From: Benzie, Richard (DEQ)
Sent: Friday, June 12, 2015 5:23 PM
To: DeBruyn, Dana (DEQ);Monosmith, Carrie (DEQ);Shekter Smith, Liane (DEQ);Busch, Stephen (DEQ);Prysby, Mike (DEQ);Scott, James D. (LARA);Dyke, Teri Lee (LARA);Madziar, Joseph (LARA)
Subject: RE: DEQ/DLARA Secondary Treatment Meeting
Attachments: Agenda(2) for June 2015 Meeting with DLARA.docx

Greetings,

Here is an agenda for the meeting on Monday morning to give DLARA participants some notice of the topics to be discussed. It is my intention that this meeting not be overly formal and we can ask questions and discuss issues as they arise.

Richard Benzie, P.E., Chief
Field Operations Section
Office of Drinking Water and Municipal Assistance, MDEQ
517-284-6512

From: DeBruyn, Dana (DEQ)
Sent: Tuesday, June 09, 2015 4:15 PM
To: Monosmith, Carrie (DEQ); Shekter Smith, Liane (DEQ); Benzie, Richard (DEQ); Busch, Stephen (DEQ); Prysby, Mike (DEQ)
Subject: hold for secondary treatment meeting

Today Richard asked me the roles that the folks invited to Monday's meeting are:

Jim Scott is the section manager of the Health Facilities Engineering Section (plan review and physical plant inspections of hospitals and long term care facilities).

Teri Dyke is the section manager that oversees federal certification of hospitals.

Joe Madziar is the head of the plumbing division.

As of today it looks like they are all with DLARA.

I did not invite anyone from the epidemiological or disease sections, (or the local health departments.) since the goal was to discuss the physical premise and permit and operational aspects.

Dana

DEQ/DLARA Meeting Agenda
June 15, 2015

Edward-Hutchinson Conference Room
Atrium South

1. Introductions – Liane Shekter Smith, Chief, ODWMA
2. Purpose – Liane Shekter Smith
3. Secondary Treatment and EPA – Richard Benzie, Chief, Field Operations
    a. PWS Definition
    b. Reasons for Secondary Treatment of premise plumbing/hot water systems
    c. Classification – Community vs. Noncommunity
    d. Veteran's Administration Directive
    e. HACCP/Water Safety Plans
4. Approach to Secondary Treatment – Liane Shekter Smith
    a. Role and Responsibility of DLARA Programs
    b. Role and Responsibility of DEQ Programs – Richard Benzie and Steve Busch, Lansing/Jackson District Supervisor
        i. Act 399 construction permits
        ii. Engineered treatment systems with paced chemical feed
        iii. Coordination with plumbing permits
        iv. Initial state oversight/approval (in lieu of LHD)
        v. Certified Operator oversight
        vi. Disinfection Byproduct Monitoring, but not coliform sampling
        vii. Annual Fees
    c. Outreach and Education – Carrie Monosmith, Chief, Environmental Health Section
5. Conclusion/Action Items – Liane Shekter Smith

From: Devereaux, Tracy Jo (DEQ)
Sent: Tuesday, September 22, 2015 6:07 PM
To: DEQ-ODWMA-Supervisors-All
Subject: DRAFT ODWMA Managers Meeting Minutes Sept 2015
Attachments: ODWMA Managers Meeting Minutes Sept 2015.docx

Attached are the draft meeting minutes, Carrie – there is a highlighted portion that I had a question on, please send me your agenda items for the October meeting.

ODWMA Management Team Meeting Minutes
September 10, 2015 – McCauley Conference Room

Attendees: Richard Benzie, Jon Bloemker, Steve Busch, Sonya Butler, Kris Donaldson, Wendy Fitzner, Kelly Green, Jeremy Hoeh, Carrie Monosmith, Kris Philip, Liane Shekter Smith, Kathy Tetzlaff, Chuck Thomas, Ronda Page, Dana DeBruyn, Kirsten Gasper

1. Employee Engagement/Leadership Discussion

   - The Revolving Loan Section issued a staff challenge to go out and interact with customers as a way of improving customer service. Prizes were given to staff meeting with the most customers. Ten staff met the challenge.

   - The majority of feedback from the August 13, 2015, ODWMA In-Service gave a "Good" or "Very Good" overall rating to the In-Service.

   - The names of the members for the Organizational Excellence Team and next year's In-Service Planning Committee were received from the surveys. Planning will begin in October. Liane desires a supervisor to participate on the In-Service Planning Committee.

2. IT Update (Ronda Page) – 10:00 a.m. (10-15 minutes)

   - There are five requests under the 200-hour effort, three of which are active: GCTS, MSU-MGMT, and DWGIS.

   - Water Track migration to SDWIS-State is underway. DTMB is on board to install, but SAIC (EPA's contractor for the SDWIS-State database) will first have to create a starter database for the Water Track data. Currently, Ronda is working with SAIC and EPA on the cost for this. Ronda and Dan Dettweiler continue to map data.

   - GCTS has been reprioritized and is starting a 100-hour effort in FY 15. Kickoff is officially October 19th with DTMB support. Lois Graham will be the lead. The Agile software development process will be employed, so that there will be continual development of modules that will require testing every two weeks by Lois, Dave DeYoung, and Matt Remus.

   - Ronda participates in the daily DTMB projects update. Ronda meets with DTMB's Lori Franz monthly and with Kate Jannereth biweekly.

   - MDARD is using Accela software now. The workflow for the Public Swimming Pool program has been sent to Accela (not sure who does this, DTMB?) for a cost estimate.

   - Migration to Office 2013 and Windows 10 is on the horizon.

- Ronda and Brant Fisher are writing user scripts for DWGIS acceptance testing to make DWGIS user friendly. Testing should begin in October.

- There is a push toward consolidating maintenance contracts for databases (including Wellogic). A RFP was submitted to DTMB and Kathy Tetzlaff was contacted for budget information.

- Ronda attends DEQ-DTMB Partnership meetings. On September 24th there will be a full-day meeting to discuss focus group comments and begin discussing issues and problem solving. The DTMB has a new business relationship manager who wants to make things better.

3. SMT/Office News

- Alternate Work Schedules (AWS) were discussed in the SMT meeting in regard to there being no signed AWS's for staff that frequently start/end work earlier or later than the official hours of 7 a.m. – 6 p.m. (field work or travel time to a meeting or conference are not included). This can cause problems in staff coverage and customer service. The current policy requires everyone to adhere to the official hours, with exceptions for those requiring special accommodations. Liane is going to bring this issue up again for further discussion and clarification at an upcoming SMT meeting.

- Governor Snyder desires improved DEQ metrics for permit issuance. DEQ metrics were discussed by the SMT as to whether or not they are really challenging and whether emphasizing action on one metric shortchanges others. Meetings will be scheduled with the offices/divisions to discuss such items as: if we are measuring the right things; what we can and cannot track; differences between office/division metrics, DEQ metrics, and State of Michigan metrics.

- All of the ODWMA managers have registered for the DEQ manager retreat at the end of October. A second session will be held for administration managers so they are not pulled out of the office during the busy end of the of the fiscal year work time.

- Two subcommittees have been formed as part of the Employee Engagement effort: Communications, and Employee Recognition and Social Relations.

- Environmental Justice (EJ) was discussed regarding the requirement that any program that accepts federal funds must comply with EJ requirements. A 20-year-old California case was used as an example. This may not affect ODWMA programs as much as others in the DEQ.

- Round 3 of the SAW grant is underway.

- The budget for FY 17 is being worked on.

- The DEQ is looking at the status of rule packages. ODWMA will meet to discuss what we are working on, etc.

- The topic of how to successfully engage Advisory Groups has been assigned to the Leadership Academy as an Action Learning Project.

- The DEQ's progress toward electronic document management was discussed. The ODWMA's Operator Training and Certification Program has sent the majority of its paper files for scanning and/or uploading to HPTrim/RM8.

- DTMB is doing a pilot study with DEQ for "Bring Your Own Device," which allows staff to use their personal cell phones for business and reimburses them for business calls. A positive may be that it easier for staff to have to deal with only one telephone, but a negative will be an increase in administration costs (for auditing personal cell phone bills, etc.). There are also concerns regarding security. Amy Lachance is participating in the pilot.

- SIGMA software is coming, eventually, to replace everything except HRMN and Navision (MICARS will replace Navision in March 2016).

- Everyone who drives a state care must sign a new driver's agreement.

- Jim Goodheart is moving to the Office of the Great Lakes, but will remain the Tribal Liaison.

- The RRD, OGL, and ODWMA will partner to develop a White Paper regarding issues created by the decisions made on contaminated groundwater. Topics to include: an economic analysis of the cost to Michigan taxpayers of providing community water supplies to people with contaminated groundwater; a map showing the areas of groundwater contamination in Michigan/where community water supplies have replaced private wells because the groundwater cannot be used; farmlands lost to groundwater contamination; cost of clean-up; predictions of the future for groundwater in Michigan; on-going trends for wellhead protection; case studies; economic analysis of tax/bond investments; and do the citizens of Michigan want to keep pushing this issue off to future generations to deal with? Brant will be ODWMA's primary contact. A meeting will take place soon to get this 3-6 month initiative started.

- Congressman Kildee sent a note to the Director and U.S. EPA's Gina McCarthy regarding Miguel Del Toro's report on lead levels in the Flint drinking water supply. ODWMA was tasked with drafting a log letter in response.

4. ICE Follow Up (Liane)

- Liane would like ICE to be an ongoing process throughout the year as a part of program operation and not written in a hurry to make the deadline. Program staff should be involved. Liane would like managers to meet with program staff by the

end of December 2015, to explain the purpose of ICE, discuss the benefits of this self-evaluation, and discover weaknesses in and things missing from the current ICE. Also, a draft ICE should be written for programs that have not undergone the ICE process before.

5. Personnel Issues

   - For Paul Brun Del Re's position – one internal staff is considering the position and will decide in the next couple of days. If not accepted, the position will be reposted as "external."

   - Tammy Roehrs is working on putting staff PDs on the "S" Drive and she will let us know when it is ready.

6. Training

   - Carrie Monosmith discussed the EPA's Small Systems Conference she recently attended in Cincinnati. Staff are welcome to look at the notebook of presentations she has from the conference.

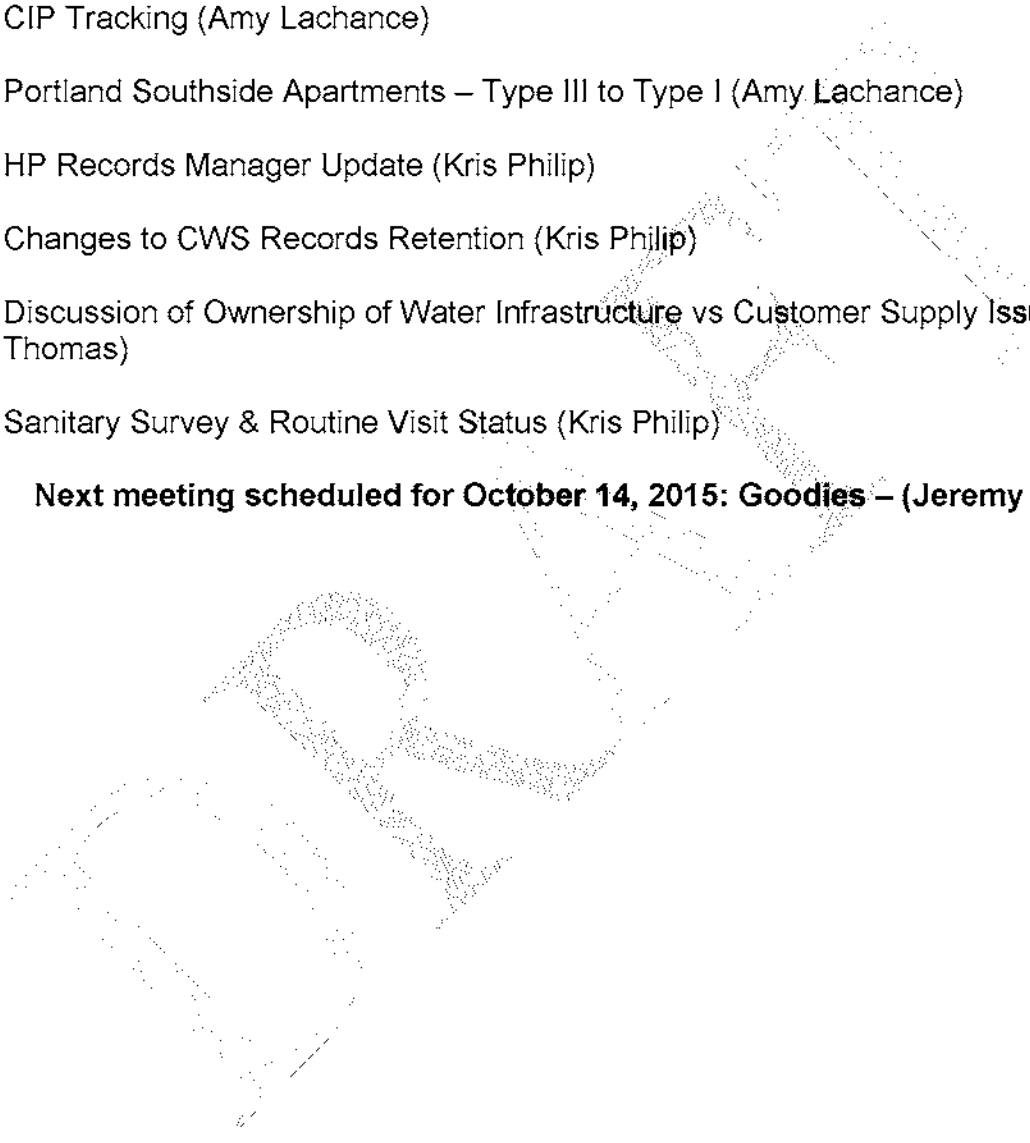
7. Administration Issues

   - New computers for staff will not be purchased until spring 2016. It is not yet known what types of computers will be offered, but SurfacePros will be available to staff with supervisory approval.

Field Topics:

1. Enforcement Matters (Sue Maul)
2. FOS Update (Richard Benzie)
3. EQA Field Visits (Amy Lachance)
4. CIP Tracking (Amy Lachance)
5. Portland Southside Apartments – Type III to Type I (Amy Lachance)
6. HP Records Manager Update (Kris Philip)
7. Changes to CWS Records Retention (Kris Philip)
8. Discussion of Ownership of Water Infrastructure vs Customer Supply Issue (Chuck Thomas)
9. Sanitary Survey & Routine Visit Status (Kris Philip)

Next meeting scheduled for October 14, 2015: Goodies – (Jeremy Hoeh)



From: Crooks, Jennifer <crooks.jennifer@epa.gov>
Sent: Thursday, October 01, 2015 2:31 PM
To: Al Lao;Benzie, Richard (DEQ);Beth.Messer@epa.state.oh.us;Cathrine Wunderlich;Dave.McMillan@illinois.gov;DeBruyn, Dana (DEQ);jill.jonas@wisconsin.gov;Philip, Kris (DEQ);Martha Clark;mike.baker@epa.state.oh.us;Monosmith, Carrie (DEQ);randy.ellingboe@state.mn.us;rick.cobb@Illinois.gov;Robert.Smude@state.mn.us; Shekter Smith, Liane (DEQ);Steve Elmore
Cc: Kuefler, Janet;Janczy, Joseph;Spaulding, William;Palmer, Michele
Subject: DWSRF Eligibility of Full Lead Service Line Replacement
Attachments: DWSRF Eligibility of Lead Service Line Replacement.pdf

FYI—HQ inadvertently left off the date, but they think it was signed in early March 2012. This memo allows the use of DWSRF loan funds to pay for water main-to-house lead service line replacement.
Jennifer

Jennifer Kurtz Crooks
Region 5 DWSRF Set-Aside Coordinator
Ground Water and Drinking Water Branch
U.S. EPA Region 5
77 West Jackson Blvd.
Chicago, Illinois 60604
312.886.0244
crooks.jennifer@epa.gov
312.582.5853 (fax)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MEMORANDUM

SUBJECT: Eligibility of Replacement of Lead Service Lines on Private Property Under the DWSRF

FROM: Jeanine Hogan
Attorney-Advisor
Civil Rights and Financial Law Office
Office of General Counsel

THROUGH: Wendel Askew
Assistant General Counsel
Civil Rights and Financial Law Office
Office of General Counsel

Ken Reiden
Deputy Associate General Counsel
Civil Rights and Financial Law Office
Office of General Counsel

TO: Peter Shanaghan
Team Leader
Drinking Water State Revolving Fund Team
Office of Ground Water and Drinking Water, Office of Water

Question Presented

You have asked whether financial assistance from a State's Drinking Water State Revolving Loan Fund can be used by eligible entities to fund projects that involve replacing lead service lines that may be on private property and that connect to private dwellings.

Brief Answer

We believe that lead service line projects, regardless of the ownership of the property on which the pipe is placed, may be funded by a State's DWSRF as long as the loans are made to an eligible entity and all other requirements of the DWSRF are met.

Analysis

The statute and the regulatory provisions governing the use of State DWSRF funds, though defining which entities may receive funds, do not require the Public Water System to have control over all portions of a project that is funded by the DWSRF. Congress gave EPA's Administrator the clear authority to determine which projects would be eligible under §1452: "Financial assistance, . . . may be used . . . only for expenditures of a type or category which the Administrator has determined, through guidance, will facilitate compliance with national primary drinking water regulations." PHSA §1452 (a)(2). The only broad statutory limitations on the types of projects that cannot be funded are projects which include monitoring, operation, or maintenance expenditures, or projects for the acquisition of real property unless the purchase is made from a willing seller and the acquisition is integral to the project.

40 CFR §35.3520 (b)(2) sets forth the categories of projects that can be funded by a DWSRF. This provision includes the transmission and distribution of water to be a category of eligible projects. Specifically, the regulation provides examples of such projects to include, "installation or replacement of transmission and distribution pipes to improve water pressure to safe levels or to prevent contamination caused by leaks or breaks in the pipes." See 40 CFR §35.3520 (2)(ii).

Lead pipes can contaminate water at any point, including on its way to a private home. Allowing a public water system to use its funds to replace such pipes is consistent with this allowable category of projects, and is similarly consistent with the overall health protections of the Safe Drinking Water Act. See PHSA 1452 (a)(1)(A). Note that if a Public Water System wishes to purchase and retain an easement so that it maintains control of such infrastructure, that purchase is authorized as well: "Funds shall not be used for real property or interests therein unless the acquisition is integral to the project authorized, .. and the purchase is from a willing seller. . ." PHSA 1452(a)(2).

This determination that replacement of lead pipes on privately owned property is an eligible project cost so long as it otherwise complies with the PHSA is consistent with prior approved eligible projects, such as water efficiency projects, that do not require all elements of a project to be under the control of a Public Water System. In a Memorandum dated July 25, 2003, then Assistant Administrator for Water G. Tracy Mehan III informed Water Division Directors in the regions that projects such as the installation or retrofit of plumbing fixtures and appliances, installation of water meters, and implementation of incentive programs to conserve water, such as rebates or conservation rate structures were all eligible projects under the DWSRF. Therefore, so long as the assistance is given to an eligible entity, and the project otherwise meets the requirements of the DWSRF, the project may be funded regardless of ownership or control of the resulting infrastructure.

From: Shekter Smith, Liane (DEQ)
Sent: Tuesday, October 13, 2015 2:07 PM
To: Dykema, Linda D. (DHHS);Groetsch, Kory J. (DHHS)
Cc: Krisztian, George (DEQ);DeBruyn, Dana (DEQ);Busch, Stephen (DEQ);Devereaux, Tracy Jo (DEQ);Besey, Kevin (MDARD)
Subject: DRAFT DELIBERATIVE. NOT SUBJECT TO FOIA - Draft recommendations for restaurants from MDARD
Attachments: Food Establishment Recommendations City of Flint Drinking Water Regarding Lead with DEQ comments.docx

Importance: High

Linda and Kory –

The attached document was created by MDARD and modified by DEQ NCWS staff. MDARD plans to e-mail this to food establishments in the flint area and also provide it to the Genesee County LHD for their use. MDARD is anxious to get this out to restaurants but would like your review/comments prior to finalizing.

This is a request for content review. They'll take care of making it look nice.

Comments can go back to MDARD directly (Kevin Besey), but I'd like to be cc'd also so that we can see your comments also. That will help us craft future messages.

Thanks.

Recommendations for Licensed Food Establishments Using City of Flint Water with Lead Concerns
DRAFT October, 13, 2015
Attention: restaurants, grocery stores, convenience stores, food processors and food warehouses.

- The best way to determine if water contains lead is to have it tested. Safe results can be posted to inform consumers.

- Information to test your water is available on-line at: DEQ – Laboratory Services at www.michigan.gov/deqlab or call 517-335-8184. To test for Lead and Copper, request a 36CC water test. This will cost $26 per sample.

Do the following each day of operation unless the water has been tested and found to not have a lead concern:

- Flush water lines for 5 minutes before using or serving water and after 6 hours of no water use. Then flush other equipment such as pop machines for at least 1-2 minutes.
- Install an NSF Standard 53 certified filter on the faucet where drinking / cooking water is obtained from. Approved filter information for faucet or in-line filters can be found at: http://nsf.com/newsroom/statement-regarding-flint-water-system-lead-issue-and-to-certification-nsf
- Use cold water and store it in pitchers for immediate consumption.
- Always use cold water for drinking, cooking and rinsing food.
- Hot water must used for dishwashing.

Other equipment that may use city water:

- Ice machines – Do not use ice machines. Use bagged ice in drinking water.
- Pop Machines – Flush for 1-2 minutes daily or use bottled beverages.
- Coffee Machines or Tea Urns – Flush for 1-2 minutes daily or use filtered water. These products may be very low risk as young children under 6 are not likely to consume them.
- Slush machines – Use filtered water.
- Spray Misters – Flush for 1-2 minutes daily or use filtered water.

A licensed plumber can check your plumbing and service lines for lead soldering or lead service lines.

Restaurants with questions should contact Genesee County Health Department at: 810-257-3612.

Grocery or Food Processing establishments with questions should contact MDARD at 1-800-292-3939.

From: Shekter Smith, Liane (DEQ)
Sent: Tuesday, October 13, 2015 5:12 PM
To: Krisztian, George (DEQ)
Cc: Thelen, Mary Beth (DEQ);Shaler, Karen (DEQ);Sygo, Jim (DEQ);Busch, Stephen (DEQ);Cook, Pat (DEQ);Benzie, Richard (DEQ);Prysby, Mike (DEQ);Devereaux, Tracy Jo (DEQ);Philip, Kris (DEQ);DeBruyn, Dana (DEQ)
Subject: DRAFT DELIBERATIVE. NOT SUBJECT TO FOIA - daily update 10/13.

Action Step 1. Preliminary list completed, circulated to HHS, and has been provided to DLARA to begin plumbing assessments. The list will remain active in case of additional schools requesting assessment/testing.

Action Step 2. See Item 1. DLARA to coordinate with Flint Schools on access for Plumbing Assessments. Tap coding identification from EPA guidance to be provided to DLARA.

Action Step 3. Preliminary comments received by voice mail from EPA. Need to discuss directly.

Action Step 4. DEQ comments provided to MDARD and draft forwarded to DHHS for their comments.

Action Step 6. Approve Flint Plan for waterline

The city and the county flushed the pipeline beginning yesterday, the first set of samples for total coliform analysis were collected around 2:30am. Genesee County will be collecting their second sample for bacteriological analysis between 6 and 8pm.

I suspect that it will take additional time to flush the Dort Reservoir before it is ready to be sampled and may set back the time that the pipeline is ready to be placed into operation (Thurs the soonest possible). The yard piping configuration at the WTP does allow for flexibility in operation and ability to take Dort out of service and maintain supply from Detroit; however, I have not been able to confirm that this is the way the city plans to proceed.

Action Step 7. E-mail sent to DHHS to determine if DEQ or DHHS will be lead and to determine how this effort will be coordinated with broader Pb education/outreach efforts.

Action Step 19. Expedite 399 plan and P04 plan

I contacted Samir Matta from LAN (Flint's consultant) for an update on the corrosion control plan and submittal of the Act 399 permit application. Flint operators, with the assistance of LAN, conducted bench tests using a corrosion inhibitor (orthophosphate) and are making comparisons for use with (treated water from Detroit vs. water treated from the Flint River). LAN is currently preparing plans and a design for installation of an orthophosphate feed system. LAN expects to submit the Act 399 permit application to the DEQ by no later than the end of this week.

Action Step 18. Contact KWA to find out if there are any bottlenecks that need to be removed to expedite completion of the KWA pipeline.

I contacted John O'Brien (Genesee County Drain Commissioner's Office). The most significant bottleneck involves road restrictions currently being imposed by the Lapeer County Road Commission and include:

- All Lapeer County secondary north-south roads are tagged "no construction traffic" for this project except for primary roads (M-19, M-53, and M-24). This significantly increases distances that construction vehicles must travel (upwards of 15 to 20 miles) to accomplish a short jog either north or south.

- Weight restrictions in the spring will cause construction to slow or stop for one to two months. The county has indicated that St. Clair and Sanilac are not imposing the weight restrictions; however, Lapeer County will maintain their restrictions.

From: Busch, Stephen (DEQ)
Sent: Wednesday, November 04, 2015 12:16 PM
To: DeBruyn, Dana (DEQ)
Subject: RE: Coding for Sampling

Yes, use that project and phase number for DCDS when coding time spent on Flint issues.

Stephen Busch, P.E.
MDEQ Lansing District Coordinator
Office of Drinking Water and Municipal Assistance
Lansing and Jackson District Supervisor
517-643-2314
buschs@michigan.gov

From: DeBruyn, Dana (DEQ)
Sent: Wednesday, November 04, 2015 8:36 AM
To: Busch, Stephen (DEQ)
Subject: FW: Coding for Sampling

Steve,
Is this the code you use for sampling siting assessments?
Dana

From: Devereaux, Tracy Jo (DEQ)
Sent: Thursday, October 22, 2015 3:29 PM
To: Graham, Lois (DEQ)
Cc: DeBruyn, Dana (DEQ)
Subject: Coding for Sampling

Admin said you should use your standard coding with the following project #

Project #: 900040-00, City of Flint Drinking Water

Thanks,

Tracy Jo

Tracy Jo Devereaux
Office of Drinking Water and Municipal Assistance
Michigan Department of Environmental Quality
Constitution Hall, 4th Floor, South Tower, Pillar P8
525 W. Allegan Street
Lansing, Michigan 48933
☎517-284-6544
✉devereauxt@michigan.gov

From: Devereaux, Tracy Jo (DEQ)
Sent: Wednesday, November 25, 2015 1:34 PM
To: Krisztian, George (DEQ);Busch, Stephen (DEQ);Shekter Smith, Liane (DEQ);DeBruyn, Dana (DEQ)
Cc: Sygo, Jim (DEQ);Shaler, Karen (DEQ)
Subject: Brownell STEM Academy
Attachments: Brownell STEM Academy.docx

Final copy with all changes incorporated. Please see remaining comment/question on page 6. Once that is answered, I should be able to send to Lisa in OEA.

Brownell STEM Academy
Outlet Sampling and Plumbing Assessment Recommendations

BACKGROUND INFORMATION

On Friday, October 30, 2015, the Department of Licensing and Regulatory Affairs (DLARA) and the Department of Environmental Quality (DEQ) conducted an assessment of the plumbing system at Brownell STEM Academy to gain a comprehensive understanding of how water moves through the building and what types of plumbing materials are used. The assessment identified the following potential sources of lead leaching into drinking water:

- Lead solder joints on copper piping
- Brass valves and brass fittings
- Brass components in fixtures
- Galvanized piping

The assessment also identified a total of 23 faucets or fountains that provide water for drinking, cooking and/or food preparation. The team developed a sequence for sampling the faucets/fountains based on how water travels through the school building.

On Saturday, October 31, 2015, the DEQ and the DLARA completed sampling of the 23 faucets/fountains in the Brownell STEM Academy school building in the order determined by the plumbing assessment from the previous day, following a stagnation period of over 12 hours. At each of the 23 faucets/fountains identified, staff collected four samples. Two initial, 125-mililiter samples (P1 and P2), were collected immediately after turning on the tap. The water was then flushed for 30 seconds and a third, 125-mililiter sample (F01) was collected. Finally, the water was flushed for another two minutes, and the fourth 125-mililiter sample (F02) was collected. These samples were used to determine the impact of any lead sources in and around each specific faucet/fountain and its connecting plumbing.

The DEQ and the DLARA then completed consecutive sampling at three of the 23 faucets/fountains in the Brownell STEM Academy school building. This consecutive sampling was used to determine the impact of any lead sources located deep in the supply plumbing of the school building. The three sites included one site near the building service line, one site near the plumbing mid-point, and one site at the far end of the plumbing system. At each of these three sites, staff collected ten, 1-liter samples. The ten samples were collected immediately after turning on the tap, and consecutively, without any flushing time in between.

WATER SERVICE INFORMATION

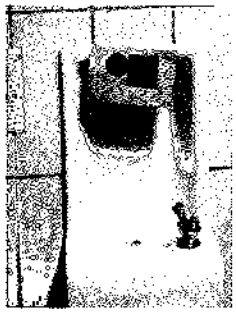
A four-inch diameter cast iron water service line enters the main school building in the mechanical room located in the middle of the building. Piping in the boiler room immediately transitions into galvanized metal piping and then into copper piping with lead solder joints for cold water lines. Two separate copper cold water supply lines exit the mechanical room. One through the north wall in the west corner appears to serve fixtures in the north end of the main wing of the school building. A second line exits the south wall and appears to serve fixtures in the south end of the main wing, and then continues over and serves fixtures in the west wing of the school building. Copper piping with lead solder joints branches off of the copper supply lines. Hot water is distributed in continuous loops that feed from and return to a central water

heater in the mechanical room. Hot water piping material, where exposed, was copper piping with lead solder joints. Brass valves were seen throughout the building.

Outlets With Lead Levels Greater Than 15 Parts per Billion

The DEQ recommends school facilities take action if samples from any drinking water outlets show lead levels greater than 15 parts per billion. Based on the sampling conducted at 23 faucets/fountains on October 31, 2015, the following 12 drinking water outlets had lead water level results greater than 15 parts per billion. Each of these 12 outlets is listed below with its sample results, including a description of the potential source(s) of lead, and recommended actions for the school to take.

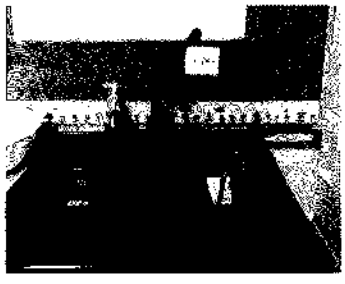
Outlet: Bubbler Drinking Fountain, (DW001)
Location: North Hallway, across from Classroom 12
Results: P1=64 parts per billion, P2=4 parts per billion, F01=2 parts per billion, F02=non-detect



These results suggest the highest contribution of lead may be from the bubbler itself. This bubbler fixture is made of chrome-plated brass with a brass connection on the underside of the unit. The connection piping to the unit also contains some brass components, including brass fittings and a brass valve.

Replacement of this bubbler tap and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Laboratory Sink Faucet, Right (CF004)
Location: Classroom 17, west wall
Results: P1=56 parts per billion, P2=29 parts per billion, F01=7 parts per billion, F02=3 parts per billion



These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be constructed of coated brass. Connecting plumbing for this faucet was not accessible, but should be checked for additional lead containing components, including brass fittings and a brass valve.

Replacement of this faucet and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

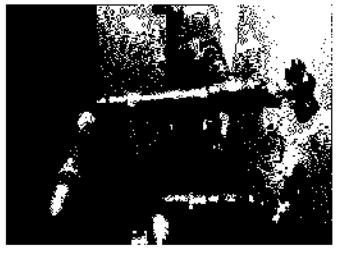
Outlet: Laboratory Sink Faucet, Left (CF005)
Location: Classroom 17, west wall
Results: P1=31 parts per billion, P2=6 parts per billion, F01=2 parts per billion, F02=1 part per billion

No Image Available

These results suggest the highest contribution of lead may be from the faucet itself. This faucet appears to be constructed of coated brass. Connecting plumbing for this faucet was not accessible, but should be checked for additional lead containing components, including brass fittings and a brass valve.

Replacement of this faucet and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Sink Faucet, Left (CF007)
Location: Classroom 26, south wall
Results: P1=164 parts per billion, P2=166 parts per billion, F01=15 parts per billion, F02=1 part per billion



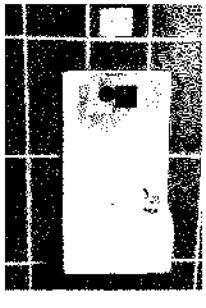
These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. The base of this faucet is chrome-plated brass, and has a brass connection on the underside of the sink. Hot and cold water lines connect to this faucet with a brass mixer fitting under the sink. Connecting plumbing in the cabinet under the sink is copper piping with lead solder and contains additional brass components and brass shutoff valves.

Copper results for samples P1 and P2 at this location were also at levels above which the DEQ recommends school facilities take action. Copper results suggest these same brass components are contributing to this condition.

Replacement of this faucet and its connection plumbing with lead-free materials will significantly reduce lead and copper exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also has an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

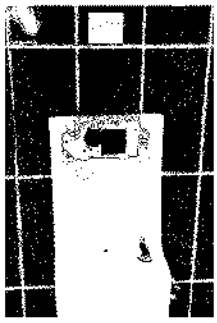
Outlet: Bubbler Drinking Fountain, Right (DW008)
Location: South Hallway, across from Classroom 26
Results: P1=46 parts per billion, P2=11 parts per billion, F01=4 parts per billion, F02=1 part per billion



These results suggest the highest contribution of lead may be from the bubbler itself. This bubbler fixture is made of chrome-plated brass with a brass connection on the underside of the unit. The connection piping to the unit also contains some brass components, including a brass valve.

Replacement of this bubbler tap and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Bubbler Drinking Fountain, Left (DW009)
Location: South Hallway, across from Classroom 26
Results: P1=23 parts per billion, P2=7 parts per billion,
F01=3 parts per billion, F02=2 parts per billion



These results suggest the highest contribution of lead may be from the bubbler itself. This bubbler fixture is made of chrome-plated brass, has a brass connection on the underside of the unit, and a brass operating valve on the side of the unit. The connection piping to the unit also contains some brass components, including brass fittings and a brass valve.

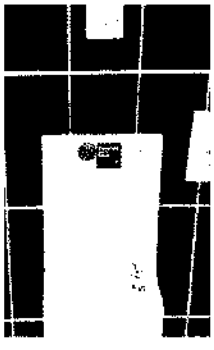
Replacement of this bubbler tap and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Sink Faucet (CF010)
Location: Room 27 Lounge, north wall
Results: P1=25 parts per billion, P2=34 parts per billion,
F01=2 parts per billion, F02=non-detect

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. The base of this faucet is chrome-plated brass, and has a brass connection on the underside of the sink. Connecting plumbing in the cabinet under the sink includes brass connectors and brass shut off valves.

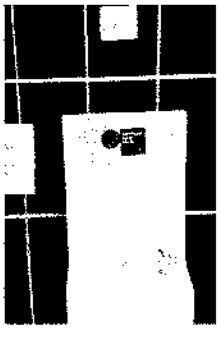
Replacement of this faucet and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Bubbler Drinking Fountain, Left (DW013)
Location: West Wing South Hallway, between Classrooms 1 and 2
Results: P1=27 parts per billion, P2=15 parts per billion,
F01=8 parts per billion, F02=2 parts per billion



These results suggest the highest contribution of lead may be from the bubbler itself. This bubbler fixture is made of chrome-plated brass with a brass connection on the underside of the unit. The connection piping to the unit also contains some brass components, including brass fittings and a brass valve.
Replacement of this bubbler tap and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

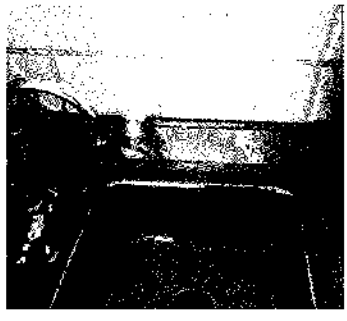
Outlet: Bubbler Drinking Fountain, Right (DW014)
Location: West Wing South Hallway, between Classrooms 1 and 2
Results: P1=16 parts per billion, P2=3 parts per billion,
F01=2 parts per billion, F02=1 part per billion



These results suggest the highest contribution of lead may be from the bubbler itself. This bubbler fixture is made of chrome-plated brass with a brass connection on the underside of the unit. The connection piping to the unit also contains some brass components, including brass fittings and a brass valve.

Replacement of this bubbler tap and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

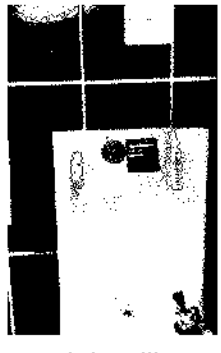
Outlet: Sink Faucet (KC019)
Location: Classroom 4, east wall
Results: P1=16 parts per billion, P2=10 parts per billion, F01=non-detect, F02=non-detect



These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. The base of this faucet is chrome-plated brass. Connecting plumbing for this faucet should be checked for additional lead containing components, including brass fittings and brass valves.

Replacement of this faucet and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

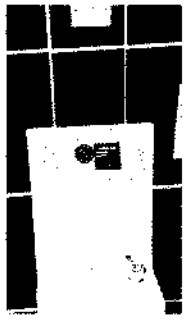
Outlet: Bubbler Drinking Fountain, Right (DW020)
Location: West Wing North Hallway, between Classrooms 6 and 7
Results: P1=33 parts per billion, P2=15 parts per billion, F01=20 parts per billion, F02=2 parts per billion



These results suggest the highest contribution of lead may be from the bubbler itself. This bubbler fixture is made of chrome-plated brass with a brass connection on the underside of the unit. The connection piping to the unit also contains some brass components, including brass fittings and a brass valve.

Replacement of this bubbler tap and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Bubbler Drinking Fountain, Left (DW021)
Location: West Wing North Hallway, between Classrooms 6 and 7
Results: P1=38 parts per billion, P2=27 parts per billion, F01=2 parts per billion, F02=2 parts per billion



These results suggest the highest contribution of lead may be from the bubbler itself. This bubbler fixture is made of chrome-plated brass with a brass connection on the underside of the unit. The connection piping to the unit also contains some brass components, including brass fittings and a brass valve.

Replacement of this bubbler tap and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlets With Lead Levels 15 Parts per Billion or Less

While the remaining 11 outlets showed sample results to be at levels requiring no further action, several recommendations have been identified.

The fourth sample (F02) at all 23 outlets following approximately three minutes of use and flushing at a reduced flow resulted in reduced lead concentrations of 3 parts per billion or less. This indicates that flushing of all taps used for drinking, cooking, and/or food preparation for four minutes following periods of stagnation will further reduce lead exposure. It is recommended that a flushing operational procedure be developed for use by staff responsible for plumbing operations and maintenance with emphasis on flushing after weekends and holidays.

Five of these 11 outlets are comprised of similar materials as the outlets listed above and could potentially experience higher lead levels under extended periods of stagnation. These faucets/fountains include:

- Bubbler Drinking Fountain Unit in North Hallway, across from Classroom 12 (DW002)
- Chrome-Plated Brass Base Faucets in Classroom 15 (CF003), Classroom 26 (CF006), Classroom 6 (CF022), and Classroom 7 (CF023)

Replacement of these fixtures with lead-free materials is also recommended.

The remaining six outlets showed sample results of 15 parts per billion or less, requiring no further action or additional recommendations. These faucets/fountains include:

- Kitchen Faucets in the Community Room (CF012), Classroom 2 (KC017), and two in Classroom 1 (KC015 and KC016).
- Integrated Bubbler Faucet in the Classroom 4 restroom (CF018)
- Water Cooler in the hallway east of the Gym (WC011)

Consecutive Sampling Results and Building Plumbing Recommendations

The consecutive samples taken on October 31, 2015, at three sites in the Brownell STEM Academy school building provide additional confirmation that the highest contribution of lead appears to be from the individual faucet/fountains and not from the larger diameter supply plumbing within the school building. However, results from Classroom 17 also suggest that the copper supply line with lead solder joints serving the north hallway in the main wing may contain more stagnant water due to the limited number of fixtures served by this line and their lack of use. A flushing operational procedure may further reduce lead contributions from this supply line caused by stagnant conditions related to its use. Results of the consecutive sample monitoring are listed in the table below.

Consecutive Sample No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Location	Lead Result (parts per billion; ND = not-detected)									
Classroom 17 Lab Sink Faucet (CF004)	10	3	3	3	2	2	2	2	2	2
Community Room Sink Faucet (CF012)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Classroom 7 Sink Faucet (CF023)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND

From: Krisztian, George (DEQ)
Sent: Wednesday, December 23, 2015 10:09 AM
To: DeBruyn, Dana (DEQ)
Subject: Potter, Holmes and Admin data
Attachments: Potter Elementary Draft.pdf; Holmes and Admin Draft.xlsx

Hi Dana,

Attached is the data for Potter Elementary, Holmes STEM Academy and the Administration building.

In case I don't see you, Merry Christmas!
George

George L. Krisztian
Flint Action Plan Coordinator
Laboratory Director
Michigan Department of Environmental Quality
Desk ph (517) 284-6719
Cell ph PPI

Potter Elementary
2500 North Averill Avenue
Flint, Michigan 48506

ANALYTE	RESULT	ANALYTE	RESULT	Sample Description	Site Code	Site Description
Lead	0.001	Copper	0.00	01CF001-RM22	CA1	First Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA2	Second Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA3	Third Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA4	Forth Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA5	Fifth Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA6	Sixth Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA7	Seventh Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA8	Eigth Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA9	Ninth Sequential Sample
Lead	0.000	Copper	0.00	01CF001-RM22	CA10	Tenth Sequential Sample
Lead	0.002	Copper	0.06	01CF013-RM 12	CB1	First Sequential Sample
Lead	0.001	Copper	0.05	01CF013-RM 12	CB2	Second Sequential Sample
Lead	0.000	Copper	0.05	01CF013-RM 12	CB3	Third Sequential Sample
Lead	0.000	Copper	0.05	01CF013-RM 12	CB4	Forth Sequential Sample
Lead	0.000	Copper	0.05	01CF013-RM 12	CB5	Fifth Sequential Sample
Lead	0.000	Copper	0.05	01CF013-RM 12	CB6	Sixth Sequential Sample
Lead	0.000	Copper	0.05	01CF013-RM12	CB7	Seventh Sequential Sample
Lead	0.000	Copper	0.05	01CF013-RM 12	CB8	Eigth Sequential Sample
Lead	0.000	Copper	0.05	01CF013-RM 12	CB9	Ninth Sequential Sample
Lead	0.000	Copper	0.05	01CF013-RM 12	CB10	Tenth Sequential Sample
Lead	0.005	Copper	0.17	01CF035-RM 2A	CC1	First Sequential Sample
Lead	0.003	Copper	0.18	01CF035-RM 2A	CC2	Second Sequential Sample
Lead	0.002	Copper	0.18	01CF035-RM 2A	CC3	Third Sequential Sample
Lead	0.003	Copper	0.18	01CF035-RM 2A	CC4	Forth Sequential Sample
Lead	0.002	Copper	0.18	01CF035-RM 2A	CC5	Fifth Sequential Sample
Lead	0.002	Copper	0.18	01CF035-RM 2A	CC6	Sixth Sequential Sample
Lead	0.002	Copper	0.18	01CF035-RM 2A	CC7	Seventh Sequential Sample
Lead	0.002	Copper	0.18	01CF035-RM 2A	CC8	Eigth Sequential Sample
Lead	0.002	Copper	0.17	01CF035-RM 2A	CC9	Ninth Sequential Sample
Lead	0.002	Copper	0.17	01CF035-RM 2A	CC10	Tenth Sequential Sample
Lead	0.009	Copper	0.12	01CF037-RM 3B	CD1	First Sequential Sample
Lead	0.001	Copper	0.07	01CF037-RM 3B	CD2	Second Sequential Sample
Lead	0.001	Copper	0.00	01CF037-RM 3B	CD3	Third Sequential Sample
Lead	0.000	Copper	0.00	01CF037-RM 3B	CD4	Forth Sequential Sample
Lead	0.000	Copper	0.00	01CF037-RM3B	CD5	Fifth Sequential Sample
Lead	0.000	Copper	0.00	01CF037-RM 3B	CD6	Sixth Sequential Sample
Lead	0.001	Copper	0.00	01CF037-RM 3B	CD7	Seventh Sequential Sample
Lead	0.000	Copper	0.00	01CF037-RM 3B	CD8	Eigth Sequential Sample
Lead	0.000	Copper	0.00	01CF037-RM 3B	CD9	Ninth Sequential Sample
Lead	0.000	Copper	0.00	01CF037-RM 3B	CD10	Tenth Sequential Sample

Note: Results of "Not Detected" have been converted to a numerical value of zero to allow for ease of sorting.
Results in RED exceed 15 ppb for lead or 1.3 ppm for Copper
1 ppb = 0.001 mg/L

Potter Elementary
2500 North Averill Avenue
Flint, Michigan 48506

ANALYTE	RESULT	ANALYTE	RESULT	Sample Description	Site Code	Site Description
Lead	0.004	Copper	0.39	01CF052-RM 31	CE1	First Sequential Sample
Lead	0.003	Copper	0.29	01CF052-RM 31	CE2	Second Sequential Sample
Lead	0.002	Copper	0.25	01CF052-RM 31	CE3	Third Sequential Sample
Lead	0.002	Copper	0.20	01CF052-RM 31	CE4	Forth Sequential Sample
Lead	0.002	Copper	0.19	01CF052-RM 31	CE5	Fifth Sequential Sample
Lead	0.002	Copper	0.18	01CF052-RM 31	CE6	Sixth Sequential Sample
Lead	0.005	Copper	0.24	01CF052-RM 31	CE7	Seventh Sequential Sample
Lead	0.006	Copper	0.22	01CF052-RM 31	CE8	Eigth Sequential Sample
Lead	0.004	Copper	0.16	01CF052-RM 31	CE9	Ninth Sequential Sample
Lead	0.003	Copper	0.14	01CF052-RM 31	CE10	Tenth Sequential Sample
Lead	0.000	Copper	0.30	01KC058-UNIT 3	CF1	First Sequential Sample
Lead	0.000	Copper	0.21	01KC058-UNIT 3	CF2	Second Sequential Sample
Lead	0.000	Copper	0.19	01KC058-UNIT 3	CF3	Third Sequential Sample
Lead	0.000	Copper	0.18	01KC058-UNIT 3	CF4	Forth Sequential Sample
Lead	0.000	Copper	0.17	01KC058-UNIT 3	CF5	Fifth Sequential Sample
Lead	0.000	Copper	0.17	01KC058-UNIT 3	CF6	Sixth Sequential Sample
Lead	0.000	Copper	0.16	01KC058-UNIT 3	CF7	Seventh Sequential Sample
Lead	0.000	Copper	0.15	01KC058-UNIT 3	CF8	Eigth Sequential Sample
Lead	0.000	Copper	0.15	01KC058-UNIT 3	CF9	Ninth Sequential Sample
Lead	0.000	Copper	0.14	01KC058-UNIT 3	CF10	Tenth Sequential Sample
Lead	0.015	Copper	0.14	01DW020 RM 7	P1	First Primary draw of 125 milliliters
Lead	0.005	Copper	0.13	01DW020 RM 7	P2	Second Primary draw of 125 milliliters
Lead	0.004	Copper	0.13	01DW020 RM 7	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.13	01DW020 RM 7	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.018	Copper	0.13	01CF019 RM 7	P1	First Primary draw of 125 milliliters
Lead	0.013	Copper	0.11	01CF019 RM 7	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.14	01CF019 RM 7	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.12	01CF019 RM 7	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.005	Copper	0.27	01KC026 RM5	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.24	01KC026 RM 5	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.16	01KC026 RM 5	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.16	01KC026 RM 5	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.005	Copper	0.20	01DW022 RM 6	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.09	01DW022 RM 6	P2	Second Primary draw of 125 milliliters
Lead	0.003	Copper	0.07	01DW022 RM 6	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.07	01DW022 RM 6	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.025	Copper	0.33	01CF021 RM 6	P1	First Primary draw of 125 milliliters
Lead	0.008	Copper	0.29	01CF021 RM 6	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.12	01CF021 RM 6	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.08	01CF021 RM 6	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.003	Copper	0.28	01CF024 RM 5	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.14	01CF024 RM 5	P2	Second Primary draw of 125 milliliters
Lead	0.007	Copper	0.14	01CF024 RM 5	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.15	01CF024 RM 5	F02	Flush Sample taken 2 minutes after First Flush Sample

Note: Results of "Not Detected" have been converted to a numerical value of zero to allow for ease of sorting.
Results in RED exceed 15 ppb for lead or 1.3 ppm for Copper
1 ppb = 0.001 mg/L

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Flint, Michigan 48506

ANALYTE	RESULT	ANALYTE	RESULT	Sample Description	Site Code	Site Description
Lead	0.011	Copper	0.08	01DW016 RM 10	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.07	01DW016 RM 10	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.07	01DW016 RM 10	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.06	01DW016 RM 10	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.007	Copper	0.15	01CF017 RM 8	P1	First Primary draw of 125 milliliters
Lead	0.014	Copper	0.16	01CF017 RM 8	P2	Second Primary draw of 125 milliliters
Lead	0.007	Copper	0.10	01CF017 RM 8	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.07	01CF017 RM 8	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.004	Copper	0.34	01KC025 RM 5	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.56	01KC025 RM 5	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.17	01KC025 RM 5	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.16	01KC025 RM 5	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.014	Copper	0.29	01CF013 RM 10	P1	First Primary draw of 125 milliliters
Lead	0.011	Copper	0.36	01CF013 RM 10	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.07	01CF013 RM 10	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.07	01CF013 RM 10	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.006	Copper	0.14	01DW018 RM 8	P1	First Primary draw of 125 milliliters
Lead	0.001	Copper	0.07	01DW018 RM 8	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.06	01DW018 RM 8	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.06	01DW018 RM 8	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.014	Copper	0.53	01DW023 RM 5	P1	First Primary draw of 125 milliliters
Lead	0.004	Copper	0.29	01DW023 RM 5	P2	Second Primary draw of 125 milliliters
Lead	0.005	Copper	0.13	01DW023 RM 5	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.004	Copper	0.14	01DW023 RM 5	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.005	Copper	0.14	01CF033 RM 1A LIBRARY	P1	First Primary draw of 125 milliliters
Lead	0.005	Copper	0.16	01CF033 RM 1A LIBRARY	P2	Second Primary draw of 125 milliliters
Lead	0.005	Copper	0.15	01CF033 RM 1A LIBRARY	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.16	01CF033 RM 1A LIBRARY	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.009	Copper	0.23	01DW032 RM 1A LIBRARY	P1	First Primary draw of 125 milliliters
Lead	0.011	Copper	0.19	01DW032 RM 1A LIBRARY	P2	Second Primary draw of 125 milliliters
Lead	0.006	Copper	0.15	01DW032 RM 1A LIBRARY	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.005	Copper	0.16	01DW032 RM 1A LIBRARY	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.335	Copper	0.78	01DW034 RM 1A LIBRARY	P1	First Primary draw of 125 milliliters
Lead	0.063	Copper	1.10	01DW034 RM 1A LIBRARY	P2	Second Primary draw of 125 milliliters
Lead	0.008	Copper	1.30	01DW034 RM 1A LIBRARY	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.004	Copper	0.23	01DW034 RM 1A LIBRARY	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.005	Copper	0.20	01DW036 RM 2A LIBRARY	P1	First Primary draw of 125 milliliters
Lead	0.007	Copper	0.16	01DW036 RM 2A LIBRARY	P2	Second Primary draw of 125 milliliters
Lead	0.004	Copper	0.15	01DW036 RM 2A LIBRARY	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.007	Copper	0.15	01DW036 RM 2A LIBRARY	F02	Flush Sample taken 2 minutes after First Flush Sample

Note: Results of "Not Detected" have been converted to a numerical value of zero to allow for ease of sorting.
Results in RED exceed 15 ppb for lead or 1.3 ppm for Copper
1 ppb = 0.001 mg/L

Potter Elementary
2500 North Averill Avenue
Flint, Michigan 48506

ANALYTE	RESULT	ANALYTE	RESULT	Sample Description	Site Code	Site Description
Lead	0.009	Copper	0.00	01CF035 RM 2A LIBRARY	P1	First Primary draw of 125 milliliters
Lead	0.014	Copper	0.16	01CF035 RM 2A LIBRARY	P2	Second Primary draw of 125 milliliters
Lead	0.012	Copper	0.16	01CF035 RM 2A LIBRARY	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.006	Copper	0.16	01CF035 RM 2A LIBRARY	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.003	Copper	0.45	01CF031 RM 3	P1	First Primary draw of 125 milliliters
Lead	0.011	Copper	0.33	01CF031 RM 3	P2	Second Primary draw of 125 milliliters
Lead	0.005	Copper	0.13	01CF031 RM 3	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.14	01CF031 RM 3	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.010	Copper	0.19	01CF027 RM 4	P1	First Primary draw of 125 milliliters
Lead	0.010	Copper	0.29	01CF027 RM 4	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.10	01CF027 RM 4	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.09	01CF027 RM 4	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.004	Copper	0.27	01CF029 RM 3	P1	First Primary draw of 125 milliliters
Lead	0.004	Copper	0.34	01CF029 RM 3	P2	Second Primary draw of 125 milliliters
Lead	0.005	Copper	0.22	01CF029 RM 3	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.009	Copper	0.25	01CF029 RM 3	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.013	Copper	0.20	01DW030 RM 3	P1	First Primary draw of 125 milliliters
Lead	0.010	Copper	0.22	01DW030 RM 3	P2	Second Primary draw of 125 milliliters
Lead	0.010	Copper	0.21	01DW030 RM 3	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.005	Copper	0.18	01DW030 RM 3	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.005	Copper	0.08	01DW028 RM 4	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.09	01DW028 RM 4	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.09	01DW028 RM 4	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.06	01DW028 RM 4	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.008	Copper	0.39	01CF003 RM 17	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.31	01CF003 RM 17	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.07	01CF003 RM 17	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.06	01CF003 RM 17	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.004	Copper	0.07	01CF001 RM 22	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.05	01CF001 RM 22	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.00	01CF001 RM 22	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.00	01CF001 RM 22	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.016	Copper	0.30	01DW006 RM 15	P1	First Primary draw of 125 milliliters
Lead	0.014	Copper	0.30	01DW006 RM 15	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.10	01DW006 RM 15	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.07	01DW006 RM 15	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.008	Copper	0.08	01CF004 RM 20	P1	First Primary draw of 125 milliliters
Lead	0.005	Copper	0.14	01CF004 RM 20	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.05	01CF004 RM 20	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.05	01CF004 RM 20	F02	Flush Sample taken 2 minutes after First Flush Sample

Note: Results of "Not Detected" have been converted to a numerical value of zero to allow for ease of sorting.
Results in RED exceed 15 ppb for lead or 1.3 ppm for Copper
1 ppb = 0.001 mg/L

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ANALYTE	RESULT	ANALYTE	RESULT	Sample Description	Site Code	Site Description
Lead	0.008	Copper	0.22	01CF007 RM 15	P1	First Primary draw of 125 milliliters
Lead	0.004	Copper	0.09	01CF007 RM 15	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.07	01CF007 RM 15	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.06	01CF007 RM 15	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.002	Copper	0.13	01DW005 RM 20	P1	First Primary draw of 125 milliliters
Lead	0.000	Copper	0.06	01DW005 RM 20	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.06	01DW005 RM 20	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.06	01DW005 RM 20	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.008	Copper	0.18	01KC009 DHHS	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.33	01KC009 DHHS	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.07	01KC009 DHHS	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.06	01KC009 DHHS	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.008	Copper	0.25	01CF014 RM 9	P1	First Primary draw of 125 milliliters
Lead	0.011	Copper	0.33	01CF014 RM 9	P2	Second Primary draw of 125 milliliters
Lead	0.003	Copper	0.20	01CF014 RM 9	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.004	Copper	0.12	01CF013 RM 12	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.06	01CF013 RM 12	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.00	01CF013 RM 12	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.00	01CF013 RM 12	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.005	Copper	0.17	01KC008 COMMUNITY RM	P1	First Primary draw of 125 milliliters
Lead	0.009	Copper	0.15	01KC008 COMMUNITY RM	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.09	01KC008 COMMUNITY RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.07	01KC008 COMMUNITY RM	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.010	Copper	0.18	01DW012 RM 12	P1	First Primary draw of 125 milliliters
Lead	0.005	Copper	0.10	01DW012 RM 12	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.00	01DW012 RM 12	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.00	01DW012 RM 12	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.010	Copper	0.20	01CF039- RM 39	P1	First Primary draw of 125 milliliters
Lead	0.009	Copper	0.27	01CF039- RM 39	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.04	01CF039- RM 39	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.07	01CF039- RM 39	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.005	Copper	0.19	01DW044- RM 37	P1	First Primary draw of 125 milliliters
Lead	0.001	Copper	0.09	01DW044- RM 37	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.09	01DW044- RM 37	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.08	01DW044- RM 37	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.000	Copper	0.41	03KC058- UNIT 3	P1	First Primary draw of 125 milliliters
Lead	0.001	Copper	0.51	03KC058- UNIT 3	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.51	03KC058- UNIT 3	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.43	03KC058- UNIT 3	F02	Flush Sample taken 2 minutes after First Flush Sample

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ANALYTE	RESULT	ANALYTE	RESULT	Sample Description	Site Code	Site Description
Lead	0.007	Copper	0.08	02DW057- OUT UNIT 2	P1	First Primary draw of 125 milliliters
Lead	0.001	Copper	0.13	02DW057- OUT UNIT 2	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.14	02DW057- OUT UNIT 2	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.09	02DW057- OUT UNIT 2	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.761	Copper	0.17	01DW040 - RM 39	P1	First Primary draw of 125 milliliters
Lead	0.026	Copper	0.08	01DW040 - RM 39	P2	Second Primary draw of 125 milliliters
Lead	0.017	Copper	0.07	01DW040 - RM 39	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.008	Copper	0.06	01DW040 - RM 39	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.002	Copper	0.10	02KC056 - OUT UNIT 2	P1	First Primary draw of 125 milliliters
Lead	0.001	Copper	0.34	02KC056 - OUT UNIT 2	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.19	02KC056 - OUT UNIT 2	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.14	02KC056 - OUT UNIT 2	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.002	Copper	0.85	03WC059 - UNIT 3	P1	First Primary draw of 125 milliliters
Lead	0.004	Copper	1.11	03WC059 - UNIT 3	P2	Second Primary draw of 125 milliliters
Lead	0.011	Copper	0.54	03WC059 - UNIT 3	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.005	Copper	1.21	03WC059 - UNIT 3	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.015	Copper	0.33	01CF043 - RM 37	P1	First Primary draw of 125 milliliters
Lead	0.010	Copper	0.37	01CF043 - RM 37	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.10	01CF043 - RM 37	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.09	01CF043 - RM 37	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.003	Copper	0.07	01DW038 - RM 38	P1	First Primary draw of 125 milliliters
Lead	0.004	Copper	0.00	01DW038 - RM 38	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.00	01DW038 - RM 38	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.00	01DW038 - RM 38	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.006	Copper	0.14	01CF037 - RM 38	P1	First Primary draw of 125 milliliters
Lead	0.013	Copper	0.23	01CF037 - RM 38	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.10	01CF037 - RM 38	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.00	01CF037 - RM 38	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.008	Copper	0.15	01DW042 - RM 36	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.06	01DW042 - RM 36	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.05	01DW042 - RM 36	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.05	01DW042 - RM 36	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.006	Copper	0.16	01CF041 - RM 36	P1	First Primary draw of 125 milliliters
Lead	0.011	Copper	0.25	01CF041 - RM 36	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.07	01CF041 - RM 36	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.00	01CF041 - RM 36	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.008	Copper	0.28	01CF047 - RM 35	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.39	01CF047 - RM 35	P2	Second Primary draw of 125 milliliters
Lead	0.015	Copper	0.30	01CF047 - RM 35	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.011	Copper	0.15	01CF047 - RM 35	F02	Flush Sample taken 2 minutes after First Flush Sample

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Potter Elementary
2500 North Averill Avenue
Flint, Michigan 48506

ANALYTE	RESULT	ANALYTE	RESULT	Sample Description	Site Code	Site Description
Lead	0.005	Copper	0.18	01CF045 - RM 34	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.23	01CF045 - RM 34	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.10	01CF045 - RM 34	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.06	01CF045 - RM 34	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.003	Copper	0.07	01DW046 - RM 34	P1	First Primary draw of 125 milliliters
Lead	0.000	Copper	0.07	01DW046 - RM 34	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.06	01DW046 - RM 34	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.06	01DW046 - RM 34	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.006	Copper	0.33	01CF050 - RM 33	P1	First Primary draw of 125 milliliters
Lead	0.005	Copper	0.15	01CF050 - RM 33	P2	Second Primary draw of 125 milliliters
Lead	0.004	Copper	0.13	01CF050 - RM 33	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.11	01CF050 - RM 33	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.007	Copper	0.39	01DW049 - RM 33	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.42	01DW049 - RM 33	P2	Second Primary draw of 125 milliliters
Lead	0.003	Copper	0.17	01DW049 - RM 33	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.004	Copper	0.12	01DW049 - RM 33	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.013	Copper	0.22	01DW048 - RM 35	P1	First Primary draw of 125 milliliters
Lead	0.010	Copper	0.15	01DW048 - RM 35	P2	Second Primary draw of 125 milliliters
Lead	0.009	Copper	0.15	01DW048 - RM 35	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.006	Copper	0.13	01DW048 - RM 35	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.002	Copper	0.73	01WC051 - HALLWAY ACROSS RM 31	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.74	01WC051 - HALLWAY ACROSS RM 31	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	1.65	01WC051 - HALLWAY ACROSS RM 31	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.21	01WC051 - HALLWAY ACROSS RM 31	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.003	Copper	0.89	01WC054 - S END EAST WING	P1	First Primary draw of 125 milliliters
Lead	0.004	Copper	0.90	01WC054 - S END EAST WING	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.61	01WC054 - S END EAST WING	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.47	01WC054 - S END EAST WING	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.004	Copper	0.31	01DW053 - RM 31	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.39	01DW053 - RM 31	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.35	01DW053 - RM 31	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.21	01DW053 - RM 31	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.008	Copper	0.87	01WC055 - SOUTHEND EAST WING	P1	First Primary draw of 125 milliliters
Lead	0.007	Copper	0.83	01WC055 - SOUTHEND EAST WING	P2	Second Primary draw of 125 milliliters
Lead	0.004	Copper	0.52	01WC055 - SOUTHEND EAST WING	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.29	01WC055 - SOUTHEND EAST WING	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.011	Copper	0.34	01DW002 - RM 22	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.05	01DW002 - RM 22	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.00	01DW002 - RM 22	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.00	01DW002 - RM 22	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.011	Copper	0.48	01CF052 - RM 31	P1	First Primary draw of 125 milliliters
Lead	0.007	Copper	0.67	01CF052 - RM 31	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.49	01CF052 - RM 31	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.42	01CF052 - RM 31	F02	Flush Sample taken 2 minutes after First Flush Sample

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Holmes STEM Academy
6602 Oxley Drive
Fint, Michigan 48504

	A	B	C	D	E	F	G
1	**ANALYTE**	**RESULT**	**ANALYTE**	**RESULT**	**Sample Description**	**Site Code**	**Site Description**
2	Lead	0.002	Copper	0.25	01KC005-KITCHEN	CA1	First Sequential Sample
3	Lead	0.003	Copper	0.10	01KC005-KITCHEN	CA2	Second Sequential Sample
4	Lead	0.000	Copper	0.05	01KC005-KITCHEN	CA3	Third Sequential Sample
5	Lead	0.000	Copper	0.00	01KC005-KITCHEN	CA4	Forth Sequential Sample
6	Lead	0.000	Copper	0.00	01KC005-KITCHEN	CA5	Fifth Sequential Sample
7	Lead	0.000	Copper	0.00	01KC005-KITCHEN	CA6	Sixth Sequential Sample
8	Lead	0.000	Copper	0.00	01KC005-KITCHEN	CA7	Seventh Sequential Sample
9	Lead	0.000	Copper	0.00	01KC005-KITCHEN	CA8	Eigth Sequential Sample
10	Lead	0.000	Copper	0.00	01KC005-KITCHEN	CA9	Ninth Sequential Sample
11	Lead	0.000	Copper	0.00	01KC005-KITCHEN	CA10	Tenth Sequential Sample
12	Lead	0.000	Copper	0.15	01CF024-B105 RM	CB1	First Sequential Sample
13	Lead	0.000	Copper	0.16	01CF024-B105 RM	CB2	Second Sequential Sample
14	Lead	0.000	Copper	0.12	01CF024-B105 RM	CB3	Third Sequential Sample
15	Lead	0.000	Copper	0.12	01CF024-B105 RM	CB4	Forth Sequential Sample
16	Lead	0.000	Copper	0.11	01CF024-B105 RM	CB5	Fifth Sequential Sample
17	Lead	0.000	Copper	0.09	01CF024-B105 RM	CB6	Sixth Sequential Sample
18	Lead	0.000	Copper	0.08	01CF024-B105 RM	CB7	Seventh Sequential Sample
19	Lead	0.000	Copper	0.08	01CF024-B105 RM	CB8	Eigth Sequential Sample
20	Lead	0.000	Copper	0.09	01CF024-B105 RM	CB9	Ninth Sequential Sample
21	Lead	0.000	Copper	0.11	01CF024-B105 RM	CB10	Tenth Sequential Sample
22	Lead	0.014	Copper	0.13	01CF032-COMMUNITY RM	CC1	First Sequential Sample
23	Lead	0.002	Copper	0.06	01CF032-COMMUNITY RM	CC2	Second Sequential Sample
24	Lead	0.002	Copper	0.00	01CF032-COMMUNITY RM	CC3	Third Sequential Sample
25	Lead	0.002	Copper	0.00	01CF032-COMMUNITY RM	CC4	Forth Sequential Sample
26	Lead	0.001	Copper	0.00	01CF032-COMMUNITY RM	CC5	Fifth Sequential Sample
27	Lead	0.001	Copper	0.00	01CF032-COMMUNITY RM	CC6	Sixth Sequential Sample
28	Lead	0.001	Copper	0.00	01CF032-COMMUNITY RM	CC7	Seventh Sequential Sample
29	Lead	0.001	Copper	0.00	01CF032-COMMUNITY RM	CC8	Eigth Sequential Sample
30	Lead	0.001	Copper	0.00	01CF032-COMMUNITY RM	CC9	Ninth Sequential Sample
31	Lead	0.001	Copper	0.00	01CF032-COMMUNITY RM	CC10	Tenth Sequential Sample
32	Lead	0.001	Copper	0.12	01WC041-RED HALL	CE1	First Sequential Sample
33	Lead	0.001	Copper	0.11	01WC041-RED HALL	CE2	Second Sequential Sample
34	Lead	0.001	Copper	0.09	01WC041-RED HALL	CE3	Third Sequential Sample
35	Lead	0.001	Copper	0.08	01WC041-RED HALL	CE4	Forth Sequential Sample
36	Lead	0.001	Copper	0.07	01WC041-RED HALL	CE5	Fifth Sequential Sample
37	Lead	0.000	Copper	0.07	01WC041-RED HALL	CE6	Sixth Sequential Sample
38	Lead	0.000	Copper	0.06	01WC041-RED HALL	CE7	Seventh Sequential Sample
39	Lead	0.000	Copper	0.06	01WC041-RED HALL	CE8	Eigth Sequential Sample
40	Lead	0.000	Copper	0.05	01WC041-RED HALL	CE9	Ninth Sequential Sample
41	Lead	0.001	Copper	0.05	01WC041-RED HALL	CE10	Tenth Sequential Sample
42	**ANALYTE**	**RESULT**	**ANALYTE**	**RESULT**	**Sample Description**	**Site Code**	**Site Description**

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	A	B	C	D	E	F	G
43	Lead	0.000	Copper	0.17	01WC043	CF1	First Sequential Sample
44	Lead	0.000	Copper	0.14	01WC043	CF2	Second Sequential Sample
45	Lead	0.000	Copper	0.10	01WC043	CF3	Third Sequential Sample
46	Lead	0.000	Copper	0.09	01WC043	CF4	Forth Sequential Sample
47	Lead	0.000	Copper	0.07	01WC043	CF5	Fifth Sequential Sample
48	Lead	0.000	Copper	0.06	01WC043	CF6	Sixth Sequential Sample
49	Lead	0.000	Copper	0.06	01WC043	CF7	Seventh Sequential Sample
50	Lead	0.000	Copper	0.05	01WC043	CF8	Eigth Sequential Sample
51	Lead	0.000	Copper	0.00	01WC043	CF9	Ninth Sequential Sample
52	Lead	0.000	Copper	0.00	01WC043	CF10	Tenth Sequential Sample
53	Lead	0.004	Copper	0.18	01CF015 RM B-109	P1	First Primary draw of 125 milliliters
54	Lead	0.002	Copper	0.67	01CF015 RM B109	P2	Second Primary draw of 125 milliliters
55	Lead	0.000	Copper	0.46	01CF015 RM B109	F01	Flush Sample taken 30 Seconds after Second Primary Draw
56	Lead	0.000	Copper	0.45	01CF015 RM B109	F02	Flush Sample taken 2 minutes after First Flush Sample
57	Lead	0.004	Copper	0.68	01DW019 RM B102	P1	First Primary draw of 125 milliliters
58	Lead	0.000	Copper	0.65	01DW019 RM B102	P2	Second Primary draw of 125 milliliters
59	Lead	0.000	Copper	0.47	01DW019 RM B102	F01	Flush Sample taken 30 Seconds after Second Primary Draw
60	Lead	0.000	Copper	0.25	01DW019 RM B102	F02	Flush Sample taken 2 minutes after First Flush Sample
61	Lead	0.005	Copper	0.24	01DW023 RM B105	P1	First Primary draw of 125 milliliters
62	Lead	0.002	Copper	0.19	01DW023 RM B105	P2	Second Primary draw of 125 milliliters
63	Lead	0.000	Copper	0.14	01DW023 RM B105	F01	Flush Sample taken 30 Seconds after Second Primary Draw
64	Lead	0.000	Copper	0.08	01DW023 RM B105	F02	Flush Sample taken 2 minutes after First Flush Sample
65	Lead	0.002	Copper	0.13	01CF024 RM B105	P1	First Primary draw of 125 milliliters
66	Lead	0.005	Copper	0.18	01CF024 RM B105	P2	Second Primary draw of 125 milliliters
67	Lead	0.000	Copper	0.08	01CF024 RM B105	F01	Flush Sample taken 30 Seconds after Second Primary Draw
68	Lead	0.000	Copper	0.06	01CF024 RM B105	F02	Flush Sample taken 2 minutes after First Flush Sample
69	Lead	0.001	Copper	0.34	01KC022 RM B102	P1	First Primary draw of 125 milliliters
70	Lead	0.002	Copper	0.53	01KC022 RM B102	P2	Second Primary draw of 125 milliliters
71	Lead	0.000	Copper	0.08	01KC022 RM B102	F01	Flush Sample taken 30 Seconds after Second Primary Draw
72	Lead	0.000	Copper	0.06	01KC022 RM B102	F02	Flush Sample taken 2 minutes after First Flush Sample
73	Lead	0.005	Copper	0.26	01KC016 RM B109	P1	First Primary draw of 125 milliliters
74	Lead	0.004	Copper	0.52	01KC016 RM B109	P2	Second Primary draw of 125 milliliters
75	Lead	0.000	Copper	0.44	01KC016 RM B109	F01	Flush Sample taken 30 Seconds after Second Primary Draw
76	Lead	0.000	Copper	0.27	01KC016 RM B109	F02	Flush Sample taken 2 minutes after First Flush Sample
77	Lead	0.000	Copper	0.21	01CF020 RM B102	P1	First Primary draw of 125 milliliters
78	Lead	0.000	Copper	0.53	01CF020 RM B102	P2	Second Primary draw of 125 milliliters

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Results in RED exceed 15 ppb for lead or 1.3 ppm for Copper
1 ppb = 0.001 mg/L

Holmes STEM Academy
6602 Oxley Drive
Fint, Michigan 48504

	A	B	C	D	E	F	G
79	Lead	0.000	Copper	0.47	01CF020 RM B102	F01	Flush Sample taken 30 Seconds after Second Primary Draw
80	Lead	0.000	Copper	0.06	01CF020 RM B102	F02	Flush Sample taken 2 minutes after First Flush Sample
81	**ANALYTE**	**RESULT**	**ANALYTE**	**RESULT**	**Sample Description**	**Site Code**	**Site Description**
82	Lead	0.002	Copper	0.33	01KC021 RM B102	P1	First Primary draw of 125 milliliters
83	Lead	0.002	Copper	0.75	01KC021 RM B102	P2	Second Primary draw of 125 milliliters
84	Lead	0.000	Copper	0.11	01KC021 RM B102	F01	Flush Sample taken 30 Seconds after Second Primary Draw
85	Lead	0.000	Copper	0.07	01KC021 RM B102	F02	Flush Sample taken 2 minutes after First Flush Sample
86	Lead	0.018	Copper	0.61	01DW014 RM B109	P1	Second Primary draw of 125 milliliters
87	Lead	0.002	Copper	1.01	01DW014 RM B109	P2	Second Primary draw of 125 milliliters
88	Lead	0.000	Copper	0.90	01DW014 RM B109	F01	Flush Sample taken 30 Seconds after Second Primary Draw
89	Lead	0.000	Copper	0.48	01DW014 RM B109	F02	Flush Sample taken 2 minutes after First Flush Sample
90	Lead	0.059	Copper	0.09	01DW018 RM B102	P1	First Primary draw of 125 milliliters
91	Lead	0.035	Copper	0.11	01DW018 RM B102	P2	Second Primary draw of 125 milliliters
92	Lead	0.020	Copper	0.06	01DW018 RM B102	F01	Flush Sample taken 30 Seconds after Second Primary Draw
93	Lead	0.004	Copper	0.00	01DW018 RM B102	F02	Flush Sample taken 2 minutes after First Flush Sample
94	Lead	0.700	Copper	0.36	01KC033 CMTY RM	P1	First Primary draw of 125 milliliters
95	Lead	0.181	Copper	1.47	01KC033 CMTY RM	P2	Second Primary draw of 125 milliliters
96	Lead	0.010	Copper	0.14	01KC033 CMTY RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
97	Lead	0.002	Copper	0.06	01KC033 CMTY RM	F02	Flush Sample taken 2 minutes after First Flush Sample
98	Lead	0.002	Copper	0.19	01KC011 RM B110	P1	First Primary draw of 125 milliliters
99	Lead	0.002	Copper	0.58	01KC011 RM B110	P2	Second Primary draw of 125 milliliters
100	Lead	0.000	Copper	0.09	01KC011 RM B110	F01	Flush Sample taken 30 Seconds after Second Primary Draw
101	Lead	0.000	Copper	0.07	01KC011 RM B110	F02	Flush Sample taken 2 minutes after First Flush Sample
102	Lead	0.006	Copper	0.16	01KC017 RM B109	P1	First Primary draw of 125 milliliters
103	Lead	0.004	Copper	0.32	01KC017 RM B109	P2	Second Primary draw of 125 milliliters
104	Lead	0.000	Copper	0.20	01KC017 RM B109	F01	Flush Sample taken 30 Seconds after Second Primary Draw
105	Lead	0.000	Copper	0.15	01KC017 RM B109	F02	Flush Sample taken 2 minutes after First Flush Sample
106	Lead	0.021	Copper	0.34	01KC034 CMTY RM	P1	First Primary draw of 125 milliliters
107	Lead	0.010	Copper	0.79	01KC034 CMTY RM	P2	Second Primary draw of 125 milliliters
108	Lead	0.003	Copper	0.09	01KC034 CMTY RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
109	Lead	0.001	Copper	0.05	01KC034 CMTY RM	F02	Flush Sample taken 2 minutes after First Flush Sample
110	Lead	0.007	Copper	0.13	01CF028 RM B114	P1	First Primary draw of 125 milliliters
111	Lead	0.002	Copper	0.09	01CF028 RM B114	P2	Second Primary draw of 125 milliliters

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	A	B	C	D	E	F	G
112	Lead	0.000	Copper	0.00	01CF028 RM B114	F01	Flush Sample taken 30 Seconds after Second Primary Draw
113	Lead	0.000	Copper	0.00	01CF028 RM B114	F02	Flush Sample taken 2 minutes after First Flush Sample
114	Lead	0.034	Copper	0.18	01CF032 CMTY RM	P1	First Primary draw of 125 milliliters
115	Lead	0.015	Copper	0.13	01CF032 CMTY RM	P2	Second Primary draw of 125 milliliters
116	Lead	0.004	Copper	0.06	01CF032 CMTY RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
117	Lead	0.004	Copper	0.00	01CF032 CMTY RM	F02	Flush Sample taken 2 minutes after First Flush Sample
118	Lead	0.012	Copper	0.10	01DW035 HALL	P1	First Primary draw of 125 milliliters
119	Lead	0.002	Copper	0.11	01DW035 HALL	P2	Second Primary draw of 125 milliliters
120	Lead	0.002	Copper	0.00	01DW035 HALL	F01	Flush Sample taken 30 Seconds after Second Primary Draw
121	Lead	0.000	Copper	0.00	01DW035 HALL	F02	Flush Sample taken 2 minutes after First Flush Sample
122	**ANALYTE**	**RESULT**	**ANALYTE**	**RESULT**	**Sample Description**	**Site Code**	**Site Description**
123	Lead	0.006	Copper	0.78	01DW027 RM B114	P1	First Primary draw of 125 milliliters
124	Lead	0.007	Copper	0.26	01DW027 RM B114	P2	Second Primary draw of 125 milliliters
125	Lead	0.001	Copper	0.11	01DW027 RM B114	F01	Flush Sample taken 30 Seconds after Second Primary Draw
126	Lead	0.000	Copper	0.00	01DW027 RM B114	F02	Flush Sample taken 2 minutes after First Flush Sample
127	Lead	0.019	Copper	1.04	01DW031 CMTY RM	P1	First Primary draw of 125 milliliters
128	Lead	0.077	Copper	0.62	01DW031 CMTY RM	P2	Second Primary draw of 125 milliliters
129	Lead	0.004	Copper	0.14	01DW031 CMTY RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
130	Lead	0.003	Copper	0.07	01DW031 CMTY RM	F02	Flush Sample taken 2 minutes after First Flush Sample
131	Lead	0.015	Copper	0.20	01KC036 MAIN OFC	P1	First Primary draw of 125 milliliters
132	Lead	0.015	Copper	0.12	01KC036 MAIN OFC	P2	Second Primary draw of 125 milliliters
133	Lead	0.002	Copper	0.00	01KC036 MAIN OFC	F01	Flush Sample taken 30 Seconds after Second Primary Draw
134	Lead	0.000	Copper	0.00	01KC036 MAIN OFC	F02	Flush Sample taken 2 minutes after First Flush Sample
135	Lead	0.004	Copper	0.15	01KC026 RM B105	P1	First Primary draw of 125 milliliters
136	Lead	0.003	Copper	0.51	01KC026 RM B105	P2	Second Primary draw of 125 milliliters
137	Lead	0.000	Copper	0.07	01KC026 RM B105	F01	Flush Sample taken 30 Seconds after Second Primary Draw
138	Lead	0.000	Copper	0.06	01KC026 RM B105	F02	Flush Sample taken 2 minutes after First Flush Sample
139	Lead	0.004	Copper	0.13	01KC030 RM B114	P1	First Primary draw of 125 milliliters
140	Lead	0.003	Copper	0.45	01KC030 RM B114	P2	Second Primary draw of 125 milliliters
141	Lead	0.000	Copper	0.00	01KC030 RM B114	F01	Flush Sample taken 30 Seconds after Second Primary Draw
142	Lead	0.000	Copper	0.00	01KC030 RM B114	F02	Flush Sample taken 2 minutes after First Flush Sample
143	Lead	0.003	Copper	0.14	01WC040 RED HALL	P1	First Primary draw of 125 milliliters
144	Lead	0.002	Copper	0.18	01WC040 RED HALL	P2	Second Primary draw of 125 milliliters

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1 ppb = 0.001 mg/L

	A	B	C	D	E	F	G
145	Lead	0.003	Copper	0.20	01WC040 RED HALL	F01	Flush Sample taken 30 Seconds after Second Primary Draw
146	Lead	0.001	Copper	0.09	01WC040 RED HALL	F02	Flush Sample taken 2 minutes after First Flush Sample
147	Lead	0.007	Copper	0.13	01KC029 RM B114	P1	First Primary draw of 125 milliliters
148	Lead	0.003	Copper	1.66	01KC029 RM B114	P2	Second Primary draw of 125 milliliters
149	Lead	0.000	Copper	0.10	01KC029 RM B114	F01	Flush Sample taken 30 Seconds after Second Primary Draw
150	Lead	0.000	Copper	0.00	01KC029 RM B114	F02	Flush Sample taken 2 minutes after First Flush Sample
151	Lead	0.004	Copper	0.37	01KC025 RM B105	P1	First Primary draw of 125 milliliters
152	Lead	0.002	Copper	0.71	01KC025 RM B105	P2	Second Primary draw of 125 milliliters
153	Lead	0.000	Copper	0.08	01KC025 RM B105	F01	Flush Sample taken 30 Seconds after Second Primary Draw
154	Lead	0.000	Copper	0.07	01KC025 RM B105	F02	Flush Sample taken 2 minutes after First Flush Sample
155	Lead	0.015	Copper	0.15	01DW039 RED HALL BY BOYS RR	P1	First Primary draw of 125 milliliters
156	Lead	0.005	Copper	0.09	01DW039 RED HALL BY BOYS RR	P2	Second Primary draw of 125 milliliters
157	Lead	0.002	Copper	0.00	01DW039 RED HALL BY BOYS RR	F01	Flush Sample taken 30 Seconds after Second Primary Draw
158	Lead	0.000	Copper	0.00	01DW039 RED HALL BY BOYS RR	F02	Flush Sample taken 2 minutes after First Flush Sample
159	Lead	0.000	Copper	0.22	01WC043 BLUE HALL	P1	First Primary draw of 125 milliliters
160	Lead	0.000	Copper	0.29	01WC043 BLUE HALL	P2	Second Primary draw of 125 milliliters
161	Lead	0.002	Copper	0.29	01WC043 BLUE HALL	F01	Flush Sample taken 30 Seconds after Second Primary Draw
162	Lead	0.000	Copper	0.13	01WC043 BLUE HALL	F02	Flush Sample taken 2 minutes after First Flush Sample
163	**ANALYTE**	**RESULT**	**ANALYTE**	**RESULT**	**Sample Description**	**Site Code**	**Site Description**
164	Lead	0.011	Copper	0.11	01DW038 YELLOW HALL BY GIRLS RR	P1	First Primary draw of 125 milliliters
165	Lead	0.003	Copper	0.06	01DW038 YELLOW HALL BY GIRLS RR	P2	Second Primary draw of 125 milliliters
166	Lead	0.000	Copper	0.00	01DW038 YELLOW HALL BY GIRLS RR	F01	Flush Sample taken 30 Seconds after Second Primary Draw
167	Lead	0.000	Copper	0.00	01DW038 YELLOW HALL BY GIRLS RR	F02	Flush Sample taken 2 minutes after First Flush Sample
168	Lead	0.024	Copper	0.16	01DW042 GREEN	P1	First Primary draw of 125 milliliters
169	Lead	0.017	Copper	0.14	01DW042 GREEN	P2	Second Primary draw of 125 milliliters
170	Lead	0.004	Copper	0.07	01DW042 GREEN	F01	Flush Sample taken 30 Seconds after Second Primary Draw
171	Lead	0.003	Copper	0.06	01DW042 GREEN	F02	Flush Sample taken 2 minutes after First Flush Sample
172	Lead	0.011	Copper	0.10	01WC041 RED HALL	P1	First Primary draw of 125 milliliters
173	Lead	0.002	Copper	0.10	01WC041 RED HALL	P2	Second Primary draw of 125 milliliters
174	Lead	0.001	Copper	0.09	01WC041 RED HALL	F01	Flush Sample taken 30 Seconds after Second Primary Draw
175	Lead	0.000	Copper	0.07	01WC041 RED HALL	F02	Flush Sample taken 2 minutes after First Flush Sample
176	Lead	0.032	Copper	0.12	01KC037 SUPPLY RM	P1	First Primary draw of 125 milliliters
177	Lead	0.031	Copper	0.15	01KC037 SUPPLY RM	P2	Second Primary draw of 125 milliliters

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Holmes STEM Academy
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Fint, Michigan 48504

	A	B	C	D	E	F	G
178	Lead	0.008	Copper	0.19	01KC037 SUPPLY RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
179	Lead	0.002	Copper	0.20	01KC037 SUPPLY RM	F02	Flush Sample taken 2 minutes after First Flush Sample
180	Lead	0.017	Copper	0.19	01DW001 BOYS LOCKER	P1	First Primary draw of 125 milliliters
181	Lead	0.012	Copper	0.17	01DW001 BOYS LOCKER	P2	Second Primary draw of 125 milliliters
182	Lead	0.005	Copper	0.14	01DW001 BOYS LOCKER	F01	Flush Sample taken 30 Seconds after Second Primary Draw
183	Lead	0.005	Copper	0.12	01DW001 BOYS LOCKER	F02	Flush Sample taken 2 minutes after First Flush Sample
184	Lead	0.000	Copper	0.20	01KC005 KITCHEN	P1	First Primary draw of 125 milliliters
185	Lead	0.001	Copper	0.77	01KC005 KITCHEN	P2	Second Primary draw of 125 milliliters
186	Lead	0.005	Copper	0.13	01KC005 KITCHEN	F01	Flush Sample taken 30 Seconds after Second Primary Draw
187	Lead	0.000	Copper	0.00	01KC005 KITCHEN	F02	Flush Sample taken 2 minutes after First Flush Sample
188	Lead	0.002	Copper	0.16	01KC010 RM 110	P1	First Primary draw of 125 milliliters
189	Lead	0.002	Copper	1.32	01KC010 RM B110	P2	Second Primary draw of 125 milliliters
190	Lead	0.000	Copper	0.09	01KC010 RM B110	F01	Flush Sample taken 30 Seconds after Second Primary Draw
191	Lead	0.000	Copper	0.07	01KC010 RM B110	F02	Flush Sample taken 2 minutes after First Flush Sample
192	Lead	0.022	Copper	0.38	01DW006 CAFETERIA	P1	First Primary draw of 125 milliliters
193	Lead	0.020	Copper	0.85	01DW006 CAFETERIA	P2	Second Primary draw of 125 milliliters
194	Lead	0.005	Copper	0.68	01DW006 CAFETERIA	F01	Flush Sample taken 30 Seconds after Second Primary Draw
195	Lead	0.004	Copper	0.73	01DW006 CAFETERIA	F02	Flush Sample taken 2 minutes after First Flush Sample
196	Lead	0.018	Copper	0.20	01DW002 GIRLS LOCKR RM	P1	First Primary draw of 125 milliliters
197	Lead	0.009	Copper	0.16	01DW002 GIRLS LOCKR RM	P2	Second Primary draw of 125 milliliters
198	Lead	0.009	Copper	0.20	01DW002 GIRLS LOCKR RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
199	Lead	0.004	Copper	0.18	01DW002 GIRLS LOCKR RM	F02	Flush Sample taken 2 minutes after First Flush Sample
200	Lead	0.011	Copper	0.11	01DW003 HALLWAY BY GIRLS LOCKER RM	P1	First Primary draw of 125 milliliters
201	Lead	0.015	Copper	0.13	01DW003 HALLWAY BY GIRLS LOCKER RM	P2	Second Primary draw of 125 milliliters
202	Lead	0.010	Copper	0.14	01DW003 HALLWAY BY GIRLS LOCKER RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
203	Lead	0.003	Copper	0.13	01DW003 HALLWAY BY GIRLS LOCKER RM	F02	Flush Sample taken 2 minutes after First Flush Sample
204	**ANALYTE**	**RESULT**	**ANALYTE**	**RESULT**	**Sample Description**	**Site Code**	**Site Description**
205	Lead	0.002	Copper	0.12	01CF013 RM B110	P1	First Primary draw of 125 milliliters
206	Lead	0.001	Copper	0.45	01CF013 RM B110	P2	Second Primary draw of 125 milliliters
207	Lead	0.000	Copper	0.07	01CF013 RM B110	F01	Flush Sample taken 30 Seconds after Second Primary Draw
208	Lead	0.000	Copper	0.06	01CF013 RM B110	F02	Flush Sample taken 2 minutes after First Flush Sample
209	Lead	0.004	Copper	0.66	01DW012 RM B110	P1	First Primary draw of 125 milliliters
210	Lead	0.000	Copper	0.95	01DW012 RM B110	P2	Second Primary draw of 125 milliliters

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1 ppb = 0.001 mg/L

	A	B	C	D	E	F	G
211	Lead	0.000	Copper	0.62	01DW012 RM B110	F01	Flush Sample taken 30 Seconds after Second Primary Draw
212	Lead	0.000	Copper	0.06	01DW012 RM B110	F02	Flush Sample taken 2 minutes after First Flush Sample
213	Lead	0.015	Copper	0.64	01DW007 CAFETERIA	P1	First Primary draw of 125 milliliters
214	Lead	0.005	Copper	0.75	01DW007 CAFETERIA	P2	Second Primary draw of 125 milliliters
215	Lead	0.004	Copper	0.73	01DW007 CAFETERIA	F01	Flush Sample taken 30 Seconds after Second Primary Draw
216	Lead	0.004	Copper	0.73	01DW007 CAFETERIA	F02	Flush Sample taken 2 minutes after First Flush Sample
217	Lead	0.047	Copper	0.44	01DW008 CAFE	P1	First Primary draw of 125 milliliters
218	Lead	0.008	Copper	0.67	01DW008 CAFE	P2	Second Primary draw of 125 milliliters
219	Lead	0.006	Copper	0.75	01DW008 CAFE	F01	Flush Sample taken 30 Seconds after Second Primary Draw
220	Lead	0.017	Copper	0.69	01DW008 CAFE	F02	Flush Sample taken 2 minutes after First Flush Sample
221	Lead	0.022	Copper	0.64	01DW009 CAFE	P1	First Primary draw of 125 milliliters
222	Lead	0.016	Copper	0.66	01DW009 CAFE	P2	Second Primary draw of 125 milliliters
223	Lead	0.013	Copper	0.66	01DW009 CAFE	F01	Flush Sample taken 30 Seconds after Second Primary Draw
224	Lead	0.008	Copper	0.53	01DW009 CAFE	F02	Flush Sample taken 2 minutes after First Flush Sample
225	Lead	0.016	Copper	0.18	01DW004 HALL BY GIRLS LOCKER	P1	First Primary draw of 125 milliliters
226	Lead	0.004	Copper	0.14	01DW004 HALL BY GIRLS LOCKER	P2	Second Primary draw of 125 milliliters
227	Lead	0.003	Copper	0.13	01DW004 HALL BY GIRLS LOCKER	F01	Flush Sample taken 30 Seconds after Second Primary Draw
228	Lead	0.002	Copper	0.12	01DW004 HALL BY GIRLS LOCKER	F02	Flush Sample taken 2 minutes after First Flush Sample

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Flint Community Schools Administration Building
923 East Kearsley Street
Flint, Michigan 48503

	A	B	C	D	E	F	G
1	**ANALYTE**	**RESULT**	**ANALYTE**	**RESULT**	**Sample Description**	**Site Code**	**Site Description**
2	Lead	0.004	Copper	0.09	01KC005 - RM 3	P1	First Primary draw of 125 milliliters
3	Lead	0.004	Copper	0.05	01KC005 - RM 3	P2	Second Primary draw of 125 milliliters
4	Lead	0.002	Copper	0.00	01KC005 - RM 3	F01	Flush Sample taken 30 Seconds after Second Primary Draw
5	Lead	0.000	Copper	0.00	01KC005 - RM 3	F02	Flush Sample taken 2 minutes after First Flush Sample
6	Lead	0.005	Copper	0.08	03DW010 - NEXT TO FAN RM 212	P1	First Primary draw of 125 milliliters
7	Lead	0.003	Copper	0.07	03DW010 - NEXT TO FAN RM 212	P2	Second Primary draw of 125 milliliters
8	Lead	0.002	Copper	0.07	03DW010 - NEXT TO FAN RM 212	F01	Flush Sample taken 30 Seconds after Second Primary Draw
9	Lead	0.003	Copper	0.08	03DW010 - NEXT TO FAN RM 212	F02	Flush Sample taken 2 minutes after First Flush Sample
10	Lead	0.003	Copper	0.07	02DW009 - NEXT TO CONFERENCE RM	P1	First Primary draw of 125 milliliters
11	Lead	0.000	Copper	0.00	02DW009 - NEXT TO CONFERENCE RM	P2	Second Primary draw of 125 milliliters
12	Lead	0.001	Copper	0.00	02DW009 - NEXT TO CONFERENCE RM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
13	Lead	0.000	Copper	0.00	02DW009 - NEXT TO CONFERENCE RM	F02	Flush Sample taken 2 minutes after First Flush Sample
14	Lead	0.000	Copper	0.44	02WC008 - NEXT TO WOMENS R/R	P1	First Primary draw of 125 milliliters
15	Lead	0.000	Copper	0.43	02WC008 - NEXT TO WOMENS R/R	P2	Second Primary draw of 125 milliliters
16	Lead	0.001	Copper	0.22	02WC008 - NEXT TO WOMENS R/R	F01	Flush Sample taken 30 Seconds after Second Primary Draw
17	Lead	0.000	Copper	0.07	02WC008 - NEXT TO WOMENS R/R	F02	Flush Sample taken 2 minutes after First Flush Sample
18	Lead	0.019	Copper	0.08	03DW011 NEXT TO RM 207	P1	First Primary draw of 125 milliliters
19	Lead	0.004	Copper	0.08	03DW011 NEXT TO RM 207	P2	Second Primary draw of 125 milliliters
20	Lead	0.003	Copper	0.05	03DW011 NEXT TO RM 207	F01	Flush Sample taken 30 Seconds after Second Primary Draw
21	Lead	0.002	Copper	0.00	03DW011 NEXT TO RM 207	F02	Flush Sample taken 2 minutes after First Flush Sample
22	Lead	0.018	Copper	0.14	01DW004 HALLWAY NEXT TO WOMEN EMPL R/R	P1	First Primary draw of 125 milliliters
23	Lead	0.009	Copper	0.06	01DW004 HALLWAY NEXT TO WOMEN EMPL R/R	P2	Second Primary draw of 125 milliliters
24	Lead	0.003	Copper	0.00	01DW004 HALLWAY NEXT TO WOMEN EMPL R/R	F01	Flush Sample taken 30 Seconds after Second Primary Draw
25	Lead	0.002	Copper	0.00	01DW004 HALLWAY NEXT TO WOMEN EMPL R/R	F02	Flush Sample taken 2 minutes after First Flush Sample
26	Lead	0.030	Copper	0.15	02DW007 NEXT TO MECH RM 111	P1	First Primary draw of 125 milliliters
27	Lead	0.015	Copper	0.09	02DW007 NEXT TO MECH RM 111	P2	Second Primary draw of 125 milliliters
28	Lead	0.014	Copper	0.09	02DW007 NEXT TO MECH RM 111	F01	Flush Sample taken 30 Seconds after Second Primary Draw
29	Lead	0.004	Copper	0.08	02DW007 NEXT MECH RM 111	F02	Flush Sample taken 2 minutes after First Flush Sample
30	Lead	0.003	Copper	0.17	01KC001 EMPLOYEE LOUNGE	P1	First Primary draw of 125 milliliters
31	Lead	0.015	Copper	0.27	01KC001 EMPLOYEE LOUNGE	P2	Second Primary draw of 125 milliliters

Note: Results of "Not Detected" have been converted to a numerical value of zero to allow for ease of sorting.
Results in RED exceed 15 ppb for lead or 1.3 ppm for Copper
1 ppb = 0.001 mg/L

	A	B	C	D	E	F	G
32	Lead	0.003	Copper	0.17	01KC001 EMPLOYEE LOUNGE	F01	Flush Sample taken 30 Seconds after Second Primary Draw
33	Lead	0.000	Copper	0.09	01KC001 EMPLOYEE LOUNGE	F02	Flush Sample taken 2 minutes after First Flush Sample
34	Lead	0.002	Copper	0.13	01KC002 OFF EMPLOYEE LOUNGE RM 10A	P1	First Primary draw of 125 milliliters
35	Lead	0.000	Copper	0.12	01KC002 OFF EMPLOYEE LOUNGE RM 10A	P2	Second Primary draw of 125 milliliters
36	Lead	0.000	Copper	0.00	01KC002 OFF EMPLOYEE LOUNGE RM 10A	F01	Flush Sample taken 30 Seconds after Second Primary Draw
37	Lead	0.000	Copper	0.00	01KC002 OFF EMPLOYEE LOUNGE RM 10A	F02	Flush Sample taken 2 minutes after First Flush Sample
38	Lead	0.001	Copper	0.09	02KC006 RM 119	P1	First Primary draw of 125 milliliters
39	Lead	0.000	Copper	0.05	02KC006 RM 119	P2	Second Primary draw of 125 milliliters
40	Lead	0.000	Copper	0.00	02KC006 RM 119	F01	Flush Sample taken 30 Seconds after Second Primary Draw
41	Lead	0.000	Copper	0.00	02KC006 RM 119	F02	Flush Sample taken 2 minutes after First Flush Sample
42	**ANALYTE**	**RESULT**	**ANALYTE**	**RESULT**	**Sample Description**	**Site Code**	**Site Description**
43	Lead	0.009	Copper	0.06	01DW003 HALLWAY NEXT TO RM 8	P1	First Primary draw of 125 milliliters
44	Lead	0.003	Copper	0.00	01DW003 HALLWAY NEXT TO RM 8	P2	Second Primary draw of 125 milliliters
45	Lead	0.000	Copper	0.00	01DW003 HALLWAY NEXT TO RM 8	F01	Flush Sample taken 30 Seconds after Second Primary Draw
46	Lead	0.003	Copper	0.08	01DW003 HALLWAY NEXT TO RM 8	F02	Flush Sample taken 2 minutes after First Flush Sample
47	Lead	0.000	Copper	0.00	02KC006-RM 119	CA1	First Sequential Sample
48	Lead	0.000	Copper	0.00	02KC006-RM 119	CA2	Second Sequential Sample
49	Lead	0.000	Copper	0.00	02KC006-RM 119	CA3	Third Sequential Sample
50	Lead	0.000	Copper	0.00	02KC006-RM 119	CA4	Forth Sequential Sample
51	Lead	0.000	Copper	0.00	02KC006- RM 119	CA5	Fifth Sequential Sample
52	Lead	0.000	Copper	0.00	02KC006-RM 119	CA6	Sixth Sequential Sample
53	Lead	0.000	Copper	0.00	02KC006- RM 119	CA7	Seventh Sequential Sample
54	Lead	0.000	Copper	0.00	02KC006- RM 119	CA8	Eigth Sequential Sample
55	Lead	0.000	Copper	0.00	02KC006-RM 119	CA9	Ninth Sequential Sample
56	Lead	0.000	Copper	0.00	02KC006- RM 119	CA10	Tenth Sequential Sample
57	Lead	0.001	Copper	0.15	01KC001-EMPLOYEE LOUNGE	CB1	First Sequential Sample
58	Lead	0.000	Copper	0.10	01KC001-EMPLOYEE LOUNGE	CB2	Second Sequential Sample
59	Lead	0.000	Copper	0.07	01KC001-EMPLOYEE LOUNGE	CB3	Third Sequential Sample
60	Lead	0.000	Copper	0.06	01KC001-EMPLOYEE LOUNGE	CB4	Forth Sequential Sample
61	Lead	0.000	Copper	0.06	01KC001-EMPLOYEE LOUNGE	CB5	Fifth Sequential Sample
62	Lead	0.000	Copper	0.06	01KC001-EMPLOYEE LOUNGE	CB6	Sixth Sequential Sample
63	Lead	0.000	Copper	0.05	01KC001-EMPLOYEE LOUNGE	CB7	Seventh Sequential Sample
64	Lead	0.000	Copper	0.05	01KC001-EMPLOYEE LOUNGE	CB8	Eigth Sequential Sample
65	Lead	0.000	Copper	0.05	01KC001-EMPLOYEE LOUNGE	CB9	Ninth Sequential Sample
66	Lead	0.000	Copper	0.05	01KC001-EMPLOYEE LOUNGE	CB10	Tenth Sequential Sample
67	Lead	0.024	Copper	0.08	03BF012-WOMENS R/R	CC1	First Sequential Sample
68	Lead	0.005	Copper	0.00	03BF012- WOMENS R/R	CC2	Second Sequential Sample
69	Lead	0.003	Copper	0.00	03BF012-WOMENS R/R	CC3	Third Sequential Sample

Note: Results of "Not Detected" have been converted to a numerical value of zero to allow for ease of sorting.
Results in RED exceed 15 ppb for lead or 1.3 ppm for Copper
1 ppb = 0.001 mg/L

	A	B	C	D	E	F	G
70	Lead	0.003	Copper	0.00	03BF012-WOMENS R/R	CC4	Forth Sequential Sample
71	Lead	0.003	Copper	0.00	03BF012-WOMENS R/R	CC5	Fifth Sequential Sample
72	Lead	0.002	Copper	0.00	03BF012-WOMENS R/R	CC6	Sixth Sequential Sample
73	Lead	0.002	Copper	0.00	03BF012-WOMENS R/R	CC7	Seventh Sequential Sample
74	Lead	0.002	Copper	0.00	03BF012-WOMENS R/R	CC8	Eigth Sequential Sample
75	Lead	0.002	Copper	0.00	03BF012-WOMENS R/R	CC9	Ninth Sequential Sample
76	Lead	0.002	Copper	0.00	03BF012-WOMENS R/R	CC10	Tenth Sequential Sample

Note: Results of "Not Detected" have been converted to a numerical value of zero to allow for ease of sorting.
Results in RED exceed 15 ppb for lead or 1.3 ppm for Copper
1 ppb = 0.001 mg/L

From: Krisztian, George (DEQ)
Sent: Saturday, January 02, 2016 11:50 AM
To: Busch, Stephen (DEQ);DeBruyn, Dana (DEQ);Madziar, Joseph (LARA)
Subject: FW: BF052 NORTHWESTERN HIGH SCHOOL
Attachments: 20151230_142409.jpg

Attached is a picture of the point used for the last sequential set at Flint Northwestern. The drinking fountain that was initially tagged for use as the last point for sequential sampling was not conducive to use. In looking at the blue print this bathroom faucet was in close proximity and was at the end of the service run. This point was named BF052.

George

George L. Krisztian
Flint Action Plan Coordinator
Laboratory Director
Michigan Department of Environmental Quality
Desk ph (517) 284-6719
Cell ph PPI

From: Devereaux, Tracy Jo (DEQ)
Sent: Wednesday, December 30, 2015 2:34 PM
To: Krisztian, George (DEQ)
Subject: BF052 NORTHWESTERN HIGH SCHOOL


BF052

From: Schinderle, Jack (DEQ)
Sent: Tuesday, January 05, 2016 9:06 AM
To: Busch, Stephen (DEQ);Krisztian, George (DEQ);DeBruyn, Dana (DEQ)
Cc: Madziar, Joseph (LARA);Neuman, Andy (LARA);Kohlhepp, Amy (DEQ)
Subject: RE: Doyle Ryder Report - Draft for Review/Final/Publish

Question:
01KC044 in the principal's office-
Outlet: Bathroom Faucet (01KC044 Alternate)
Location: Principal Office Bathroom
Results: P1=48 parts per billion, P2=30 parts per billion,
F01=3 parts per billion, F02=2 parts per billion

Faucet 01KC044 was not accessible during sampling on November 7, 2015. Instead an alternate faucet in the adjacent bathroom was sampled. This faucet is not used for drinking or cooking and an assessment was not completed on the fixture or its connecting plumbing.

No Image Available

The results for this location suggest the highest contributions of lead may be from the faucet and its connecting plumbing. Replacement of this fixture and its connection plumbing with lead-free materials will significantly reduce lead exposure at this location if it is ever used for drinking or cooking. If replacement is not feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet was not accessible and another faucet was sampled instead. "Yet, the results from this location suggest…" This paragraph is confusing in that there was no assessment done but there is discussion about lead results.

Let me know when the review is complete and I will have the document put in final format.

jack

From: Busch, Stephen (DEQ)
Sent: Monday, January 04, 2016 1:49 PM
To: Krisztian, George (DEQ); Schinderle, Jack (DEQ); Madziar, Joseph (LARA); DeBruyn, Dana (DEQ); Neuman, Andy (LARA)
Subject: Doyle Ryder Report - Draft for Review/Final/Publish

Attached is the draft report for the Doyle Ryder Elementary school in Flint. Please review the report for content. Note that this report includes new language regarding outlets not sampled for being out of service so please review carefully.

Jack you may forward this on to OEA staff that are assigned to finalize and convert into a publication. Once complete please send the final copy back to George and I to take a last look before we release the report.

Thanks everyone.

Stephen Busch, P.E.
MDEQ Lansing District Coordinator
Office of Drinking Water and Municipal Assistance

Lansing and Jackson District Supervisor
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