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**From:** Shekter Smith, Liane (DEQ)  
**Sent:** Friday, November 13, 2015 3:58 PM  
**To:** Shekter, Jean (DEQ)  
**Subject:** Draft sampling protocol for schools  
**Attachments:** Working Draft - DEQ Collecting Water Samples at Schools 11-6-15.docx

FYI – as requested. Mike has a hard copy for you.

*DRAFT – WORK IN PROGRESS*  
 Protocol for Collecting Water Samples at Schools for Lead Analysis

The following is the procedure being used by the Michigan Department of Environmental Quality to ensure samples from schools on city of Flint water are collected in a systematic, consistent manner to provide meaningful results. By following the below procedures school and health officials will have information to be able to identify and correct sources that contribute lead into drinking water. The procedures being used are:

- With the assistance from Department of Licensing and Regulatory Affairs (LARA) staff, conduct an on-site assessment of the building plumbing to identify plumbing components of concern and prioritize sample sites.
- DEQ and LARA staffs collect the samples from prioritized sites and in the sequence recommended by LARA.
- Submit the samples and appropriate paperwork to the DEQ Drinking Water Laboratory.
- Laboratory performs analysis and informs DEQ (ODWMA) staff of the results.
- DEQ informs DHHS of test results, and they jointly interpret the results.
- DHHS and DEQ staff relays the results to school officials and confers on any follow-up or corrective remedies that may be needed.

Step 1 – Prepare for On-Site Assessment

In order to assist LARA staff to identify and prioritize sample sites, school staff are being asked to compile, collect, and review any records pertaining to the building plumbing. This includes building permits, plumbing permits, as built plans, and information about the service line and all potable water pipes, fixtures and appurtenances within the building. At a minimum, a diagram of each floor layout should be provided. In addition, answers to the following questions will help streamline the on-site assessment process.

- When was the facility built?
- Have new buildings or additions been added? If so, when were they added? If built since 1986, were lead-free plumbing and solder used?
- When were the most recent plumbing repairs made and where were they located?
- What are the potable water pipes in the facility made of and what is their location? Options include: lead, brass, copper, plastic, galvanized metal and other materials. What materials were used to solder the potable water pipes in the system? Are brass taps, fittings or valves used? Note the locations.
- How many of the following outlets provide water for consumption: Bubblers, ice makers, water coolers and kitchen taps. Note their location. Include taps that might be used for making coffee or preparing formula.