



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of Environmental
Conservation**

OFFICE OF THE COMMISSIONER

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March 29, 2016

Mr. Joel Beauvais
Deputy Assistant Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Federal Building
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Assistant Administrator Beauvais:

Thank you for your February 29th letter regarding the partnership between the Environmental Protection Agency (EPA) and states to ensure the safety of drinking water. The Alaska Department of Environmental Conservation (DEC) implements the Safe Drinking Water Act rules for the State of Alaska and has been actively working to evaluate our public water systems with respect to the Lead and Copper Rule following the recent events in Flint, MI. Ensuring safe drinking water for all Alaskans is a high priority for the agency.

I understand the importance of maintaining and restoring public confidence in our public drinking water systems. My staff are actively engaged with the staff at EPA Region 10, state agency partners, tribes, communities, and water system operators in reviewing Alaska's public drinking water systems that may have exceeded an Action Level to ensure appropriate actions have and will continue to be taken to meet the Lead and Copper Rule. DEC is enhancing public access to sampling data, fact sheets, and other useful information. As you requested, enclosed is a description of DEC's actions related to the five areas you had identified in your letter.

We appreciate our continuing partnership with EPA and look forward to further discussion of strategies and actions to improve the safety and sustainability of our drinking water systems. If there are any questions on the information provided, please feel free to contact us.

Sincerely,

Larry Hartig
Commissioner

Enclosures

cc: Dennis McLerran, EPA Region 10
Marie Jennings, EPA Region 10
Bob Blankenburg, DEC-EH
Cindy Christian, DEC-EH-DW

ENCLOSURE
Alaska Department of Environmental Conservation
Lead and Copper Rule (LCR) Near-Term Action Areas
Responses to EPA Letter Dated February 29, 2016

Area # 1 – Confirm that the state’s protocols and procedures for implementing the LCR are fully consistent with the LCR and applicable guidance.

The State of Alaska Drinking Water Program (DWP) is implementing the LCR requirements as we understand them. The DWP has been actively reviewing all of the requirements of the LCR and various LCR guidance documents to confirm that we are implementing the LCR consistently in all area offices and in accordance with EPA interpretation. The state is committed to following all applicable guidance as it becomes available from the EPA. We will immediately follow-up with EPA if there are questions on how guidance should be implemented.

Area # 2 – Use relevant guidance on LCR sampling protocols and procedures for optimizing corrosion control.

The state is committed to using the relevant guidance on LCR sampling protocols once we receive training and information on the proposed sampling protocols. We have been in contact with Peter Grevatt, Director of the Office of Ground Water and Drinking Water regarding the new LCR sampling protocols and will be in attendance at the EPA/ASDWA meeting on March 28 to discuss concerns with the recommended sampling protocols. Corrosion control is a complex and highly specialized field and it is challenging for most states to provide a high level of expert guidance on the subject and the State of Alaska is no exception. The DWP does review and approve corrosion control treatment plans through the engineering plan review process. Ultimately it is up to the public water system and their consultants to develop and implement an appropriate treatment plan. The state has reviewed the large water systems in the state and those systems are operating consistently below the action level.

Area # 3 – Post on your agency’s public website all state LCR sampling protocols and guidance for identification of Tier 1 sites (at which LCR sampling is required to be conducted).

The state’s guidance on LCR sampling protocols has been available on the DWP public website for many years. We are aware that we may need to revise our current guidance to be consistent with the guidance recently sent out by the EPA Office of Ground Water and Drinking Water. The DWP currently does not have guidance on the selection of Tier 1 sites. Under the LCR it is the responsibility of the public water system to follow the LCR requirements and select appropriate sites. The DWP does provide compliance assistance to public water systems to select the highest tier sights available in their distribution system. Most public water systems in Alaska do not have Tier 1 sites or do not have a sufficient number of Tier 1 sites to make up their entire sampling pool. The state will work on providing written guidance for the identification of Tier 1, Tier 2 and Tier 3 sites.

Area # 4 – Work with PWSs – with a priority emphasis on large systems – to increase transparency in implementation of the LCR by posting on their public website and/or on your agency’s website the following:

- **The materials inventory that systems were required to complete under the LCR, including the locations of lead service lines, together with any more updated inventory or map of lead service lines and lead plumbing in the system.**

The materials inventory was a requirement for public water systems in the LCR when it was first promulgated and the DWP did not receive the inventories from water systems. However, the DWP is unaware of any lead service lines in the state. During engineering plan review, we require that the submitting engineer specify that only lead-free materials will be used during construction. Certification of compliance with the requirement must be submitted with the request for approval to operate. We would be unable to post information to our agency website because we don’t have the information.

- **LCR compliance sampling results collected by the system, as well as justification for invalidation of LCR samples.**

LCR compliance results expressed as the 90th percentile are available on the DWP website at our Drinking Water Watch link. Many individual sampling results are from private homes and we would be concerned about posting results for individual homes on our website for privacy reasons. Invalidation of LCR samples are done in writing and retained in the public water system file. They are typically not available in electronic format.

Area # 5 – Enhance efforts to ensure that residents promptly receive lead sampling results from homes, together with clear information on lead risks and how to abate them, and that the general public receives prompt information on high lead levels in drinking water systems.

The DWP is currently enforcing notification requirements based on the time frames in the LCR. Individual homeowners are provided with the Consumer Notice of Tap Water Lead Results. Public water systems that exceed the 90th percentile are required to provide Public Education notification to all their consumers within 60 days. We encourage water systems to provide this information as soon as possible after learning of the exceedance. The DWP provides a high level of assistance to small public water systems to ensure that information being provided is correct and that it is distributed as soon as possible. Examples of the Consumer Notice of Tap Water Lead Results and Public Education documents are attached for your review.



NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

This brochure explains the health effects of lead and simple steps you can take to protect yourself by reducing your exposure to lead in drinking water.

_____ exceeded the Lead Action Level for drinking water.

The United States Protection Agency (EPA) and _____ are concerned about lead in your drinking water. Routine testing found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

HEALTH EFFECTS OF LEAD

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

SOURCES OF LEAD

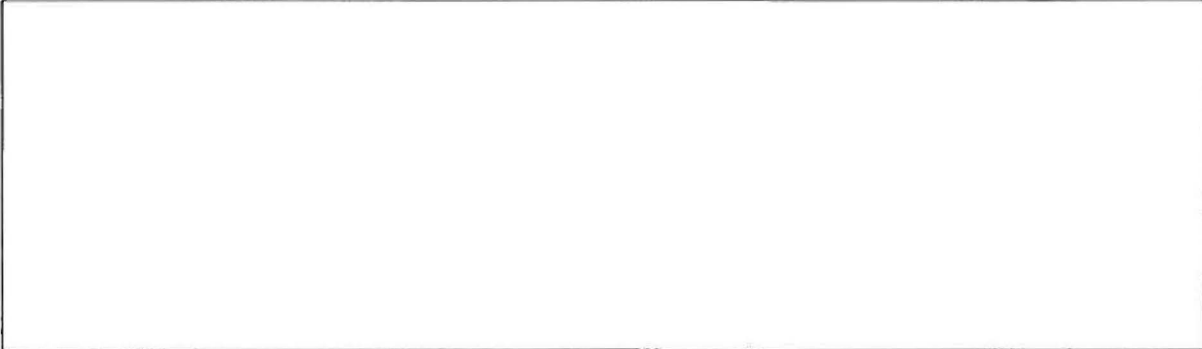
Lead is a common metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery porcelain and pewter. Drinking water is also a possible source of lead exposure. Most sources of drinking water have no lead or very low levels of lead. Most lead gets into drinking water after the water leaves the local well or treatment plant and comes into contact with plumbing materials containing lead. These include lead pipes, lead solder, as well as faucets, valves, and other components made of brass.

HOW LEAD ENTERS OUR WATER

Unlike most drinking water contaminants, lead is unusual in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, may contain higher levels of lead. Flushing tap water is a simple and inexpensive measure you can take to reduce your exposure.

WHAT WE ARE DOING

Although some locations have low levels of lead in their drinking water, some taps within the distribution system have lead levels above the EPA action level of 0.015 mg/L for Pb based on 90th percentile level of tap water samples. An action level exceedance is **not a violation** but can trigger other requirements that include water quality parameter (WQP) monitoring, corrosion control treatment (CCT), source water monitoring/treatment, public education, and lead service line replacement (LSLR) if applicable. Under Federal law we are required to have a program in place to minimize lead in your drinking water. This program includes:



STEPS TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. _____ is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Therefore, when your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

Lead levels in some homes or buildings can be higher than others. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. If you are concerned about lead in your drinking water, you may want to have your water tested. For more information on getting your water tested for lead, please call your public water system representative, _____ at _____.

If a water test indicates that the drinking water drawn from a tap in your home contains lead above 0.015 mg/L or if you suspect that your plumbing system components may contain lead, then you should take the following precautions:

1. FLUSH YOUR SYSTEM.

Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. The longer water resides in your home's plumbing, the more lead it may contain. Flushing usually uses less than one or two gallons of water. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush water to wash dishes or water plants.

2. USE ONLY COLD WATER FOR COOKING AND DRINKING.

Try not to cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove.

3. REMOVE LOOSE SOLDER AND DEBRIS FROM PLUMBING MATERIALS.

Remove loose solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced. To do this, remove the faucet strainers from all taps and run the water from 3-5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

4. IDENTIFY AND REPLACE LEAD SOLDER.

If your copper pipes are joined with lead solder replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny.

5. HAVE AN ELECTRICIAN CHECK YOUR WIRING.

If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards

IF LEAD LEVEL PERSISTS

The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations in excess of 0.015 mg/L after flushing, then you may want to take the following additional measures:

6. PURCHASE OR LEASE A HOME TREATMENT DEVICE.

Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap. However, all lead reduction claims should be investigated. Be sure to check the actual performance of a specific treatment device before and after installing the unit.

7. PURCHASE BOTTLED WATER FOR DRINKING AND COOKING.

FOR MORE INFORMATION

You can consult a variety of sources for additional information: Your family doctor or pediatrician can provide you with information about the health effects of lead and how to get your child's blood tested. DEC Drinking Water 1-800-770-2137 can provide you with information about your water supply, and a list of local laboratories certified by the State for testing water quality. For more information on lead call National Lead Information Center at 1-800-424-LEAD or the EPA Safe Drinking Water Hotline at 1(800) 426-4791; or visit the EPA website on lead at www.epa.gov/lead.

System Name	Representative Name	System Address (Street)
Phone Number	System PWSID#	System Address (City, State, Zip)

Results received from lab on: _____ **Date Notice Distributed:** _____

Method or Methods of Distribution: _____

<p>Public Education Certification:</p> <p>The public water system named above hereby affirms that public education has been provided to its consumers in accordance with all delivery, content, format, and deadline requirements specified in 40 CFR 141.85. Verification of delivery must be submitted via mail or fax to your DEC Drinking Water Program Office within 10 days.</p> <p>Owner/Operator: _____ <div style="display: flex; justify-content: space-around; width: 100%;"> (Signature) (Print Name) (Date) </div> </p>
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- *Non-Transient Non-Community Water Systems:* must conduct Public Education within 60 days after the end of the monitoring period in which the lead exceedance occurred and repeated once every 12 months. System may discontinue delivery of PE materials if the system has met the lead action level during the most recent six month monitoring period.
- *Community Water Systems:* must conduct Public Education within 60 days after the end of the monitoring period in which the lead exceedance occurred repeat once every 12 months; provide water bill inserts - quarterly; press releases – two times annually, and web posting -continuously.

What Are We Doing Examples

(Do Not Post as Part of the Public Education)

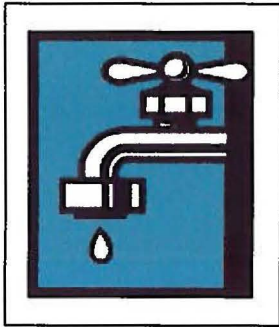
For example: We are taking a number of steps to correct the problem. We will begin sampling for lead every 6 months so we can closely monitor the lead levels in our water system. Your continued participation and support in our lead tap monitoring program is very important. In addition, we will initiate a Public Education campaign to ensure our customers know about the action level exceedance, understand the health effects of lead, the sources of lead, and actions you can take to reduce exposure to lead in drinking water. We will also monitor our source water.

1. Corrosion control treatment (treating the water to make it less likely that lead will dissolve into the water);
2. Source water treatment (removing any lead that is in the water at the time it leaves our treatment facility); and
3. A public education program.

If you have any questions about how we are carrying out the requirements of the lead regulation please give us a call.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

_____ appreciates your participation in the tap water lead monitoring program. This notice is to inform you of the tap water monitoring results for lead at the location identified below. We are happy to report that your result, as well as the 90th percentile value for our water system, is below the lead action level.



Sample Location _____

Sample Date	Parameter Tested	Results / Units	Action Level / Units
_____	Lead	_____ mg/L	0.015 mg/L (15 ppb)

What Does This Mean? Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 0.015 mg/L (15 ppb). This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the locations sampled (90th percentile value). The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If the 90th percentile from all the water samples taken exceeds the action level, the utility must take certain steps to resolve the problem. The MCLG (Maximum Contaminant Level Goal) for lead is zero. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

What are the Health Effects of Lead? Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Steps you can take to reduce your exposure to lead in your drinking water:

- Run your water to flush out lead. If water hasn't been used for several hours, run water for 30 seconds to 2 minutes until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- Use cold or bottled water for drinking, cooking, and preparing baby formula.
- Do not boil water to remove lead.
- Identify and replace your plumbing fixtures that contain lead and/or lead solder.

Contact Information: Call us at _____ or (if applicable) visit our website at _____. For more information on reducing lead exposure around your home/building and the health effects of lead, visit the Environmental Protection Agency's (EPA) website at www.epa.gov/lead; call the National Lead Information Center at 1-800-424-LEAD; call the EPA's Safe Drinking Water Hotline at 1-800-426-4791; or contact your health care provider. If you have specific health concerns, you may want to consult your doctor.

Consumer Notice of Tap Water Lead Results

Water System Name: _____

PWSID# _____

Date Notice Distributed: _____

Distribution Method: _____

For Official State Use ONLY

Initials SDWS Date

The public water system named above hereby certifies that the Consumer Notice of Lead Tap Water Results has been provided to its consumers in accordance with all delivery, content, format and deadline requirements specified in 40 CFR 141.85. Notice must be delivered to consumers within 30 days of receiving the results. Certification of delivery is due within 90 days of the monitoring period end date, send or fax a copy of the completed notice and this form to your DEC Drinking Water Program Office

Owner/Operator: _____ (Signature) _____ (Print Name) _____ (Date)

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

_____ appreciates your participation in the tap water lead monitoring program. This notice is to inform you of the tap water monitoring results for lead at the location identified below. Please note that the monitoring results show that the water system exceeded the 90% lead action level.

Sample Location _____

Sample Date	Parameter Tested	Results / Units	Action Level / Units
_____	Lead	_____ mg/L	0.015 mg/L (15 ppb)

What Does This Mean? Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 0.015 mg/L (15 ppb). This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the locations sampled (90th percentile value). The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If the 90th percentile from all the water samples taken exceeds the action level, the utility must take certain steps to resolve the problem. The MCLG (Maximum Contaminant Level Goal) for lead is zero. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

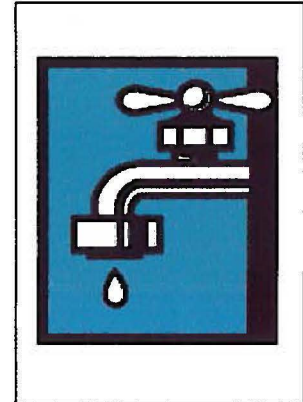
What are the Health Effects of Lead? Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

What are we doing to reduce lead levels in our water? _____

Steps you can take to reduce your exposure to lead in your drinking water: Although we are taking action to reduce lead levels, your elevated lead level may also be due to conditions unique to your home, such as the presence of lead solder or brass faucets, fittings, and valves that may contain lead. There are actions you can take to reduce exposure. We strongly urge you to take the steps below to reduce your exposure to lead in drinking water.

- **Run your water to flush out lead.** If water hasn't been used for several hours, run water for 30 seconds to 2 minutes until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- **Use cold or bottled water for drinking, cooking, and preparing baby formula.**
- **Do not boil water to remove lead.**
- **Identify and replace your plumbing fixtures that contain lead and/or lead solder.**

Contact Information: Call us at _____ or (if applicable) visit our website at _____. For more information on reducing lead exposure around your home/building and the health effects of lead, visit the Environmental Protection Agency's (EPA) website at www.epa.gov/lead; call the National Lead Information Center at 1-800-424-LEAD; call the EPA's Safe Drinking Water Hotline at 1-800-426-4791; or contact your health care provider. If you have specific health concerns, you may want to consult your doctor.



Consumer Notice of Tap Water Lead Results

Water System Name: _____

PWSID# _____

Date Notice Distributed: _____

Distribution Method: _____

For Official State Use ONLY

Initials SDWIS Date

The public water system named above hereby certifies that the Consumer Notice of Lead Tap Water Results has been provided to its consumers in accordance with all delivery, content, format and deadline requirements specified in 40 CFR 141.85. Notice must be delivered to consumers within 30 days of receiving the results. Certification of delivery is due within 90 days of the monitoring period end date, send or fax a copy of the completed notice and this form to your DEC Drinking Water Program Office.

Owner/Operator: _____
(Signature) (Print Name) (Date)

Do Not Include the Following Paragraph; It is For Example Only

We are taking a number of steps to correct the problem. We will begin sampling for lead every 6 months so we can closely monitor the lead levels in our water system. Your continued participation and support in our lead tap monitoring program is very important. In addition, we will initiate a Public Education campaign to ensure our customers know about the action level exceedance, understand the health effects of lead, the sources of lead, and actions you can take to reduce exposure to lead in drinking water. We will also monitor our source water.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

_____ appreciates your participation in the tap water lead monitoring program. This notice is to inform you of the tap water monitoring results for lead at the location identified below. The 90th percentile for your water system will be determined after all sample results have been received. Water system personnel will contact you if further action is required.

Sample Location _____

Sample Date	Parameter Tested	Results / Units	Action Level / Units
_____	Lead	_____ mg/L	0.015 mg/L (15 ppb)

What Does This Mean? Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 0.015 mg/L (15 ppb). This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the locations sampled (90th percentile value). The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If the 90th percentile exceeds the action level, the utility must take certain steps to resolve the problem. The MCLG (Maximum Contaminant Level Goal) for lead is zero. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

What are the Health Effects of Lead? Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Steps you can take to reduce your exposure to lead in your drinking water:

- **Run your water to flush out lead.** If water hasn't been used for several hours, run water for 30 seconds to 2 minutes until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- **Use cold or bottled water for drinking, cooking, and preparing baby formula.**
- **Do not boil water to remove lead.**
- **Identify and replace your plumbing fixtures that contain lead and/or lead solder.**

Contact Information: Call us at _____ or (if applicable) visit our website at _____. For more information on reducing lead exposure around your home/building and the health effects of lead, visit the Environmental Protection Agency's (EPA) website at www.epa.gov/lead; call the National Lead Information Center at 1-800-424-LEAD; call the EPA's Safe Drinking Water Hotline at 1-800-426-4791; or contact your health care provider. If you have specific health concerns, you may want to consult your doctor.



Consumer Notice of Tap Water Lead Results

Water System Name: _____

PWSID# _____

Date Notice Distributed: _____

Distribution Method: _____

For Official State Use ONLY

Initials _____ SDWIS Date _____

The public water system named above hereby certifies that the Consumer Notice of Lead Tap Water Results has been provided to its consumers in accordance with all delivery, content, format and deadline requirements specified in 40 CFR 141.85. Notice must be delivered to consumers within 30 days of receiving the results. Certification of delivery is due within 90 days of the monitoring period end date, send or fax a copy of the completed notice and this form to your Drinking Water Program Office.

Owner/Operator: _____
 (Signature) (Print Name) (Date)