Indiana Lead Sampling Program
for Public Schools

January 2019
Executive Summary

The Indiana Finance Authority (IFA), with assistance from the Indiana Department of Environmental Management (IDEM), developed the Lead Sampling Program for Public Schools to help schools assess if there is a presence of Lead (Pb) in drinking water within their facilities. This program is voluntary because current state and federal laws do not require schools that purchase water from a Public Water System to test for Lead. Out of over 1,700 eligible K-12 public schools and educational facilities in Indiana, 915 schools enrolled in the program. The program enrollment included 60% of all public school students in Indiana.

Lead is not commonly found in the drinking water entering school buildings from local utilities, but rather is related to the internal water-distribution system of the building. Lead primarily enters drinking water through corrosion of internal plumbing material; and in most cases, the issue is not system-wide, but specific to the fixture identified.

For this program, an elevated Lead level is a reading that meets or exceeds the U.S. Environmental Protection Agency Lead and Copper Rule (LCR) “Action Level” (AL) of 15 parts per billion (ppb). The AL of 15 ppb is not a measure of health effects. It serves as a signal to the school to take steps to reduce the Lead concentration in the water. In this program, 57,000 samples were collected (an average of 60 samples per school), with 62% of schools having at least 1 fixture with Lead over 15 ppb (also called an “Action Level Exceedance,” or ALE). Seven percent of schools had more than 10 fixtures (out of an average of 40 fixtures per school) with ALEs.

Faucets and water fountains were implicated as the highest proportion of fixtures with ALEs, and many of the highest values were related to infrequently used (e.g., commercial kitchen appliances) or seasonally used (e.g., athletic facilities, concession stands) fixtures. These results are consistent with other school Lead sampling programs.

Because the primary goal of the program was to provide schools with more information about how to better manage water quality within their facilities, the IFA worked closely with each school to identify remediation approaches specific to the fixture and the needs of the school. These actions resolved problems by removing or replacing fixtures, posting handwashing-only signs, or routinely flushing fixtures before use. No- or low-cost remediation actions were chosen for 43% of fixtures yielding elevated Lead concentrations in drinking water, whereas 46% of fixtures were repaired or replaced.

PROGRAM SUMMARY

57,000 samples were collected in total
60% of Indiana public school students were served by the program
915 school buildings were sampled
62% of schools had at least 1 fixture with Pb over 15 ppb
7% of schools had more than 10 fixtures with Pb over 15 ppb
$550 was the average cost to replace fixtures per school
95% of fixtures were under 15 ppb per school, on average
1% of hallway water coolers have Pb over 15 ppb
56% of classroom faucets had Pb over 15 ppb
100% of water entering schools was not a source of Pb