

NORTH HOLLYWOOD AMMONIATION STATION PHASE II FACT SHEET

Los Angeles Department of Water & Power Water Quality Improvement Project

Project Description

The Los Angeles Department of Water and Power (LADWP) is currently constructing the North Hollywood Ammoniation Station (NHAS) Project in the North Hollywood Area. The NHAS Project is being completed in two phases. Phase I, completed in July 2010, included the construction of the Ammoniation Station located at the North Hollywood Facility. Phase II will construct two on-site sodium hypochlorite generation stations that will produce a low-strength chlorine solution.

Phase II Construction Schedule

One station will be located within an LADWP facility on Vose Street and the second facility will be located on an LADWP property adjacent to Whitsett Park. Construction on Phase II will start in July 2012 at the Vose Street station and be completed in approximately one year. Construction at the Whitsett Park facility will begin in September 2012 and be completed in April 2014. Due to the location of existing utilities, a new sewer line must also be installed through Whitsett Park connecting to Whitsett Street. LADWP is working with the Department of Recreation and Parks to minimize disruption to the existing soccer fields. For ongoing construction updates, please visit the project website: www.ladwp.com/nhas.

Purpose

The NHAS Project is one of several ammoniation stations being constructed citywide as LADWP switches its disinfection process to meet water quality requirements. Due to stricter laws set by the United States Environmental Protection Agency, LADWP must switch from chlorine to chloramine to treat the City's water supply.

Chloramine is a type of disinfectant made by combining ammonia and chlorine and is widely used as a disinfectant throughout the United States. Both chlorine and chloramine effectively kill bacteria and other microorganisms, but chloramine forms less byproducts and does not have a strong odor.

Chloraminated water also provides increased flexibility to LADWP's operations by allowing chloraminated water from the Metropolitan Water District of Southern California (MWD) to enter at different locations within the water system. Currently, LADWP is not able to serve treated water purchased from MWD because when the chloramine from MWD water mixes with the chlorine from LADWP water, the interaction of the two disinfectants reduces the effectiveness of each of the treatment methods.

On-Site Sodium Hypochlorite Generation Stations

Sodium hypochlorite is a low-strength chlorine solution made using everyday items: water, salt and electricity. Water and salt are combined to form a salt solution. The salt solution then passes through the station equipment that allows the electricity to convert it into chlorine, which is necessary to create chloramine.

This process is similar to systems that are used to add chlorine to backyard pools, but on a much larger scale. Because the chlorine generated is low-strength, it is not considered a hazardous substance. Household bleach, which is about 6 percent chlorine, is approximately 7.5 times stronger than the chlorine generated by the stations, which is 0.8% chlorine.

For more information, contact:

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Visit www.ladwp.com, search "HT Chloramine" or "Disinfection Byproducts"

WHAT IS CHLORAMINE?

Chloramine is a type of disinfectant used to kill potentially harmful bacteria in the water. Chloramine is a combined form of chlorine and ammonia.

Is chloramine safe?

Yes. Chloramine is approved by the United States Environmental Protection Agency for use as a disinfectant for drinking water and has been used safely in the U.S. and Canada for many years. MWD has been supplying water treated with chloramine since 1985 to our neighboring cities like Beverly Hills, Santa Monica, Glendale, and the Harbor area of the City.

Chloraminated Water Is Safe for Everyone To Drink:

- Pregnant women
- Children and infants
- People with diabetes
- Pets
- People on low-sodium diets
- People on kidney dialysis

Chloraminated water is safe to drink for everyone because the digestive process neutralizes the chloramine before reaching the bloodstream. Chloraminated water also is safe for bathing, cooking and all other daily uses.

Will there be any noticeable change to the taste and smell of the water?

The use of chloramine may result in improvements to the taste and smell of the water because chloramine is not as odorous as chlorine.

How does chloramine affect kidney dialysis patients?

Although it is safe for dialysis patients to drink chloraminated water, it is not safe to have it directly enter their bloodstream. In the dialysis process, water comes in contact with the blood across a permeable membrane. Like chlorine, chloramine is toxic in dialysis water. Chlorine and chloramine must be removed from the water used in kidney dialysis machines. Medical centers that perform dialysis are responsible for purifying the water that enters the dialysis machines. Hemodialysis patients who receive treatment at home should check with their physicians for the appropriate type of water treatment.

Chloramine and Fish

Why is chloramine harmful to fish?

Chloramine is harmful to fish because it passes through the gills of the fish, enters the bloodstream and binds with the iron in the hemoglobin causing a reduction in the oxygen carrying ability of the blood. This ultimately results in the fish suffocating from a lack of oxygen.

Are saltwater fish affected by chloramine?

Yes. Chloramine affects saltwater fish just as it affects fresh water fish. Remove the chloramine from the water used to make the saltwater solution.

Are Koi susceptible to chloramine?

Yes. Koi are just as susceptible to chloramine as any other fish.

What can you do to protect your fish?

To protect your fish, be sure to remove the chloramine from their water. The following treatments are effective for removing the chloramine from the water used for fish:

- Use a carbon filter. To be effective, however, it must contain high quality granular activated carbon and you must permit sufficient contact time between the water and the carbon. A chlorine test kit can be used to verify that all the chloramine has been removed from the water.
- Use chemicals specifically designed to remove chloramine, which can be found at fish and pond supply stores.

Which treatments are NOT effective in removing chloramine?

- Letting the untreated water stand outside for a day or two
- Boiling the water
- Using chemicals that remove only chlorine
- Using a reverse-osmosis filter

