The Pearl of the Bayshore℠
Keyport
NEW JERSEY

May 23, 2012

Dear Resident,

We would like to inform you of a change in your drinking water. Drinking water which the Borough of Keyport purchases from New Jersey American (NJA) through Shorelands Water Company will be changing the disinfection process from conventional Chlorine to Chloramines.

Due to regulatory groundwater supply reductions by the NJ Department of Environmental Protection Agency in 1990, the Borough of Keyport has been required to purchase water to supplement our own groundwater supplies annually from September through May. During these periods of time, the Borough discontinues production from our own water treatment plant that utilizes Chlorine as the primary disinfectant and will purchase water that will be now treated with Chloramines. Because we discontinue use of Chlorine and will then maintain Chloramines through purchased water at different times there will be no mixing of the two chemicals residuals in the distribution system.

Use of Chloramines is a common treatment process used throughout the United States and is becoming more widely adopted to comply with more stringent drinking water regulations imposed by the US Environmental Protection Agency (EPA). When Chlorine and organic material (primary found in surface water source supplies) combine in the drinking water it produces potentially harmful substances known as Disinfection By-Products (DBPs). Amount of organic material, chlorine levels and length of time all contribute to the concentration of DBPs. Chloramines are quite simply the addition of small amounts of ammonia with the chlorine to generate Chloramines. This change should enable NJA surface water supplies to comply with the new stringent Disinfection By-Products regulations. Because the Borough's water produced from its treatment facility is derived from groundwater, there is almost no organic material to generate DBPs so there is need or requirement for the Borough to switch disinfection practices when it produces it own drinking water in the months of June through August. Residents should expect to have Chloramines in the drinking water in September of 2012.

Chloramines have been proven safe but similar to Chlorine, kidney dialysis patients and fish owners must take special care when using water with Chloramines.

Please see attached Q & A Fact Sheets

Should you have any questions, please call the Borough of Keyport Water Department at 732 264-0900.

Chloramines in Drinking Water Question and Answer Fact Sheet

Why do we need to add a disinfectant to drinking water? As a safeguard to prevent waterborne illnesses, the State of New Jersey requires public water systems to maintain disinfection residual throughout the water system.

What is a "chloramine"? Chloramines are formed when chlorine is combined with a small amount of ammonia.

Chlorine and chloramine — what's the difference between these disinfectants?

- Chlorine is most commonly used because it's quick, effective, safe, and is the least expensive method of water disinfection.

- Chlorine is quicker acting, but is used up faster as it reacts with contaminants in the water. It will also form chemical compounds called disinfection by products when it mixes with naturally occuring organic compounds.

- Chloramines are safe and effective, but react more slowly than chlorine. However, they stay active longer, and they reduce the formation of disinfection by products formed in water containing naturally occuring organics.

Are chloramines safe?

Yes. Chloramines have been used safely in the United States and Canada for many years. The State of New Jersey accepts chloramines as an approved disinfectant.

Are there special considerations for potable water containing chloramines?

- kidney dialysis equipment - aquariums - rubber plumbing products

Kidney Dialysis In the dialysis process, water comes in contact with the blood across a permeable membrane and must be pretreated to remove chlorine and ammonia. Medical centers that perform dialysis are responsible for purifying the water that enters the dialysis machines. Persons with home dialysis machines should check with their physician or equipment supplier. Please contact your doctor and dialysis equipment provider for more information and review the review the Kidney Dialysis Fact Sheet.

Aquariums Chlorine and ammonia are toxic to all fish since water enters through the gill structure and goes directly in the bloodstream. Chloramines stay in the water for up to several weeks, so a dechlorinating agent must be added to remove it. This includes the water for both freshwater and saltwater aquariums.

How much of a dechloraminating agent, or what type of filter should be used? Pet stores should have a product that will quickly neutralize both the chlorine and ammonia molecules. Also, ask your
pet supplier the best filtration equipment to use. See the fish and aquarium fact sheet for more information.

Will reverse osmosis remove chloramines? No. Salts can be caught by the permeable membranes, but chloramines pass through easily.

Can persons with kidney ailments, diabetes, or on low sodium diets drink chloraminated water?

Yes. People with serious medical conditions should contact their doctor. It can be used for any other purpose except for dialysis treatment.

What about people who are sensitive to chemicals? Like Chlorine, the amount of chloramines will be extremely small — no more than 2.5 parts per million as it leaves our

Do home water softeners remove chloramines? Only if the softeners have a Granular Activated Carbon (GAC) filter.

What effect does chloramine have on rubber? Rubber plumbing parts or liners may disintegrate over a period of time. Durable replacement parts are available at most plumbing stores.

Will chloramines harm plants? No. It is safe to water plants of any type, including ornamentals, vegetables, fruit and nut trees.

Are chloramines new? No. Many counties and cities in the U.S. have used chloramines for decades. Chloramine has been approved by the EPA for use as a municipal drinking water disinfectant for decades. It is a water quality improvement as it reduces disinfection byproducts (DBP) levels.

Will chloramination affect routine household water uses? No. Chloramination will not affect routine water uses such as food preparation, household laundering and dishwashing, watering plants, etc. Chloramines is not reported to have any effect on plants of any type, and will usually be removed by the high chlorine demand in the soil.

When will the conversion to chloramine occur? The residents of the Borough of Keyport will NOT have chloramines in their drinking water until we switch back to purchasing bulk water supply from New Jersey American Water Company in September of 2012.