

2019-2020 Drinking Water Quality Annual Report

Presented to the Board of Education – May 2020

AAPS Testing for Lead in Drinking Water Program History

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- **2016-17**
 - Initial, random testing and mitigation across the district
 - Action Level >15ppb (parts per billion)
 - 73 Samples
- **2017-18**
 - 12 locations at each school sampled
 - Action Level of >15ppb
 - 384 Samples
- **2018-19**
 - All drinking water sources tested
 - Action Level lowered to >5ppb
 - 1,426 locations Sampled
- **2019-20**
 - All drinking water sources tested
 - Action Level >5ppb
 - Filters installed at all drinking locations prior to IFD samples
 - Testing Procedure updated based on State and Federal guidance
 - 1806 Initial First Draw (IFD) samples



AAPS Testing for Lead in Drinking Water Program

Testing Procedure

Initial First Draw (IFD) Sampling:

Collect 250ml first draw samples before the facility opens and before any water is used for at least 8 hours. Samples should be collected during periods of normal daily use should not be collected after vacations, extended weekends or holidays because the water will have remained stagnant for too long and will not represent typical daily water use. If an individual tap is infrequently used but accessible for use during a typical school day, this outlet should be sampled. If the building water has been unused for more than 48 hours, it is probably not typical of school usage and the sampling event should be rescheduled.

Repeat First Draw – Aerator

A repeat first draw sample shall be collected at outlets where an aerator or screen is present if the first draw test result is 5 ppb or higher.

Flush Samples

Flush sampling generally involves the collection of a sample after running the water at that outlet for 30 seconds (15-min for water coolers). Flush samples can be used to determine if lead is coming from the fixture itself or from interior plumbing.

Conduct flush sampling at an outlet if any of the following occur:

- If the first draw sample result on an outlet that does not have an aerator or screen is greater than 5 ppb.
- If the Repeat First Draw-Aerator sample result greater than 5 ppb (and the aerator/screen is clean).

* Based on the Environmental Protection Agency document: *3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities*

AAPS Testing for Lead in Drinking Water Program Testing Results

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| 2019-2020 AAPS DRINKING WATER SUMMARY | | |
|--|-------------|---------------|
| Total IFD Tests Conducted to Date | 1806 | |
| Total Fixtures Permanently Removed | 4 | |
| Total Fixtures Re-designated as Non-potable | 16 | |
| Total IFD Sample Results at Non Detect | 1554 | 86.05% |
| Total IFD Sample Results Between 1-5ppb | 218 | 12.07% |
| Total IFD Sample Results Between 6-15ppb | 22 | 1.22% |
| Total IFD Sample Results Above 15ppb | 12 | 0.66% |
| Total IFD Sample Results Below Action Level | 1772 | 98.12% |
| Total Follow-Up Samples Collected | 43 | |
| Total Drinking Water Outlets for 2020-21 Sampling | 1806 | |
| Total Remaining Outdoor Drinking Water Outlets | 14 | |

*as of 4/1/2020

AAPS Testing for Lead in Drinking Water Program Project Costs

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| Vendor | Service/Equipment | FY 19 Cost | FY 20 Cost |
|--------------------------|--|------------------|------------------|
| Arch Environmental Group | Testing | \$143,000 | \$93,583 |
| Goyette Mechanical | Plumbing Labor | \$440,000 | \$251,762 |
| Other Contractors | Misc. Trades | \$76,000 | \$15,000 |
| Phoenix Contracting | Project Management | \$45,000 | \$0 |
| Ferguson Enterprises | Plumbing Supplies, Filters, & Hydration Stations | \$249,000 | \$179,231 |
| | TOTAL | \$953,000 | \$539,576 |

AAPS Testing for Lead in Drinking Water Program

Next Steps

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- **Filter Replacement**
 - Annually at all drinking locations, more frequently at high use locations
- **Flushing of all Water Systems**
 - Continue flushing following school breaks; Summer, Winter, Spring, etc.
- **Do Not Drink Signage**
 - Maintain Installed signage at non-drinking locations
- **Future Testing for Lead in Drinking Water**
 - **RECOMMENDATION:** Test 1/3 of Drinking Locations per building annually in a three year cycle.
 - Continue Annual Report to the Board of Education