



Documents show safety concerns slowed fluoridation

BY MIKE LEE UNION-TRIBUNE

ORIGINALLY PUBLISHED JANUARY 31, 2011 AT 10:41 A.M., UPDATED JANUARY 31, 2011 AT 6:07 P.M.

San Diego officials announced Monday they will start fluoridating drinking water today — a historic step in a city that has long resisted the controversial compound and has been the largest city in the nation without it.

The move comes about six weeks later than originally planned because of concerns raised by a whistleblower inside the water agency about employee safety and uncertainties about properly adding the chemical.

Those problems were detailed in internal city e-mails the mayor’s office released on Monday in response to a Public Records Act request by The San Diego Union-Tribune.

<



DOCUMENT
Download: [San Diego email about fluoride issues](#)



Utility officials said the slowdown highlights how the safety system worked, though the documents suggest some city leaders were disturbed by the timing of the deferral.

San Diego was three days from starting fluoridation on Dec. 22 when senior operations supervisor Jim McVeigh said the schedule would preclude hands-on training by system operators before the process went live.

He said the pace “severely compromises Operator knowledge and experience before they are asked to accurately feed and monitor the application of a toxic chemical into the drinking water.”

When the delay was made public on Dec. 21, a utilities spokesman said that “a few issues were identified that need to be addressed” before the project launched.

It has been on the drawing board since 2008, when San Diego accepted a \$3.9 million donation from First 5 San Diego, which uses tobacco-tax money to improve early childhood health. The money covers construction and two years of operation.

Fluoride questions

The Centers for Disease Control and Prevention recently updated information about fluoridated water.

Q: How does fluoride work to prevent tooth decay?

A: It keeps tooth enamel strong and solid. When a person eats sugar and other refined carbohydrates.

Fluoride, an odorless and tasteless chemical, is widely touted as a way to reduce cavities in teeth and is used by more than 60 percent of people in the country. Still, some people oppose treating public health problems by putting anything in drinking water systems and they are concerned that overexposure to fluoride causing health problems from dental stains to brittle bones.

San Diego residents voted to ban fluoride in the 1950s. The City Attorney's Office has said that prohibition is superseded by a state law mandating that water agencies with more than 10,000 customers add fluoride now that San Diego has outside funding.

City water leaders, federal disease experts and a local environmental health professor said they did not know of any studies about the pros and cons of fluoridated water using San Diego as a test case.

In January, federal health officials announced that they planned to reduce the target level for fluoride in drinking water to 0.7 milligrams per liter, at the lowest end of the range they have deemed acceptable. They said people get fluoride from many different sources now and there doesn't need to be so much in the water.

San Diego's utility department is targeting 0.8 milligrams per liter and said it will reassess once federal guidelines are final.

For now, city leaders are focused on trying to get the fluoridation process right. McVeigh's e-mail on Dec. 19 said the city's schedule was sacrificing worker health "in a headlong rush to start."

Fluorsilicic acid — the technical name for the compound San Diego will use — "is every bit as hazardous [if not more] to employee safety as chlorine or ammonia ... yet we have done no planning whatsoever on process hazard assessment, job safety analysis, or emergency response," McVeigh said.

He said the acid shouldn't be delivered to city treatment plants until proper safety gear was handed out, a full hazard assessment was completed, an emergency plan was written and other steps were taken.

McVeigh also said some pumps didn't work as they should and the "system contains dangerous piping that is

bacteria produce acid that removes minerals from the surface of the tooth. Fluoride helps to remineralize tooth surfaces and prevents cavities from continuing to form.

Q: What is dental fluorosis?

A: It is a change in the appearance of the tooth's enamel. It can result when children regularly consume higher-than-recommended amounts of fluoride at age 8 and younger. Most dental fluorosis in the U.S. — about 92 percent — is very mild to mild, appearing as white spots on the tooth surface that in many cases only a dental professional would notice.

Q: What are the adverse health effects of excessive fluoride exposure?

A: Children under age 8 who are exposed to excessive amounts of fluoride have an increased chance of developing pits in their tooth enamel. Excessive consumption of fluoride over a lifetime may increase the likelihood of bone fractures, and may lead to bone pain and tenderness, a condition called skeletal fluorosis.

Q: Should my children stop brushing their teeth with fluoride toothpaste?

A: Children over 2 years old should continue to brush their teeth with their usual fluoride-containing toothpaste. Specific questions and concerns should be discussed with a dentist or pediatrician.

susceptible to breakage and release of” fluorsilicic acid.

“I cannot train Operators in the use of a system that is not operational,” he said.

On Dec. 20, city engineer Iraj Asgharzadeh raised a question in an internal e-mail that some residents are likely to ask. “Why are these issues coming so late?” Asgharzadeh said. “This is not a good thing for (the) City of San Diego.”

Two days later, senior city water official Dana Chapin said in an e-mail that “the timing was not good” but safety assessments and training are expected to highlight “issues that need to be corrected.”

The city’s new schedule is for fluoridation to begin at the Miramar Water Treatment Plant today. Located in Scripps Ranch, it serves northern parts of the city.

At the Alvarado Water Treatment Plant near Lake Murray, which serves the central city, fluoridation is scheduled to start Feb. 8.

Fluoride implementation at the Otay Water Treatment Plant, which serves southern areas of the city, is tentatively scheduled for the following week depending on the installation of safety equipment.

Jim Fisher, assistant director of the utilities department, said in an interview that the staggered start was set to ensure all safety concerns are taken care of as each plant goes online.

At Miramar, he said, “it has all been addressed and is ready to go.”

Fisher said the safety issues raised by McVeigh came up at the end because that’s when the final walk-throughs are done and safety training is completed. “If it’s done too early, it’s not useful,” he said.

Because of how the region’s water-delivery system works, residents in Coronado, Del Mar and Imperial Beach also will start receiving fluoridated water as San Diego’s system goes online. Most water departments in the region already sell fluoridated water because they buy it from the Metropolitan Water District, which started adding the compound to treated water in 2007.

Related story: [Health officials plan to lower fluoride target](#)

Related story: [Fluoridation delayed in San Diego](#)

Press release: [HHS and EPA announce new scientific actions on fluoride](#)

Mike Lee: (619)293-2034; mike.lee@uniontrib.com

Find this article at:

<http://www.signonsandiego.com/news/2011/jan/31/fluoridation-start-tuesday-san-diego>

Check the box to include the list of links referenced in the article.

© Copyright 2011 The San Diego Union-Tribune LLC.



Ad Council

Log onto EarthShare.org and see what you can do.

Earth Share One environment. One simple way to care for it.®