

Kentucky Division of Water
Drinking Water Sample Collection Recommendations
For Lead & Copper
April 2020

Kentucky Division of Water (DOW) has prepared the following guidance to assist residents and facility personnel with drinking water sample collection for lead and copper using social distancing precautions. These guidelines are strongly recommended to ensure sample results are representative, defensible and meet their intended use in accordance with the Safe Drinking Water Act.

Lead and Copper ONLY Sampling Procedures¹

- Whenever possible use sampling supplies from the laboratory (containers, preservatives, etc.)
- Select an indoor “COLD” water faucet (kitchen or bathroom) for sampling that is free from water softeners or filters.
- DO NOT remove any screens or aeration devices.
- If collecting a “first-draw²” sample for lead/copper, allow the water to sit undisturbed in residence water pipes for at least six hours.
- DO NOT intentionally flush the water line before the start of the six hour period.
- Use a wide-mouth 1 Liter bottle under the faucet.
- Open the faucet and collect the first water out of the tap.
- Collect sample by filling bottle to the prescribed volume, properly cap and label. Do not rinse bottle prior to filling (supplied bottles are pre-cleaned and may contain an added preservative).
- Make sure to include the sample date and time, along with the name or initials of the person taking the sample(s). Write these on the bottle or label and transfer the information to the chain of custody.

COMPLETE CHAIN-OF-CUSTODY PROVIDED BY THE PUBLIC WATER SYSTEM (PWS) OR THEIR LABORATORY WITH ALL REQUIRED INFORMATION (SEE ATTACHED EXAMPLE). IN THE “RELINQUISHED BY” SECTION PRINT YOUR NAME, INCLUDE THE DATE/TIME AND SIGN YOUR NAME.

CONTACT THE PWS FOR PICKUP AND LET THEM KNOW THE DESIGNATED SECURE LOCATION YOU PLAN TO LEAVE THE SAMPLE(S) AND CHAIN-OF-CUSTODY FORM. PLACE THE SAMPLE(S) AND PAPERWORK IN THE AGREED UPON LOCATION. Social distancing is being practiced to protect residents and laboratory personnel.

TO BE COMPLETED BY THE RESIDENT (OR FACILITY PERSONNEL)	
Water was last used: Time: _____ AM PM	Date: __/__/_____
Sample was collected: Time: _____ AM PM	Date: __/__/_____
Sample Location & Faucet (e.g. bathroom sink): _____	
Signature: _____	Date: __/__/_____

¹ EPA Quick Guide to Drinking Water Sample Collection (September 2016)

https://www.epa.gov/sites/production/files/2015-11/documents/drinking_water_sample_collection.pdf

² First draw sample means a one-liter sample of tap water, collected in accordance with §141.86(b)(2), that has been standing in plumbing pipes at least 6 hours and is collected without flushing the tap.

EXAMPLE – Completed Chain of Custody

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

Residence Name (please print): <i>John Smith</i>		Residence Address: <i>123 Appletree Lane, Frankfort KY 40601</i>		Sample Location within Residence (kitchen sink, bathroom sink, etc): <i>Kitchen sink</i>					
Sampler (Signature): <i>John Smith</i>		Sampled by Home Owner: <input checked="" type="checkbox"/> Sampled by Public Utility: <input type="checkbox"/>		Sample Description					
Lab # (Lab Use)	Sample Collection Date Time		Description of Sample Location (Sampling guidelines were used to obtain samples below)					Grab/ Comp	Matrix
	<i>5/7/2020</i>	<i>8:30 am</i>	<i>First draw sample from kitchen sink (cold)</i>		<i>Grab</i>	<i>DW</i>	<i>No</i>	<i>1000</i>	Lead and Copper in drinking water
	<i>5/7/2020</i>	<i>1:00 pm</i>	<i>Total coliform sample from kids bathroom</i>		<i>Grab</i>	<i>DW</i>	<i>No</i>	<i>100</i>	Fecal Coliform

First draw sample means a one-liter sample of tap water, collected in accordance with 40 CFR 141.86(b)(2), that has been standing in plumbing pipes at least 6 hours and is collected without flushing the tap.

Relinquished By: <i>John Smith</i>		Designated Drop Off Location: <i>Outside porch milkbox</i>		Date <i>5/7/2020</i>	Time <i>2:30 pm</i>	***** Laboratory Use Only ***** Shipping Conditions: <input type="checkbox"/> Iced <input type="checkbox"/> Ambient Container Temperature: _____ Holding times acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No Preservative added upon receipt at lab? _____ pH's checked? <input type="checkbox"/>
Relinquished By: <i>Outside porch milkbox</i>		Received By:		Date	Time	

Sample Information: Drinking Water <input checked="" type="checkbox"/> Container Type: <u><i>Provided by laboratory</i></u>		***** Laboratory Use Only ***** PRESERVATION CODES: NA – Nitric Acid (HNO ₃) HA – Hydrochloric Acid (HCl) SA – Sulfuric Acid (H ₂ SO ₄) SH – Sodium Hydroxide (NaOH) AC – Ammonium Chloride X – None ST – Sodium Thiosulfate (Na ₂ S ₂ O ₃) ZA – Zinc Acetate (Zn(O ₂ CCH ₃) ₂) AA - Ascorbic Acid (C ₆ H ₈ O ₆) PA – Phosphoric Acid (H ₃ PO ₄) CS – Copper Sulfate (CuSO ₄)	
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