



STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**DIVISION OF WATER RESOURCES**  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor  
Nashville, Tennessee 37243-1102

November 30, 2023

West Knox Utility District  
Drexel Heidel, General Manager  
P.O. Box 51370  
Knoxville, TN 37950

SENT VIA ELECTRONIC MAIL TO: [dheidel@wkud.com](mailto:dheidel@wkud.com)

Re: **Lead and Copper Rule – Participating Consumer Notification Documents**  
PWSID: TN0000371  
County: Knox

Dear General Manager Heidel:

The Division of Water Resources (DWR) appreciates your dedicated efforts to delivering safe drinking water. According to our records, the West Knox Utility District successfully completed the monitoring of lead and copper at consumer taps during the compliance period of June 1, - September 30, 2023.

We have received the sample results; however, we have not received the required documentation of the participant notice activities as outlined in Tenn. Comp. R. & Regs. (“Rule[s]”) Chapter § 0400-45-01-.33(6)(e). Each sampled location must receive a Consumer Notification letter within 30 days of the results being received from the laboratory. Examples of these documents are included for reference.

If you believe the violation listed above has been identified incorrectly, submit copies of the documents validating that the requirements were timely completed via email to [DWRWater.Compliance@tn.gov](mailto:DWRWater.Compliance@tn.gov) within 10 days of receipt of this notice.

After 10 days, the violation will be submitted to the EPA and additional reporting will be required in order to return to compliance with the Lead and Copper Rule:

- (I) Public Notice - Missing the Lead and Copper sampling event deadlines constitutes a Tier 3 Violation and requires issuance of a public notice within 12 months. This public notice must contain content and language specified in Tenn. Comp. R. & Regs. (“Rule[s]”) Chapter § 0400-45-01-.19(5). Submit a copy of the public notice to the Division within 10 days of publication.

If you should need assistance or have any questions, please contact the Knoxville Environmental Field Office at (865) 594-6035 or Christopher Allen in the Nashville Central Office at (615) 948-0716 and via email at Christopher.Daniel.Allen@tn.gov.

Sincerely,

A handwritten signature in cursive script that reads "Jessica Murphy".

Jessica Murphy  
Manager, Compliance and Enforcement Unit, Division of Water Resources

EJM:CDA

Cc: Tom Moss, NCO-C&E Unit, Tom.Moss@tn.gov  
Anna Sartors, NCO-DW Unit, Anna.R.Sartors@tn.gov  
Christopher Allen, NCO-C&E Unit, Christopher.Daniel.Allen@tn.gov  
Robert Ramsey, KEFO-DW Unit, Robert.Ramsey@tn.gov  
Greg Mize, KEFO-DW Unit, Greg.Mize@tn.gov  
Doug Alderman, DS Superintendent-West Knox Utility District, dalderman@wkud.com  
Jacob Swafford, WTP Superintendent-West Knox Utility District, jswafford@wkud.com  
Wayne Hastings, Assistant Manager-West Knox Utility District, whastings@wkud.com



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
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William R. Snodgrass Tower, 312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243

## Lead and Copper Results Consumer Notice Certification Form

PWS\_ID#: TN \_\_\_\_\_

Phone: \_\_\_\_\_

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

Date(s) of results receipt from laboratory \_\_\_\_\_

The water system named above hereby certifies that its lead consumer notice has been provided to each person it serves at the specific sampling site from which the sample was tested. The water system also certifies that these results and the following information were provided to such persons within 30 days of receiving the test results from the laboratory:

- Individual tap results from lead tap water monitoring carried out under the requirements of 40 CFR 141.86.
- An explanation of the health effects of lead.
- Steps that consumers can take to reduce exposure to lead in drinking water.
- Contact information for our water utility.
- The maximum contaminant level goals and action levels for lead, and the definitions of these two terms from 40 CFR 141.153(c).

This information was distributed to consumers at sampling locations within the required timeframe – Select all that apply:

- within 30 days to all sites with results below the Lead Action Level
- within 72 hours to \_\_\_\_\_ (#) sites with Lead results above Action Level on \_\_\_\_\_ (date),
- within 72 hours to all sampled sites if 90<sup>th</sup> percentile exceeded Action Level, Public Notice was also conducted on \_\_\_\_\_ (date) include documentation of actions and copy of Public Notice.

Method of Distribution - Select all that apply:

- Notice was distributed by mail or other direct delivery.
- electronic mail.
- 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. Specify other methods: \_\_\_\_\_

This form must be completed and returned to the Division along with a completed copy of the distributed Participant Notification.

Distributor print name: \_\_\_\_\_

Distributor signature: \_\_\_\_\_ Date: \_\_\_\_\_

Email address: \_\_\_\_\_

Return form to: Drinking Water Compliance, Tennessee Tower 11<sup>th</sup> Floor, 312 Rosa L. Parks Ave.,  
Nashville, TN 37243 or vial email DWRWater.Compliance@tn.gov

Location: \_\_\_\_\_

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

\_\_\_\_\_  
\_\_\_\_\_

## Notification of Results

Thank you for participating in the monitoring of tap water.

### The results at the sampled tap are:

Lead \_\_\_\_\_mg/L                  Copper \_\_\_\_\_mg/L

### Contaminant level requiring follow-up action:

Lead 0.015 mg/L                  Copper 1.3 mg/L

ppm or mg/L = Parts per million or milligrams per liter, explained in terms of money as one penny in \$10,000.

ppb or micrograms/L = Parts per billion or micrograms per liter, explained in terms of money as one penny in \$10,000,000.

The MCLG, or maximum contaminant level goal for lead is zero mg/L. This is the level of a contaminant in drinking water where there is no known or expected health risk. MCLGs allow for a margin of safety. The action level for lead is 0.015 mg/L and the action level for copper is 1.3 mg/L. An action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead is a common metal found in the environment. Although most lead exposure occurs when people eat paint chips and inhale dust, or from contaminated soil, the EPA estimates that 10 to 20 percent of human exposure to lead may come from lead in drinking water. Lead is rarely found in source water but enters tap water through corrosion of plumbing materials. Homes built before 1988 are more likely to have lead pipes, fixtures, and solder. However, new homes are also at risk: even legally designated "Lead-Free" plumbing may contain up to 8 percent lead. The most common source is brass and chrome-plated brass faucets and fixtures, which can leach significant amount of lead into water, especially hot water.

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Copper is a reddish metal that occurs naturally in rock, soil, water, sediment, and air. It is commonly found in coins, electrical wiring, and pipes. It is an essential element for living organisms, including humans. However, too much copper can cause adverse health effects, including vomiting, diarrhea, stomach cramps, and nausea. It has also been associated with liver damage and kidney disease.

The human body has a natural mechanism for maintaining the proper level of copper; however, children under one year old have not yet developed this mechanism and, as a result, are more vulnerable to the toxic effects of copper. People with Wilson's disease also have a problem with maintaining the proper balance and should exercise particular care in limiting exposure to copper.

**Consumers can reduce their exposure to lead in drinking water by the following:**

- (I) Run your water to flush out lead. If the water has not been used for several hours, run water for 15-30 seconds, or until it becomes cold, or until it reaches a steady temperature before using it for drinking or cooking. Flushing removes water containing lead from the plumbing lines.
- (II) Do not cook with or drink water from the hot water tap. Lead dissolves more easily into heated water. Do not use hot water for preparing baby formula. Boiling water does not reduce lead.
- (III) Look for alternative sources or treatment of water if you are concerned about contaminants. You may want to consider purchasing a water filter or bottled water. Read the packaging to ensure the filter is approved to reduce lead or contact NSF International at 800-NSF-2010 or [www.nsf.org](http://www.nsf.org) for more information on performance standards for water filters.
- (IV) Get your child tested. Visit the Tennessee Department of Health to learn more about children and lead, or contact your healthcare provider to find out how you can get your child tested for lead if you concerned about lead exposure. <https://www.tn.gov/health/health-program-areas/mch-lead.html>
- (V) The following is a list of some Department approved laboratories in your area that you can call to have your water tested for lead (Insert names and phones numbers of at least two laboratories).
- (VI) Identify your plumbing fixtures containing lead. New brass faucets, fittings, and valves, even those advertised as "Lead-Free" may contribute lead to drinking water. Tennessee law currently restricts the sale of plumbing fixtures not considered "lead-free."

For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at [www.epa.gov/lead](http://www.epa.gov/lead), call the EPA Safe Drinking Water Hotline at 800-426-4791, contact your health care provider, or reach out to the State of Tennessee Department of Environment and Conservation by mailing:

Lead and Copper in Drinking Water  
Tennessee Tower, 11<sup>th</sup> Floor  
312 Rosa L. Parks Ave.,  
Nashville, TN 37243

**Your participation in this program is a valuable contribution to the community's safety.**

For more information contact please contact \_\_\_\_\_  
with your local water utility at ( \_\_\_\_\_ ) \_\_\_\_\_