

Executive Summary of Lead in Drinking Water Services

August 2024

New Wave Engineering was retained to conduct a first draw "lead in drinking water sampling" at the district's school buildings located within the Hawthorne Board of Education in July of 2024. Water samples were collected from designated drinking water outlets at the following schools:

All samples were collected according to the regulatory guidelines outlined in the amendments to the N.J.A.C. 6A:26: Educational Facilities (July 2016) and its supporting documentation.

- **Hawthorne High School**
- **Roosevelt Elementary School**
- **Jefferson Elementary School**
- **Washington Elementary School**
- **Lincoln Middle School**

First draw sample results indicated that water sources sampled at locations from the above noted schools, exhibited no lead levels above the Regulatory Action Level of 15ppb. All potable drinking water sources tested can continue to resume regular usage. The next required testing of drinking water sources in NJ schools will need to be completed in three (3) years unless any plumbing changes are made to the water system.

1.0 PROJECT BACKGROUND

New Wave Engineering was contacted by the Hawthorne Board of Education (the "Client") to perform lead in drinking water sampling to determine the lead content of drinking water from sources throughout the school facilities. Additionally, as per State regulations, New Wave was contracted to update a Quality Assurance Project Plan (QAPP) and a Sampling Plan (SP), including: a Drinking Water Outlet Inventory, Filter Inventory, and Outlet Location Schematic in conjunction with the District's Buildings and Grounds Director.

The purpose of lead in drinking water sampling is to determine if any sampled drinking water sources exhibit lead levels exceeding the Regulatory Action Level of 15 parts per billion (ppb). Drinking water concentration points included: any water sources from which a student, staff, or faculty may reasonably drink or from which the water may be used for cooking or beverage preparation, including, but not limited to, water coolers/bubblers, kitchen faucets, Nurse's Office faucets, and Faculty/Staff lounges.

For further information on guidance protocols and Action Levels that were followed please refer to: The EPA's Revised Technical Guidance - "*3Ts for Reduced Lead in Drinking Water in Schools*" and the Guidance Document from NJDEP Division of Water Supply and Geoscience — "*Lead in Drinking Water: Guidance for Schools and Child Care Facilities Served by Public Water*".

2.0 LEAD IN DRINKING WATER

Lead is a toxic substance that can be harmful to human health. As compared to adults, children are more susceptible to the detrimental health effects of lead, as their nervous systems are not yet fully developed. Exposure to lead can occur in a variety of ways including through food, soil, deteriorating lead-based paint, and drinking water. Lead can leach into drinking water from plumbing materials such as pipes and solders, as well as brass plumbing fixtures. For this investigation, planning, preparation, methodology, sampling, and follow up actions were conducted according to the technical guidance provided by New Jersey following the adoption of amendments to N.J.A.C. 6A:26: "*Educational Facilities, requiring the sampling of drinking water for Lead in Schools*"

3.0 DRINKING WATER SAMPLING METHODOLOGY

New Wave collected drinking water samples from water outlets throughout each school building. At each collection point, New Wave filled a 250 milliliter (ml) wide-mouth high density polyethylene (HDPE) sample collection bottle from the designated water source. Samples were collected after the water in each building had not been used for at least 8 hours, but not more than 48 hours. The initial sample at each collection point represents the first draw sample. The first draw sample is representative of the water from the end point of the water source (i.e., the bubbler/bottle filler or tap).