 5 months:** \_\_\_\_\_  
*(Over 9 excursions in 6 months is a violation. Entry Point and Distribution excursions are cumulative )*

*For OHA use only*

### Minimum Water Quality Parameters as set by

pH	7.5	
Alk	30	(Alkalinity)
PO4		(Orthophosphate)
Other		( )

**Print Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Send to DWP within 10 days after end of sampling period

Send to Drinking Water Program within 10 days after end of sampling period:  
OHA Drinking Water Program, PO Box 14350, Portland, OR 97293-0350  
Phone (971) 673-0405 Website: <http://healthoregon.org/dwp/>

## **Lead Tap Water Monitoring Certification of Notice to Individual Consumers**

Water System Name:

PWS ID No: 41-

Monitoring period to which the notice applies (for example, June – Sept. 2009): -

Date(s) results were received from laboratory:

Date(s) results were provided to consumers:

- ☐ Notice included individual tap results from lead tap water monitoring completed according to OAR 333-061-0034(5)(e)
- ☐ Notice included an explanation of the health effects of lead.
- ☐ Notice included steps that consumers can take to reduce exposure to lead in drinking water.
- ☐ Notice included contact information for our water utility.
- ☐ Notice included the maximum contaminant level goals and action levels for lead, and the definitions of these two terms from OAR 333-061-0043.

I hereby certify that consumer notice of tap water monitoring has been provided to consumers at each specific sampling site from which a sample was collected. I also certify that these results and the following information were provided to such persons within 30 days of receiving the test results from the laboratory:

### **Certified by**

Name:

Title:

Phone number:

Date:

### **Delivery Method**

- ☐ Notice was distributed by mail or other direct delivery. Specify other direct delivery methods:
- ☐ Electronic mail.
- ☐ Posting the notice on the Internet at www. .
- ☐ Posting the notice in public places (attach a list of locations).
- ☐ Delivery of multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers.
- ☐ Other methods.

**Please return this form as follows within 3 months of the end of the monitoring period (per OAR 333-061-0040(1)(g)(E)(iii)):**

Drinking Water Services

PO Box 14350

Portland, OR 97293-0350

E-mail: [dpw.dmce@state.or.us](mailto:dpw.dmce@state.or.us)

Fax: 971-673-0694



OAR 333-061-0034(5)(e) – Consumer Notification of Individual Tap Sample Results:

- (e) Notification of results.
  - (A) Water supplies must provide a notice of the individual tap results from lead tap water monitoring carried out according to OAR 333-061-0036(10)(d) to the persons served by the water system at the specific sampling site from which a sample was collected (for example, the occupants of the residence where the tap was tested).
  - (B) Water suppliers must provide the consumer notice as soon as practical, but no later than 30 days after learning of the tap monitoring results.
  - (C) The consumer notice must include the results of lead tap water monitoring for the tap that was tested, an explanation of the health effects of lead, list steps consumers can take to reduce exposure to lead in drinking water and contact information for the water utility. The notice must also provide the maximum contaminant level goal and the action level for lead and the definitions for these two terms.
  - (D) The Consumer notice must be provided to persons served at the tap that was tested, either by mail or by another method approved by the Authority. For example, upon approval by the Authority, at a NTNC water system, the water supplier could post the results on a bulletin board in the facility to allow users to review the information. Water supplier must provide the notice to customer at every sample tap tested, including consumers who do not receive water bills.