NASCC Lead Exceedance Public Education

Naval Air Station Corpus Christi *found elevated levels of lead in drinking water in the building(s) during* ***late August 2018****. 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.*

This notice is being sent to you by **Naval Air Station Corpus Christi,** Texas State Water System ID # **1780017** on **October 10th 2018**.

The Texas Commission on Environmental Quality (TCEQ) and **Naval Air Station Corpus Christi** are concerned about lead in your drinking water. Although most sinks had low levels of lead in the drinking water, some had high lead levels above the Environmental Protection Agency (EPA) action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L).

Please note, this is not a violation under federal or state law, it does however, prompt **Naval Air Station Corpus Christi** to post Lead Public Education and if found to have a high level reading in subsequent sampling, a program in place to minimize lead in your drinking water. This program may include adding corrosion control treatment, source water treatment, and if necessary replacing lead service lines. If you have any questions about how we are carrying out the requirements of the lead regulation, please give us a call at **(361) 961-2108**. This document explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water while in the **Naval Air Station Corpus Christi** facilities.

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 in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes). Lead is found in some toys, some playground equipment, and some children's metal jewelry.

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 Environmental Protection Agency (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 the 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 in 2011 restricted the lead content of faucets, pipes and other plumbing materials to 0.25%. 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, can contain fairly high levels of lead.

Steps You Can Take to Reduce Exposure to Lead in Drinking Water

1. **Run water to flush out lead.** If it hasn't been used for several hours, run the cold water tap until the temperature is noticeably colder. This flushes lead-containing water from the pipes. To conserve water, remember to catch the flushed tap water for plants or some other household use (e.g. cleaning).

2. **Use cold water for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Don't use water from the hot water tap to make baby formula.

3. **Do not boil water to remove lead.** Boiling water will not reduce lead.

4. **Look for alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality. Contact NSF International at 800-NSF-8010 or **NSF website** for information on performance standards for water filters.

5. **Get your child's blood tested.** Contact your local health department or healthcare provider to find out how you can get your child tested for lead, if you are concerned about exposure.

What Happened and What is Being Done

Routine sampling was completed in August 2018, 3 out of 20 samples exceeded the action level from sinks in building 1730,1722 and 1721. Additional sampling will be performed in November 2018. All locations that tested high in lead will be re-tested in the near future. Besides sampling and monitoring, we will be reviewing ways to improve our distribution system. As we run tests and make repairs, we ask for your patience with water outages.

The Texas Commission on Environmental Quality (TCEQ) and **Naval Air Station Corpus Christi** are concerned about lead in your drinking water. Some drinking water samples taken from this facility have lead levels above the TCEQ 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 **March 31, 2019**.

This program includes:

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 at **(361) 961-2108**

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

HEALTH EFFECTS OF LEAD

Lead is 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 into 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 to try to make sure 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. TCEQ estimates that drinking water can make up 20% or more of a person's total exposure to lead.

HOW LEAD ENTERS OUR WATER

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 houses and buildings to water mains (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of pipes and plumbing fixtures 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 if the water has not been used all day, can contain fairly high levels of lead.

STEPS TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

1. FLUSH YOUR SYSTEM.
Let the water run from the tap before drinking or cooking any time the water in a faucet has gone unused for more than 6 hours. The longer water resides in plumbing the more lead it may contain. Flush the cold water faucet for about 15-30 seconds. Flushing tap water is a simple and inexpensive measure you can take to protect your health. It usually uses less than 1 or 2 gallons of water.

2. USE ONLY COLD WATER FOR COOKING AND DRINKING.
Do not 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 then heat it.

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 that has been installed illegally since it was banned in 1986, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify your **Texas State Board**

of Plumbing Examiners, 800/845-6584 about the violation.

5. HAVE AN ELECTRICIAN CHECK YOUR WIRING.

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 grounding wires from the electrical system are attached to your pipes, corrosion may be greater.

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 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:

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 BULK 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 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:

Texas Commission on Environmental Quality, Public Drinking Water Section at 512/239-4691 or the

Texas Department of State Health Services, Lead Poisoning Group 800/588-1248 can provide you with information about the health effects of lead.

TCEQ

Lead in Drinking Water