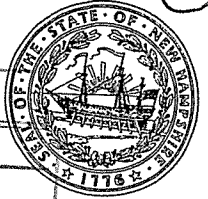




The State of New Hampshire  
**Department of Environmental Services**

Michael P. Nolin  
Commissioner

AL  
DW 12-254  
#13  
Nathaniel Sullivan  
COMMUNITY SYSTEMS FILE



SUBJECT: LEAD EXCEEDANCE REQUIREMENTS FOR COMMUNITY SYSTEMS FILE

Dear Owner/Operator,

The NH Department of Environmental Services (DES) has received a round of lead and copper samples from the subject water system. The results show that your water system exceeded the action level for lead at the 90th percentile. As a result, you need to comply with the following requirements:

1. Public education notification to all consumers,
2. Submission to this office of proof of public education,
3. Water quality sampling, and
4. Submission of an optimal corrosion control treatment recommendation report.

PUBLIC EDUCATION NOTIFICATION:

STEP 1:

Since your water system did exceed the lead action level, Env-Ws 381 requires that you begin public education. You must immediately distribute the enclosed "Lead In Your Water" notice to each consumer presently served by your water system. This notice must be inserted in each customer's water bill, sent by separate mailing, or hand-delivered no later than October 31, 2006. In addition, all notices must contain the following heading, printed in large print: **"SOME HOMES IN THIS COMMUNITY HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE ENCLOSED NOTICE FOR FURTHER INFORMATION."** The guideline indicates, in parentheses and bold print, the information you must insert into the notice. For your convenience the notice and guideline are now available on our web site. All community water systems must repeat this step every twelve months for as long as the system exceeds the lead action level.

Since you are a very small community water system, with a population less than 500, you need only to mail or hand-deliver the notice to each resident.

STEP 2:

By November 10, 2006, please submit to this office a completed copy of the material provided to your consumers and a letter describing how you delivered the public education materials. This letter must include the date of the mailing or hand distribution.

WATER QUALITY SAMPLING:

You may take the required water quality samples yourself or hire a water consultant to assist you. Water quality samples are to be taken from each point-of-entry to the distribution system and from one distribution site. Distribution sites can be bacteria sites, lead and copper sites, or any other site of your choice. Both entry-point and distribution samples should be analyzed for temperature, pH, alkalinity, calcium and conductivity. Please remember that water quality samples are flushed samples.

Water quality samples must be taken from locations representative of each source after treatment, if treatment is present. Many small water systems have only one well and therefore will have only one source site. If your system has multiple sources and the water is blended before entry into the distribution system (i.e. storage tank), then samples must be taken from the first service connection after blending. When a water system has multiple sources that are not blended prior to discharge into the distribution system, a water quality sample is needed from each source.

Two rounds of water quality samples must be taken from each distribution and source site. The second round of sampling should be taken at least one week after the first round was taken. Samples must be submitted to the lab with the enclosed "Water Quality Parameters" form and the results returned to this office no later than November 30, 2006.

Please note that each water quality sample should have the pH and temperature measured at the time of collection. A digitized pH meter and thermometer should be used. If you are not able to take these measurements yourself, the samples must be taken to the lab immediately so that lab personnel can take the necessary readings. The alkalinity, calcium and conductivity must be analyzed at your water quality laboratory. In addition to water quality samples, you must take one lead and copper sample from each source /point-of-entry. Source lead and copper samples results must be submitted to this office no later than November 30, 2006.

#### OPTIMAL CORROSION CONTROL TREATMENT REPORT:

When a water system exceeds the lead or copper action level, Env-Ws 381 requires that you submit a recommendation to this office designating the optimal corrosion control treatment for the system. You must submit this recommendation to this office no later than February 28, 2007. It is important that you use the water quality sample results to determine optimal treatment.

All owners/operators have the option of preparing the report themselves or having a qualified consultant or firm prepare the report. Please note that preparing an optimal corrosion control treatment report is not always an easy task. It requires a complete understanding of water chemistry, knowledge of water mechanics and basic operation management abilities, and a thorough knowledge of present day water treatment technology. Therefore, you may need to have an individual who understands the corrosion control treatment process prepare the report for you. Enclosed, you will find a list of individuals and firms who have attended a State sponsored training program for the determination of optimal treatment for any water system. This office is not recommending one individual or firm over another. If an individual or firm is not on the list it does not mean that they are not qualified to prepare the study, but only that they did not attend our training program.

Once this office has approved your optimal treatment method, you must install treatment and begin operation within 24 months.

In some cases, a water system will be required to submit additional information and conduct a more in-depth study. If additional information and an expanded study are needed, you will receive separate notification from this office.

# LEAD IN YOUR WATER

**SOME HOMES IN THIS COMMUNITY HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THIS NOTICE FOR FURTHER INFORMATION.**

## INTRODUCTION

The United States Environmental Protection Agency (USEPA) and Forest Edge Water System are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the USEPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law we are required to have a program in place to minimize lead in your drinking water by July 1, 2010. This program includes corrosion control treatment, source water treatment and public education.

We are also required to replace the portion of each lead service line that we own if the line contributes lead concentrations of more than 15 ppb after we have completed the comprehensive treatment program. If you have any questions about how we are carrying out the requirements of the lead regulation please call F.X. Lyons, Inc. at (603) 356-6767.

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

## HEALTH EFFECTS 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, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes in contact with sources of lead contamination, like dirt and dust that rarely affect an adult. It is important to wash children's hands and toys often and make sure that they only put food in their mouths.

## LEAD IN DRINKING WATER

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants 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 pipe 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, can contain fairly high levels of lead.

## STEPS YOU CAN TAKE TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste or smell lead in drinking water. Some local laboratories that can provide this service are listed at the end of this brochure. For more information on having your water tested, please call (603) 356-6767 F.X. Lyons, Inc.

If a water test indicates that the drinking water drawn from a tap in your home contains lead levels above 15 ppb, then you should take the following precautions:

**Let the water run from the tap before using it for drinking or cooking any time the water in the faucet has gone unused for more than six hours.** The longer the water resides in your home's plumbing, the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking. 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. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually takes less than one or two gallons of water at no additional cost.

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 the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. These plumbing systems have more and sometimes larger pipes

\* than smaller buildings. Ask your landlord for help in locating the source of lead and for advice on reducing the lead level.

**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-water tap and heat it on the stove.

**Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has been recently replaced, by removing the faucet strainers from all taps and running the water from 3 to 5 minutes.** Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

**If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber that did the work and request that he or she replace the lead solder with lead-free solder.** Lead solder looks dull gray, but when scratched with a key looks shiny. In addition, notify the Water Supply Engineering Bureau of the Department of Environmental Services about the violation.

**Determine whether or not the service line that connects your home or apartment to the water main is made of lead.** The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line. You can identify the plumbing contractor by checking the city's record of building permits which should be maintained in the files of the Town of Conway - Building Department.

A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes or pipe fittings that contain lead. The public water system that delivers water to your home should also maintain records of the materials located in the distribution system. If the service line that connects your dwelling to the water main contributes more than 15 ppb of lead to drinking water after our comprehensive treatment program is in place, we are required to replace the line. If the line is only partially

owned by Forest Edge Water System we are required to provide the owner of the privately owned portion of the line with information on how to replace the privately owned portion of the service line, and offer to replace that portion of the line at the owner's expense. If we replace only the portion of the line that we own, we also are required to notify you in advance and provide you with information on the steps you can take to minimize exposure to any temporary increase in lead levels that may result from the partial replacement, to take a follow-up water sample at our expense from the line within 72 hours after the partial replacement, and to mail or otherwise provide you with the results of that sample within 3 business days of receiving the results. Acceptable replacement alternatives include copper, steel, iron and plastic pipe.

**It is recommended that you 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. If you attempt to change the wiring yourself be aware that improper grounding can cause electrical shock and fire hazards.

#### **ADDITIONAL STEPS YOU CAN TAKE**

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 15 ppb after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

**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 home treatment device before and after installing the unit.

**Purchase bottled water for drinking and cooking.**

#### **ADDITIONAL INFORMATION**

You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. State and local government agencies that can be contacted include:

The **F. X. Lyons Inc.** at (603) 356-6767 can provide you with information about your community's water supply, and a list of the local laboratories that have been certified by the EPA for testing water quality.

The Town of Conway - Building Department at (603) 447-3855 can provide you with information about building permit records that should contain the names of plumbing contractors that plumbed your home.

The Health Risk Assessment Unit of the NH Department of Public Health at 271-4664 or the Health Officer at (603) 447-3855 can provide you with information about the health effects of lead and how you can have your child's blood tested.

#### **STATE APPROVED LABORATORY**

The following is a list of some department approved laboratories in your area that you can call to have your water tested for lead.

A+L Laboratory  
1695 East Main Street  
Center Conway, NH 03813-0028  
(603) 447-4826

State of NH Laboratory  
29 Hazen Drive  
Concord, NH 03301  
(603) 271-3445