



Fort Worth ISD WATER SAMPLING PROGRAM

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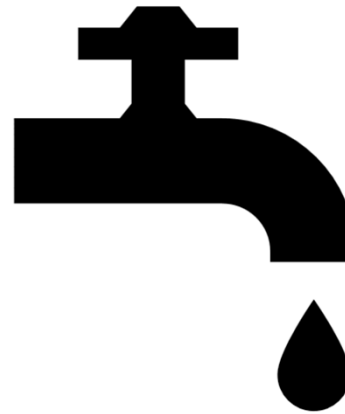
PROGRAM IMPLEMENTATION

- 2016 - Devise sampling program for summer
- Issues:
 - Which schools to sample?
 - Location and number of fountains?
 - Different types of fountains?
 - What lab to use and how to pay for analysis?
 - Best way to provide results to public?
 - What action level to use? 15 ppb



PROGRAM IMPLEMENTATION - 2016

- ▶ Met with Fort Worth Water Department to receive training on water sampling and chain of custody preparation.
- ▶ Agreed to use the Fort Worth Water Department lab for analysis, and we were able pay for sample analysis via the water department accounts for each school.



PROGRAM IMPLEMENTATION - 2016



- ▶ Original plan was to sample approximately 80 elementary schools during the summer of 2016.
- ▶ Sampling would focus on older construction
- ▶ Sampling would include fountains, sinks in teachers' lounges, and kitchens
- ▶ "Bubblers" located in kindergarten and pre-K rooms were later added

PROGRAM IMPLEMENTATION - 2016

- ▶ We needed to map the schools showing locations and types of fountains
 - ▶ We provided folders with pictures of different fountain brands and designs for the environmental techs to use during mapping
 - ▶ We identified at least 15 different types of fountains installed over the years
 - ▶ The maps included construction dates for the campuses
 - some had 3 or 4 different additions.

PROGRAM IMPLEMENTATION - 2016

- ▶ Mapping - continued
 - ▶ Locations consisted of school number, location number, and fountain type
 - ▶ Maps were kept by the environmental department for security reasons

SAMPLING



- ▶ Sampling took place over summer break
- ▶ Samplers visited schools and flushed fountains the afternoon before sampling
 - ▶ If fountains were near restrooms or custodial closets, we ran water in those rooms to help flush the lines.

SAMPLING

- ▶ Samplers collected kitchen keys and arrived at schools early, before custodians or students started using water
- ▶ First draw samples
- ▶ Later in the summer, some schools had been unoccupied for a month or more - those required significant flushing the day before
- ▶ Employees delivered samples to the water lab and filled out COCs

SAMPLING

- When results arrived from the lab, they were shared with Communications/Public Information Department
- Sampling scope was expanded to include all middle and high schools. Fountain maps were prepared for the remainder of the schools.

RESPONSE

- ▶ Fountains exceeding 15 ppb lead were flushed and resampled
- ▶ Fountains that still didn't pass were removed and replaced, re-plumbed, or removed from service
- ▶ Some older schools had a “looped” chiller system with a cooling tank and fountains on a loop, not connected to other plumbing. Those systems had higher lead levels.

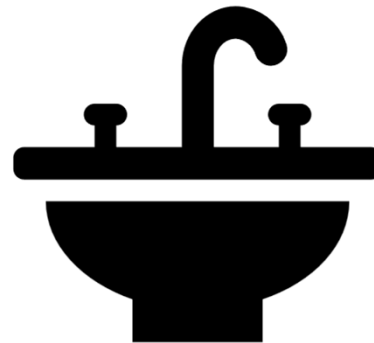
RESPONSE



- ▶ Older fountains with a chiller tank were more likely to have higher lead levels
- ▶ Approximately 500 fountains were removed and replaced in 2016 and 2017

RESPONSE

- ▶ Between June 2016 and April 2017 nearly 2,000 water samples were collected from 1,700 locations at 128 facilities
- ▶ 218 samples exceeded 15 ppb lead and those fountains were repaired or removed from service



RESPONSE

- ▶ Athletic facilities, fieldhouses and maintenance facilities were added to the sampling schedule
- ▶ Locations that had originally exceeded 15 ppb but were corrected were resampled in 2018 and 2019
- ▶ A regular triennial sampling schedule was developed for all campuses but was not conducted due to COVID shutdown.

CURRENT DAY

- ▶ We resumed sampling during the summer of 2022 by collecting water samples from approximately 42 (half) of our elementary schools
- ▶ The other half of the elementary schools were sampled this summer
- ▶ Water fountains are being replaced with hands-free fountains and bottle fillers due to COVID. We are currently sampling the new fountains and kitchens.