### **Dustin Fisk**

From: Amanda Enbysk <aenbysk@efulcrum.net>

**Sent:** Friday, February 3, 2017 2:21 PM

**To:** Keith Colee

**Cc:** Dustin Fisk; Ryan Mathews

**Subject:** Drinking Water Sampling - Remaining Tasks as of 2/3/2017

Keith-

I've compiled/updated the list of remaining tasks for the results we've received. Summaries are below:

### **Ridgeview Elementary**

Fixtures replaced, precondition flush and aggressive flush completed; 1/28/17 samples lost in shipping

We received word today that the missing cooler is scheduled for delivery at the lab today...If it is delivered, we'll get results early next week for the fixture replacement/aggressive flush. If not, we'll have to come back and sample again.

#### **Cottonwood Elementary**

Fixture replaced and precondition flush completed; 1/28/17 samples lost in shipping

We received word today from FedEx that the missing cooler is scheduled for delivery at the lab today...If it is delivered, we'll get results early next week for the fixture replacement/aggressive flush. If not, we'll have to come back and sample again.

### **Sunset View Elementary**

- -Complete aggressive flush of 9 fixtures above the action level for copper
- -Sample fixtures to determine effectiveness of aggressive flush

### Vista Elementary

Fixtures in Music Room replaced for copper

- -Complete 24 hour precondition flush
- -Sample to determine effectiveness of fixture replacement

#### **MTS Building**

Replace all water coolers of the same type as the one that came back high for lead (three of them...one in the warehouse, one near the conference room, and one in transportation shop)

- -Precondition w/24 hour flush
- -Sample post replacement to determine effectiveness

## **Administration Building**

- -Complete aggressive flush of 4 fixtures elevated for copper
- -Sample to determine aggressive flush effectiveness

Is there any way to flush the water coolers that came back high for copper at the valve beneath the fixture? If we could sample the water that comes in to the water cooler and demonstrate that it is below the action level for copper, it would prove that the water cooler itself is the issue, not the plumbing behind it.

## **Phoenix High School**

- -Complete aggressive flush of four fixtures that report elevated copper
- -Sample to determine effectiveness of aggressive flush procedure

## **Legacy High School**

- -Complete aggressive flush of fixtures that report elevated copper. One is above the action level (CF-02, in Room 1) and one reports just below (DF/WC-03, west fountain near the main office)...it may be worth it to flush both fixtures.
- -Sample to determine aggressive flush effectiveness

# **Washington Elementary**

- -Complete aggressive flush of four fixtures that report elevated copper
- -Sample to determine effectiveness of flush procedure

#### **Sagecrest Elementary**

- -Complete aggressive flush of all fixtures reported above the action level for copper (it might be best to flush everything except the drinking fountains/bottle fillers in the hallways)
- -Sample to determine effectiveness of flush procedure

## **Fruitland Building**

- -Replace one fixture identified with elevated lead concentration
- -Precondition with 24 hour flush
- -Sample to determine effectiveness of fixture replacement

# Next step:

-Determine if there are any of the same fixture type in the building. If there are and they haven't been sampled, regulations (WAC 246-366A -130) state they must be sampled or replaced to ensure lead concentrations are below action levels. I believe there's only one in the building, but a walkthrough would confirm.

### **Tri-Tech Skills Center**

- -Completed fixture replacement of 6 fixtures with elevated lead; Three were identified with elevated lead post-replacement sampling.
- -Completed aggressive flush of one fixture identified with copper; results indicate the flush was successful.
- -Laboratory is analyzing second and third draw samples of fixtures that still report with elevated lead to find the source of lead in the plumbing. Results are pending.

#### Next steps:

- -Identify other fixtures of like styles that were identified with elevated lead.
- -Sample or replace fixtures identified as the same style. Some have already been sampled and reported with lead concentrations below the action level, but there are some of the same style we did not initially sample.

### **Desert Hills Middle School**

- -Completed aggressive flush of all fixtures initially identified with elevated copper concentrations. Aggressive flush was successful on all but 7 fixtures.
- -Collected follow-up samples on 1/28/2017. Some samples were lost in shipping...FedEx reports the missing cooler should be delivered today.

-Lab is analyzing second and third draw samples for KF-01 in the kitchen to determine where the copper might be leaching from. Results are pending, they should arrive next week.

# **Highlands Middle School**

- -Completed fixture replacement and preconditioning of high lead fixtures; completed aggressive flush of high copper fixtures
- -Sampled replaced fixtures and fixtures that underwent aggressive flushing
- -Fixture replacement was successful at reducing lead in all but one fixture (CF-14, in room 20). Lab is analyzing second and third draw samples to determine the source of lead.
- -Aggressive flushing was not successful at reducing copper concentrations. Lab is analyzing second and third draw samples to determine the source of copper.

### Next steps:

- -Identify other fixtures of like styles that were identified with elevated lead.
- -Sample/replace fixtures identified as the same style. Some have already been sampled and reported with lead concentrations below the action level, but there are some of the same style we did not initially sample.

## **Kennewick High School**

- -Completed aggressive flush of fixtures with elevated copper; results indicate flush was successful for all but one fixture
- -Collected samples were lost in shipping...FedEx reports the missing cooler should be delivered today. If it isn't delivered soon, we'll have to sample again for second and third draw samples.
- -Fixture identified with elevated lead was permanently taken out of service

### Next steps:

-Need to confirm there are no other like fixtures for the drinking fountain that was taken out of service. This will probably require a walkthrough. I know there's one drinking fountain like the leaded one, but I have questions on at least one that we didn't sample.

#### Kamiakin High School

-Completed aggressive flush of fixtures with elevated copper; results indicate flush was successful for all but two fixtures -Lab is analyzing second and third draw samples of one of the fixtures (they are side-by-side). Results are pending, we should see them next week.

#### **Eastgate Elementary**

- -Completed aggressive flush of fixtures with elevated copper; follow-up results indicate flush was unsuccessful on all but two fixtures.
- -Second and third draw results from follow-up sampling (completed 1/28/2017) indicate copper is leaching from plumbing behind the fixtures.

We are currently reviewing drawings to get a better idea of any potential copper sources.

## **Southgate Elementary**

- -Completed aggressive flush and follow-up sampling of fixtures with elevated copper; follow-up results collected 1/21/2017 indicated flush was successful on all but three fixtures.
- -Samples collected 1/28/2017 were lost in shipping...FedEx reports the missing cooler should be delivered today, in which case samples will be analyzed and we'll have results early next week.
- -Lab is analyzing second and third draw samples from one fixture collected on 1/21/2017 to determine source of copper.

#### **Lincoln Elementary**

- -Completed aggressive flush and follow-up sampling of fixtures with elevated copper; follow-up results collected 1/21/2017 indicated flush was successful on all but seven fixtures.
- -Samples collected 1/28/2017 were lost in shipping...FedEx reports the missing cooler should be delivered today, in which case samples will be analyzed and we'll have results early next week.
- -Lab is analyzing second and third draw samples collected 1/21/2017 from two fixtures.

We are currently reviewing building drawings to get a better idea of potential copper sources.

I'll give you a call and we can discuss plans for further sampling. Let me know if you have any questions.

Thank you,

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