PWS Information

Purpose of this worksheet: *For water systems to document basic system information.*

Facility Information			
Water System Name:			
PANORAMIC HEIGHTS			
PWSID:	Population Served (number of people):	Number of Service Connections:	PWS Type:
02890F	**47**	**18**	☑ CWS ☐ NTNCWS
If you are a CWS, do multi-family residences comprise at least 20% of the structures you serve?			*Select "Yes" or "No"*
Mailing Address			
Street or P.O. Box:			
PO BOX 1000			
City or Town:		State:	Zip Code:
CARLSBORG		**WA**	**98324**
System Contact Person			
Name:		Title:	
BOWEN KENDRICK		**WATER & WASTEWATER SYSTEMS MANAGER**	
Telephone:		Email:	
360.565.3459		BKENDRICK@CLALLAMPUD.NET	
Person Who Prepared Inventory (if different from above)			

Inventory Methodology

PWS Name: PANORAMIC HEIGHTS
PWSID: 02890F

Enter Date Last Updated:	**07/23/24**

Purpose of this worksheet: *For water systems to document the methods and resources they used to develop and update their inventory.*

Part 1: Historical Records Review

Type of Record	Describe the Records Reviewed for Your Inventory and Indicate Your Level of Confidence (*e.g.* , Low, Medium, or High)
1. Previous Materials Evaluation *Example: Locations of Tier 1 lead tap sampling locations that are served by a lead service line.*	LOCATIONS OF PREVIOUS LCR SAMPLING - MEDUIM
2. Construction Records and Plumbing Codes *Examples: Local ordinance adopting an international plumbing code. Permits for replacing lead service lines.*	1986 SAFE DRINKING WATER ACT LEAD SERVICE BAN, LOCATIONS CONSTRUCTED & CONNECTED AFTER THE LEAD BAN ARE ASSUMED NON-LEAD - HIGH CONFIDENCE.
3. Water System Records *Examples: Capital improvement plans. Standard operating procedures. Engineering standards.*	CPUD GENERAL SPECIFICATIONS, LUD FORMATION DOCUMENTS - HIGH CONFIDENCE.
4. Distribution System Inspections and Records Examples: *Distribution system maps. Tap cards. Service line repair/replacement records. Inspection records. Meter installation records.*	COMPLETED SERVICE ORDERS, SERVICE AS-BUILTS (METER INSTALLATION RECORDS) - HIGH CONFIDENCE
5. Additional Records Required by Your State	
6. Other Records	

Part 2: Identifying Service Line Material During Normal Operations

1. During which normal operating activities are you collecting information on service line material? Check all that apply.

- ☐ Water meter reading
- ☑ Water meter repair or replacement
- ☑ Service line repair or replacement
- ☑ Water main repair or replacement
- ☐ Backflow prevention device inspection
- ☐ Other

If "Other", please explain:

2. Did you develop or revise standard operating procedures to collect service line material information during normal operation? *No*

If "Yes", please describe:

No formal revision to SOP - operators are encouraged to note service line material when possible in service order notes.

Part 3: Service Line Investigations

1. Identify the service line investigation methods your system used to prepare the inventory (check all that apply). If a water system chooses an investigation method not specified by the state under 40 CFR §141.84(a)(3)(iv), state approval is required. ***Note that investigations are not required by the LCRR but can be used by systems to assess accuracy of historical records and gather information when service line material is unknown.***

- ☐ Visual Inspection at the Meter Pit
- ☐ Customer Self-Identification
- ☐ CCTV Inspection at Curb Box - External
- ☐ CCTV Inspection at Curb Box - Internal
- ☐ Water Quality Sampling - Targeted
- ☐ Water Quality Sampling - Flushed
- ☐ Water Quality Sampling - Other
- ☑ Mechanical Excavation
- ☐ Vacuum Excavation
- ☐ Predictive Modeling
- ☑ Other

☐ Water Quality sampling - Sequential

If "Other", please explain:

Statistical Approach utilized for evaluation of uknown service lines in accordance with WA DOH Guidance Document 331-723.

2. If "Predictive Modeling", please briefly describe the model and inputs used:

3. How did you prioritize locations for service line materials investigations? For example, did you consider environmental justice and/or sensitive populations, did you use predictive modeling, and/or did you target areas with high number of unknowns?

9 service locations were identified with construction dates prior to the SDWA Lead Ban and initially classified as unknown. These locations were randomized and 2 were physically inspected to ensure a confidence level of 95% in accordance with WA DOH Guidance Document 331-723. Locations were then classified as non-lead in accordance with statistical approach.

Inventory Summary

PWS Name: PANORAMIC HEIGHTS
PWSID: 02890F

Enter Date Last Updated:	**07/23/24**

Purpose of this worksheet: *For water systems to provide a summary of their service line inventory, including information on ownership, inventory format, and the number of service lines for each of the four required materials classifications.*

Part 1. General Information

1. Is this the **Initial Inventory** or an **Inventory Update**?	*Initial Inventory*
2a. Who **owns the service lines** in your system? *If other, please explain below.*	*Ownership is split, meaning that the system owns and portion and the customer owns a portion*
2b. Is there documentation that defines service line ownership in your system, such as a local ordinance? *If yes, please describe below and explain where ownership is split (e.g., property line, curb stop).*	*Yes*

System ownes service line from water main to water meter/setter. Customer owns service line from water meter box to building. Detailed in the CPUD General Specifications.

3a. Describe when lead service lines were generally installed in your system.

N/A

3b. When were lead service lines banned in your system? Reference the state or local ordinance that banned the use of lead in your system.

SDWA 1986

4. Do you have lead goosenecks, pigtails or connectors in your system?	*No*

5. What is your overall level of confidence in the inventory (*i.e.* , "Low", "Medium", or "High.") Please explain your rationale below.

High - No records of lead services lines, most of system and most structures build after 1986 SDWA Lead ban. Statistical Approach utilzied for inventory, no lead identified in service line survey.

Part 2. Inventory Format

Describe your inventory format in the space provided below (*e.g.* , the **Detailed Inventory** worksheet, custom spreadsheet, GIS map). Provide the filename and/or web address if applicable. ***Note that the state may require you to submit your detailed inventory of each service line in your distribution system.***

Detailed inventory worksheet.

Part 3. Inventory Summary Table [1]

If you are using the ***Detailed Inventory*** *worksheet, the classifications you select in the Column "Entire Service Line Material Classification" (Column X) will be used to calculate the total number of service lines for each of the four material classifications below. Otherwise, enter the number of service lines in the aqua-colored cells.* ***Remember this is the classification for the entire service line.***

Service Line Material Classification	Definition	Total Number of Service Lines (REQUIRED to be reported under the LCRR)
Lead	Any portion of the service line is known to be made of lead.[2]	0
Galvanized Requiring Replacement (GRR)	The service line is not made of lead, but a portion is galvanized and the system is unable to demonstrate that the galvanized line was never downstream of a lead service line.	0
Non-Lead	All portions of the service line are known NOT to be lead or GRR through an evidence-based record, method, or technique.	18
Lead Status Unknown	The service line material is not known to be lead or GRR. For the entire service line or a portion of it (in cases of split ownership), there is not enough evidence to support material classification.	0
	TOTAL	18

Notes

[1] This summary table is for reporting material for the entire service line connecting the water main to the customer's plumbing. See the **Classifying SLs** worksheet for additional guidance on assigning a materials classification to the entire service line when ownership is split. Remember that systems must track the system-owned and customer-owned portions separately in their inventory.

[2] A lead-lined galvanized service line is consistent with the definition of an LSL under the LCRR ("a portion of pipe that is made of lead, which connects the water main to the building inlet") (40 CFR §141.2) and must therefore be classified in the inventory as an LSL. Do NOT, however, count non-lead service lines with a lead gooseneck or pigtail as lead service lines unless required by your state.

Location Information					System-Owned Portion									Customer-Owned Portion								Entire Service Line Material Classification	Other Potential Sources of Lead			Additional Information to Assign Tap Monitoring Tiering				Lead Service Line Replacement (LSLR)	
Unique Service Line ID	Location Identifier		Sensitive Population? (Yes/No)	Disadvantaged Neighborhood? (Yes/No)	System-Owned Portion Service Line Material Classification	If Non-Lead in Column G, Was Material Ever Previously Lead?	Service Line Installation Date	Service Line Size	Basis of Material Classification	Was the Service Line Material Field Verified?	If "Yes" Service Line Material Was Field Verified:		Notes	Customer-Owned Portion Service Line Material Classification	Service Line Installation Date	Service Line Size	Basis of Material Classification	Was the Service Line Material Field Verified?	If "Yes" Service Line Material Was Field Verified:		Notes		Is there a Lead Connector?	Is there Lead Solder in the Service Line?	Describe Other Fittings and Equipment Connected to the Service Line that Contain Lead	Building Type Connected to Service Line	Point-of-Entry or Point-of-Use Treatment Present?	Does the Interior Building Plumbing Contain Copper Pipes with Lead Solder Installed Before Your State's Lead Ban (Generally 1986 - 1988)?	Current LCR Sampling Site?	Date of System-owned LSLR	Date of Customer-owned LSLR
	Street Address	SERVICE LOCATION #									Describe the Field Verification Method	Enter the Date of Field Verification							Describe the Field Verification Method	Enter the Date of Field Verification													
A Unique ID is recommended for each service line.	*Water systems must track addresses of all service lines in their internal inventory. For the publicly accessible version, location identifiers are required for lead and galvanized requiring replacement. If the system does not use addresses for their location identifier, other options could include GPS coordinates, landmark, intersection, block, or other details to specify service line locations.*		*Select Yes if sensitive subpopulation, e.g., day care, school, multifamily home. If Yes-Other, describe in the Notes field.*	*Does location meet state affordability guidelines or other measures?*	*Dropdown list includes recommended subclassifications. If "Non-Lead Other", describe in Notes field*	*Select Yes, No, or Don't know. Important for determining if downstream/customer-owned galvanized service line requires replacement*	*Date, year, or estimated date range when the service line was installed or replaced*	*Diameter in inches*	*Select option from drop down list. If "Other," describe in the Notes field*	*Select Yes or No*	*Select option from drop down list. If "Other," describe in the Notes field*	*Enter approximate date of field verification or date that the record was updated*	*Can use this field for documenting additional relevant information, including when classification changes.*	*Dropdown list includes recommended subclassifications. If non-lead other, describe in Notes field.*	*Date, year, or estimated date range when the service line was installed or replaced*	*Diameter in inches*	*Select option from drop down list. If "Other," describe in the Notes field*	*Select Yes or No*	*Select option from drop down list. If "Other," describe in the Notes field*	*Enter approximate date of field verification or date that record was updated*	*Can use this field for documenting additional relevant information, including when classification changes.*	*Dropdown list includes four required service line classifications of Lead, Non-lead, Galvanized Requiring Replacement, or Unknown*	*For example, lead gooseneck or pigtail where the water main is connected to the service line*	*Select Yes, No, or Don't Know*	*For example, backflow preventer or meter containing lead*	*Note: This information may be helpful for identifying lead top monitoring locations.*					
PH-1	241 E PANORAMA LN	10951	No	No	Non-Lead - Copper		7/19/1974	<2-inch	Field inspection only with no records	Yes	Mechanical Excavation at multiple locations	5/20/2024	LOCATE #24200427 customer side is Poly.	Non-Lead - Plastic	7/19/1974	<2-inch	Field inspection only with no records	Yes	Mechanical excavation at multiple locations	5/20/2024	LOCATE #24200427 customer side is Poly.	Non-Lead								
PH-2	202 E ELDERBERRY LN	10949	No	No	Non-Lead - Plastic		2/21/1986	<2-inch	Field inspection only with no records	Yes	Mechanical Excavation at multiple locations	5/20/2024	LOCATE #24200350 brass on customer side. Poly on PUD side.	Non-Lead - Other	2/21/1986	<2-inch	Field inspection only with no records	Yes	Mechanical excavation at multiple locations	5/20/2024	LOCATE #24200350 brass on customer side. Poly on PUD side.	Non-Lead								
PH-3	207 E ELDERBERRY LN	10965	No	No	Non-Lead - Other		6/13/1966	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead - Other	6/13/1966	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead								
PH-4	113 E ELDERBERRY LN	10947	No	No	Non-Lead - Other		9/9/1966	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead - Other	9/9/1966	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead								
PH-5	5612 S HOLLY ST	10950	No	No	Non-Lead - Other		7/7/1967	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead - Other	7/7/1967	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead								
PH-6	215 E ELDERBERRY LN	10964	No	No	Non-Lead - Other		7/21/1967	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead - Other	7/21/1967	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead								
PH-7	217 E PANORAMA LN	10954	No	No	Non-Lead - Other		10/2/2014	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	10/2/2014	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								
PH-8	114 E ELDERBERRY LN	10948	No	No	Non-Lead - Other		10/23/1973	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead - Other	10/23/1973	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead								
PH-9	5732 S PASTORAL DR	10956	No	No	Non-Lead - Other		12/2/1975	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead - Other	12/2/1975	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead								
PH-10	225 E PANORAMA LN	10953	No	No	Non-Lead - Other		12/18/1978	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead - Other	12/18/1978	<2-inch	Other	No			STATISTICAL PER WA DOH 331-723	Non-Lead								
PH-11	211 E PANORAMA LN	10955	No	No	Non-Lead - Other		3/3/1987	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	3/3/1987	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								
PH-12	5715 S PASTORAL DR	10960	No	No	Non-Lead - Other		8/24/1988	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	8/24/1988	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								
PH-13	121 E ELDERBERRY LN	10946	No	No	Non-Lead - Other		8/1/1989	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	8/1/1989	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								
PH-14	223 E ELDERBERRY LN	10963	No	No	Non-Lead - Other		2/26/1993	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	2/26/1993	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								
PH-15	5737 S PASTORAL DR	10958	No	No	Non-Lead - Other		8/2/1995	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	8/2/1995	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								
PH-16	5733 S PASTORAL DR	10959	No	No	Non-Lead - Other		2/29/1996	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	2/29/1996	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								
PH-17	5746 S PASTORAL DR	10962	No	No	Non-Lead - Other		7/19/1996	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	7/19/1996	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								
PH-18	233 E PANORAMA LN	10952	No	No	Non-Lead - Other		9/23/1996	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead - Other	9/23/1996	<2-inch	Installation date after lead ban	No			INSTALLATION DATE AFTER LEAD BAN	Non-Lead								