



CITY COUNCIL COMMUNICATION

May 16, 2016

SUBJECT: Lead Levels in City of Haslet Water Supply

SUBMITTED BY: Public Works Director David Rogers

PREPARED BY: Public Works Director David Rogers

ITEM NO: IX.A.1.

BACKGROUND: The issues making the news about the Flint, Michigan water supply system have raised the public's awareness about their drinking water quality. The issue of corrosive waters causing the leaching of lead from service piping used in municipal distribution systems and solder containing lead used in building plumbing systems has become a topic of concern.

EXPLANATION: To help keep the City Council and the customers informed the Haslet Water Department has prepared the attached report.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATIONS: N/A.

LEGAL REVIEW: N/A

FUNDING: N/A

STAFF RECOMMENDATION: N/A

SUPPORTING DOCUMENTS:

Lead and Copper Report Update 2016

Haslet Lead and Copper Report Update 2016

Almost every day there is a news report about issues with lead in drinking water supply systems. This is a concern when corrosive water comes in contact with piping for water meter service lines, solder used in copper pipe joints and plumbing fixtures that contain lead. When water has a corrosive nature this water can dissolve the solder in copper pipe joints or the lining of lead pipes and release lead into the water supply. Corrosive waters are normally waters with a pH below 7.0. The water Haslet draws from its wells and purchases from the City of Fort Worth has an average pH of 8.4 which is classified as non-corrosive and slightly scale forming. This light scale is not detrimental to the piping or fixtures and can help keep leaching of lead or copper from happening.

Our water mains are Poly Vinyl Chloride (PVC). Service lines from the mains to the meter sets installed prior to 1980 are copper with flared fittings or a combination of copper and PVC. After 1980 all service lines are polybutylene or polyethylene. No meter services have been installed with lead piping or copper pipe with soldered joints.

In 1991 the Environmental Protection Agency (EPA) required additional testing of water systems for lead and copper. The new requirements added testing of the water at consumer taps along with continued testing of the water in the distribution system. The new EPA requirements was for water systems serving a population of 50,000 or greater, to replace any system piping that contained lead by January 1997, smaller systems serving populations less than 50,000 had to replace piping if test results contained levels of lead that exceeded the action levels as set by the EPA. The action levels are 0.015 milligrams per liter (mg/l) for lead and 1.3 mg/l for copper.

Our system was required by Texas Commission on Environmental Quality (TCEQ) to start the additional testing in July 1993. To prepare for this testing an audit of all the service lines in the system was conducted. This audit found no service lines that contained lead piping or solder joints with lead. This audit also included identifying homes or businesses built before 1983. The regulation of the use of lead in the manufacturing of solder, brass pipe fittings and plumbing fixtures was changed in 1982 and adopted into the uniform plumbing codes so plumbing installed prior to 1983 was targeted for testing. There were 20 test sites identified by our audit that met the EPA target criteria. After testing these 20 sites in July 1993, only 10 were found to have any lead or copper present. These 10 sample sites were then used for monitoring of lead and copper levels. Testing was performed on these 10 sample sites again six months later to determine a base line. All 10 samples were below the minimum action levels set. Our test results continued to remain below the action levels, so in 1995 we were moved to reduced monitoring status. We tested annually for the next two years then our status changed to testing every other year, then changed again to every three years, then every 5 years. Our current reduced monitoring status is testing required every nine years. This reduced monitoring status is due to our waters stable characteristics and our test result numbers remaining so low.

These and other test results are reported in our Consumer Confidence Report published and delivered annually in the July water bill and is available on the City website www.haslet.org under the residents drop down box, Water Quality Reports and at City Hall as a hand out to all new customers and interested individuals.

The City of Haslet water system is made up of:

- 40 miles of water main ranging in size from 4 in. to 16 in.
- 2 - water wells
- 3 meter vault connection for purchasing treated water from the City of Fort Worth
- 1 million gallons in ground storage tanks
- 1 million in elevated storage tank
- 2 - Pump stations
- Total service pump capacity of 2,500 GPM.
- 758 water service connections