



## City of Sweeny

P.O. BOX 248 ★ 102 W. ASHLEY WILSON RD. ★ SWEENY, TEXAS 77480

(979) 548-3321 ★ FAX (979) 548-7745

November 1, 2018

Residents of Sweeny,

The City of Sweeny's water treatment plant has undergone corrective implementation of required equipment in need of improvements. We have installed an AutoValve to assist in monitoring and adjusting the chlorine feed that is being injected into our city water. We have also removed a galvanized metal nipple that was in contact with the shut off valve on the chlorine injection line that was corroding. These measures were taken to correct the fluctuating chlorine levels within the water.

The enclosed public notice is to notify you, the public, the city has been issued a violation and made the above changes to quickly correct the violation. Please see the attached information for more detail on the Texas Administrative Code, TCEQ chlorine mandated levels, and our newly implemented equipment.

The City of Sweeny takes pride in our residents and is committed to providing safe, reliable water service to you, the customer. We will continue to follow all guidelines and testing as required by TCEQ.

Should you have any question or concerns, please contact City Hall at 979 548 3321.

Thank you,

City of Sweeny

## Mandatory Public Notification Language

### Notice of Drinking Water Treatment Technique Violation(s)

The City of Sweeny (PWS# TX0200009), has violated the treatment technique requirements set by the Texas Commission on Environmental Quality (TCEQ) in Title 30, Texas Administrative Code (30 TAC), Section 290, Subchapter F. Public water systems are required to properly disinfect water before distribution, maintain acceptable disinfection residuals within the distribution system, monitor the disinfectant residual at various locations throughout the distribution system, and report the results of that monitoring to the TCEQ on a quarterly basis.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. During the months of April, May, July, August, and September of 2018, sufficient levels of chlorine residual were not met in more than five percent (5%) of monthly samples.

Month	Day	Free Chlorine Residual
April	24 <sup>th</sup>	0.09 mg/L
April	27 <sup>th</sup>	0.03 mg/L
May	6 <sup>th</sup>	0.11 mg/L
May	10 <sup>th</sup>	0.15 mg/L
July	7 <sup>th</sup>	0.03 mg/L
July	8 <sup>th</sup>	0.07 mg/L
July	29 <sup>th</sup>	0.16 mg/L
August	11 <sup>th</sup>	0.15 mg/L
August	12 <sup>th</sup>	Not Taken
September	1 <sup>st</sup>	0.09 mg/L
September	12 <sup>th</sup>	0.11 mg/L

**11 days out of 153 days total, the chlorine residual was below 0.20 mg/L**

The following actions have been completed to correct this issue:

1. Removal of a galvanized metal nipple in direct contact with a brass shut-off valve installed on the chlorine injection line.
  - a. Having a galvanized metal nipple in direct contact with a brass valve was creating an excessive amount of *galvanic corrosion* to occur on the inside of the metal nipple.
    - i. As the inside of the galvanized nipple began to corrode, it began to literally dissolve from the inside out. Because these two items were installed upstream of the chlorine injection point on the chlorine injection line. The scale and corrosion being released by this chemical reaction were reacting with the chlorine being injected. This caused

a lot of the chlorine to become chemically inert before it ever reached the water stored in the ground storage tanks.

2. Installation of a Superior™ AutoValve™ automatic proportioning chlorine feed valve to manage the amount of chlorine being injected into the city's drinking water.
  - a. Previously, I had to constantly change the chlorine feed rate manually throughout the day to maintain the free chlorine residual I desired in our drinking water.
    - i. The challenge with manual control is not being able to anticipate the changes to the flow rate coming from our water wells throughout the day. If I adjusted the chlorine feed to high, then I could go over the *maximum* amount of free chlorine allowed in our drinking water by the TCEQ, *4.00 mg/L*. If I adjusted the chlorine feed to low, then I could fall below the *minimal* amount of free chlorine allowed in our drinking water by the TCEQ, *0.20 mg/L*.
  - b. With the Superior™ AutoValve™ automatic proportioning chlorine feed valve installed, any change in the flow rate is immediately interpreted electronically and within seconds the chlorine feed rate is automatically adjusted to match the interpreted flow rate coming from the wells.

Please share this information with all other people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

If you have any questions regarding this matter, you may contact Mark W. Niemeyer at (979) 548-3321.