### **Water Testing Timeline**

**Schools** with 1 of 3 water sources of concern are shut off. 24 DPS schools with 2 or announces more water for testing sources of concern.

24 schools flush and main tested for elevated levels. 14 schools cleared and concerning water sources turned off. Other 10 schools shift to DiHydro

corrosion

control system.

District installs DiHydro corrosion control system in 10 schools with repeat lead elevations.

**Elected Board of Education** sworn in.

Dr. Vitti joins the district and prioritizes stakeholder engagement and systems analysis.



DPS begins

Three water

sources per

water

testing.

City of

Detroit

support

\$135,000

Kellogg

with

**SPRING 2016** 

**AUGUST 2016** 

**OCTOBER** 2016

**JANUARY** 2017

**JUNE 2017 Start of New** Superintendency



#### Water Testing Timeline (pt. 2)

Dr. Vitti orders all drinking water turned off in 10 schools with DiHydro treatment. Water coolers are provided.

DPSCD Board Approves Clean Water Resolution. Results from follow up 2016
testing reveals 8 of 12
concerning schools have
isolated water sources with
elevated levels of copper and/or
lead. Drinking water
discontinued at 8 schools.
Water coolers provided. District
begins proactive annual testing
despite any federal, state, or
local requirements to do so.

First round of all schools tested received. 16 of the 24 schools tested show elevated levels of lead and or copper. Drinking water discontinued in 16 schools then all district schools. Water coolers used. Awaiting results from other schools.



OCTOBER 2017

MAY 2018

AUGUST 2018



#### Possible Causes to Elevated Levels

- Plumbing contains lead and copper that can dissolve into water, especially during long periods with no or low water use (e.g., weekends and school breaks).
- Lower usage of water due to smaller enrollment size leads to lead and copper release from the plumbing (schoolwide but namely at individual water sources). Lead and copper release tends to be higher in isolated (not frequently used) water sources.
- Older plumbing materials, including water fountains and sink outlets, contain more lead than fixtures sold starting in January 2014.

# Suggested Solutions that Do Not Ensure Safety or are Too Costly

• Continue the previous practice of turning off individual water sources with elevated levels.

**ISSUE**: Prior strategy ignored new sources identified as concerns with each new round of testing. Subjects staff and students to exposure.

 Conduct study of building plumbing in all schools to detect sources of concern.

**ISSUE:** Each school has separate and distinct plumbing components and configurations. Most plumbing contains lead; replacing some plumbing now does not prevent future exposure from the rest of the plumbing.

# Suggested Solutions that Do Not Ensure Safety or are Too Costly

Replace all water fountains or sinks.

ISSUE: Costly, time consuming and will not address internal piping issues.

Replace water fountain and sink fixtures where concerns exist.

**ISSUE:** Recent test results from Spring and Summer surfaced larger number of concerns and unexpected sources as compared to previous tests. Lead release is unpredictable. A single low sample does not guarantee that a fixture is safe for drinking.

Only turn off drinking water at schools where concerns were identified

**ISSUE:** Spring and Summer testing identified schools that were previously cleared, including new buildings such as Cass Tech and Renaissance

### Water Hydration Stations

- Filter removes contaminants (including copper and lead) as water leaves the fixture
- Cools water
- Promotes more water usage by students and staff
- Concentrates water use at a reduced number of fixtures resulting in fresher water
- Environmentally responsible
- Place one for every 100 students. In addition, kitchen, faculty lounge, and gyms.
- Commit to regular testing and filter replacement
- Equipment and labor ~\$2M



### Next Steps

- Engage School Board and community on proposed solution.
- Work with City Department of Health to provide child lead testing if requested by parents.
- Continue districtwide strategy of discontinuing drinking water in schools and use water coolers until hydration stations are implemented. Provide additional water bottles to students to fill daily.
- Use of water for washing hands and showers can continue and is safe.
- If water hydration systems approved, then units can be installed by the start of next school year in all schools.

http://detroitk12.org/content/drinkingwater/