REPORT TO THE GOVERNOR, PRESIDENT OF THE SENATE AND SPEAKER OF THE ASSEMBLY

LEAD IN SCHOOL DRINKING WATER STATUS REPORT

Report prepared by New York State Department of Health with cooperation by New York State Education Department



Executive Summary

In 2016, New York State (NYS) was the first in the nation to enact a law requiring all public schools to test for lead in drinking water at all outlets used for consumption. Public school districts and Boards of Cooperative Educational Services (BOCES) (referred to as "schools" herein) throughout NYS conducted the initial/first round of required monitoring in 2016. This included testing at nearly 4,700 schools to evaluate over 390,000 individual outlets for lead. Initial sampling for the second round of required monitoring was originally scheduled to be completed in 2020, but was extended to June 30, 2021, in recognition of the logistical challenges presented by the global pandemic. Through 2021, schools performed a variety of measures to address outlets containing lead over the 15 parts per billion (ppb) action level. Many of these outlets have been successfully remediated and returned to service. Between 2019 and 2021, the NYS Department of Health (the "Department") assisted schools through responses to hundreds of phone calls and emails with questions about remediation, sampling and reporting. The Department continues to make progress to improve compliance by developing and updating guidance, revising reporting tools to streamline and ease reporting, and by providing technical assistance.

Background

Lead is a metal that can harm children and adults when it gets into their bodies. Lead is a known neurotoxin, particularly harmful to the developing brain and nervous system of children under 6 years old. Lead can harm a young child's growth, behavior, and ability to learn. Lead exposure during pregnancy may contribute to low birth weight, preterm delivery, and developmental delays in infants. Although lead had been known to be harmful to humans, lead containing plumbing materials such as pipes, solder and fixtures were used in construction until this practice was banned in 1986. Since then, the federal government required that only "lead-free" materials be used in new plumbing and plumbing fixtures. The federal law, however, still allowed pipes and plumbing fixtures with up to eight percent lead to be labeled "lead-free." In 2011, the Reduction of Lead in Drinking Water Act, an amendment to the Federal Safe Drinking Water Act, re-defined "lead-free" to mean not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures and not containing more than 0.2% lead when used with respect to solder and flux (effective January 4, 2014). Common sources of lead in school drinking water include water fixtures, drinking fountains, bubblers or lead solder used to connect pipes and fixtures.

On September 6, 2016, New York State enacted a new law (Chapter 296 of the Laws of 2016) requiring all schools in NYS to test drinking water for lead contamination, and to take remedial action if lead exceeded the actionable threshold. Any school building with internal plumbing that met the definition of "lead-free" as defined by the federal Reduction of Lead in Drinking Water Act was exempt from sampling. A building could be deemed lead-free if: (1) it was built after January 4, 2014; or (2) a NYS Professional Engineer or Architect certified the building to be lead-free. Schools were required to report their list of lead-free buildings on their schools'

websites. Implementing regulations can be found in Subpart 67-4 of Title 10 of the Codes, Rules, and Regulations of the State of New York (10 NYCRR Subpart 67-4).¹

There are nearly 4,700 schools in over 700 school districts in New York State. Every school in the state was required to test every outlet used by students in pre-kindergarten through grade 12 in 2016 and again in 2020. This included outlets used for drinking, as well as those used for cooking. Sampling for the 2020 compliance period was suspended in April 2020 due to the COVID-19 pandemic and its impact on school operations. Many schools closed for long periods during the 2020 school year, and/or operated under a hybrid schedule where students attended in person instruction on a part-time basis. While schools were closed in response to COVID-19, they were instructed to suspend sampling for lead in drinking water and to resume (or begin) their 2020 compliance sampling upon resuming normal operating conditions. The reporting requirements under Subpart 67-4 were temporarily extended until the school reopened, for those test results received immediately prior to or during closure. However, upon reopening, the reporting requirements contained in Subpart 67-4 were to be followed. The deadline for completing the initial sampling requirements for the 2020 compliance period was extended to June 30, 2021.

Public Health Law (PHL) § 1110 and 10 NYCRR Subpart 67-4 require schools to take immediate action to eliminate the potential for exposure to any outlet in exceedance of 15 ppb for lead in drinking water. This action level of 15 ppb is equivalent to the U.S. Environmental Protection Agency's (EPA) lead action level for public water systems². Any outlet that exceeds the lead action level must be immediately taken out of service until a remediation plan is implemented to mitigate the lead levels at the outlet. In addition, building occupants must be provided with an adequate supply of potable water for drinking and cooking until remediation is performed and testing shows lead levels are at or below the action level. The local health department (LHD), parents, and students must be notified of the exceedance. The outlet cannot be used for drinking and cooking until tests confirm that the level of lead in water is below 15 ppb.

From 2019 through 2021, schools have taken a variety of actions to address outlets exceeding the lead action level of 15 ppb. The actions taken were dependent on several factors including, but not limited to, the frequency and type of outlet use, plumbing configurations, and the availability of suitable lead-free replacements.

Actions to Restrict Use Outlets that Exceed the Action Level:

- Shut off outlets;
- Lock the room with the outlet or install a lock on the faucet; and/or
- Post signs indicating "do not drink."

¹ The New York State Department of Health, in consultation with the New York State Education Department, issued emergency regulations titled "Lead Testing in School Drinking Water," 10 NYCRR Subpart 67-4, effective September 6, 2016. Final regulations were issued on May 9, 2018, and apply to all public schools and BOCES, including those already classified as a public water system under 10 NYCRR Subpart 5-1.

² To put the standard into context, 15 ppb lead can be thought of as approximately two marbles worth of lead dispersed across an Olympic sized swimming pool.

Actions to Reduce Lead Levels in Water:

- Replace outlet or fixture (e.g., faucets, drinking fountains, bubblers, valves, etc.);
- Install point of use treatment (i.e., filters);
- Flush outlets;
- Replace lead pipe;
- Modify plumbing configuration; and/or
- Replace old plumbing with lead-free plumbing materials.

The Department learned of specific outlets including chemistry laboratory outlets and outside hose bibs that do not have suitable lead-free replacements that meet the federal Reduction of Lead in Drinking Water Act (containing no more than a weighted average of 0.25 percent lead). In these cases, schools are using a combination of measures including signs with supervision, outreach and education, locks, filters, and documentation to provide controls to maintain compliance.

Following implementation of remedial measures including outlet or fixture replacement, amendments to plumbing or other actions, schools were required to perform post remediation sampling prior to putting an outlet back in service to ensure the water is below the lead action level.

Finally, pursuant to Education Law § 3602(6-h) and Public Health Law §1110, the State continues to reimburse school districts for a significant portion of testing and remediation costs associated with compliance under this law.

National Leaders

NYS was the first in the nation to enact a law requiring *all public schools and BOCES* test for lead in drinking water at *all outlets* used for consumption. Since 2016, NYS continues to serve in a leadership role to eliminate lead in school drinking water.

The Department serves on the Council of State and Territorial Epidemiologists Children's Environmental Health at Schools Workgroup. This national workgroup seeks to develop school environmental health indicators, document existing children's environmental health surveillance programs, explore ways to identify children vulnerable to environmental hazards, and other activities to protect children from environmental health hazards in their school environment. As a leader in this area, New York is well-suited to contribute to this group.

In addition, the Department has developed the New York State Clean, Green, and Healthy Schools Program, a statewide school environmental health program developed through collaborative efforts by the NYSDOH in conjunction with over 40 state and federal agencies, and non-government organizations. The program reinforces the regulatory requirements of 10 NYCRR Subpart 67-4 and incorporates best practices for schools to combat lead in drinking water. Furthermore, the program also helps schools improve their overall environmental health, which promotes better health, attendance, productivity, and test scores. The program provides information for all school occupants on best practices, tools, knowledge, and resources in nine environmental health focus areas: Indoor Air Quality; Energy and Resource Conservation; Integrated Pest Management; Mold/Moisture; Chemical and Environmental Hazards; Cleaning and Maintenance; Transportation; Construction/Renovation; and Water Quality.

The Department also enabled the creation of the New York State Children's Environmental Health Centers (NYSCEHC), a statewide network of specialty units that provide various resources and services to improve the recognition, evaluation, management, and prevention of environmental health problems in children. Physicians and other healthcare providers at the Centers are experts in the field of children's environmental health. This Network is a resource for all children, parents, health care providers, daycares, schools, and communities in New York State and is considered a model for other states.

The overall goals of NYCEHC are as follows:

- Improve the recognition and management of environmental health problems, including lead exposure in children;
- Strengthen and expand educational programs in environmental health for children;
- Provide comprehensive, coordinated services for children exposed to environmental toxins throughout development;
- Reduce environmental health threats to children where they live, play, and learn through partnerships, educational campaigns, and public health marketing;
- Prevent disease in children through partnerships, educational campaigns, and public health marketing;
- Increase the accuracy of diagnosis of diseases in children caused by environmental factors;
- Improve the treatment of diseases in children caused by environmental factors;
- Better quantify and describe the burden on children of diseases of environmental origin;
- Improve access to expertise in pediatric environmental health.

Reporting

Schools are required to report to the Department, the LHD, and the NYS Education Department (NYSED) through the Health Electronic Response Data System (HERDS) reporting application, accessed through the secure NYS Health Commerce System (HCS) portal. The information reported includes lead-free building information, sampling details and sampling results.

The data are self-reported by schools. The Department and LHD will continue to review the data reported for accuracy. Since implementation of 10 NYCRR Subpart 67-4, the Department, in coordination with the LHD, has worked with the schools to improve the quality and completeness of the data reported. The Department makes the reported data publicly available through the Health Data New York (HDNY) platform found at health.data.ny.gov. For the 2016 compliance period, two datasets are displayed: one showing a list of school buildings with lead-free plumbing and one showing sampling and results information. For the 2020 compliance period, one dataset displays all information required to be reported by schools. The data displayed are updated manually by Department staff. HDNY provides interactive tools for parents, the public, and media to access the information for schools across the state. In addition to these datasets, schools are required to post the sample results on their website.

Access to HERDS/HCS for the 2016 compliance period to report/update information was suspended on December 31, 2019. The 2020 School Lead Drinking Water Reporting application was launched in HERDS/HCS on January 1, 2020 and will be accessible by schools for data/information reporting updates throughout the 2020 compliance reporting period.

Activities Performed 2019-2021

Between 2019 and 2021, the Department continued to provide guidance to schools, initiating hundreds of phone calls and emails to assist school personnel with accessing HCS and correctly reporting data. These efforts were complicated by school staff turnover as well as school closures and re-openings for various routine and exceptional reasons, including responses to the global pandemic. While these efforts significantly improved the quality and quantity of data reported, additional work is needed.

The Department developed the New York State Department of Health Lead Testing in School Drinking Water Program 2020 Guidance Manual. The guidance manual is a 37-page resource document that provides information and templates to assist schools in developing and implementing the testing, reporting and remediation requirements under Subpart 67-4.

The Department also developed the 2020 Lead in School Drinking Water Reporting application in HCS. The 2020 reporting form was developed, streamlining the reporting process by changing the form, structure and questions to improve clarity and efficiency. These changes improved the reporting application by making it more user friendly, thereby reducing errors and increasing data accuracy.

Below are some of the specific activities performed for the 2020 compliance period.

September 12, 2019 – Webinar to Western Region Training – Program Review and Update for 2020 Compliance Period

September 18, 2019 – Presentation to Clean, Green and Healthy Schools – Program Update

April 4, 2019 - Presentation to School Facilities (NYSED): Program Review and Updates

May 3, 2019 - The NYSDOH held a conference call with stakeholders on May 3, 2019 including representatives from several Public Schools, BOCES, consulting firms working with schools, the NYC Department of Education and others to learn about their experiences implementing the Lead Testing in School Drinking Water Program. Feedback from the stakeholders was valuable information that was used for compiling guidance documentation for schools.

November 11, 2019 - Webinar to Schools - Program Review and Updates for 2020 Compliance Period

April 3, 2020 – School superintendents and other school representatives were contacted by

the Department electronically and advised to suspend 2020 compliance period sampling while schools were closed in response to the pandemic. Schools were advised to sample upon resuming normal operations. Additionally, the reporting requirements under Subpart 67-4 were temporarily extended until the school was reopened, for test results received immediately prior to or during closure. However, upon reopening, the reporting requirements contained in Subpart 67-4 must be followed.

Summer 2020 – Student Internship

Following the 2016 and 2020 compliance testing programs, schools performed a variety of remediation measures to address all outlets with lead levels that exceeded the lead action level of 15 ppb. As test results became available from the 2020 compliance period, and new remedial measures were implemented, the NYSDOH sponsored an internship program to evaluate test result information to understand sources of lead, their persistence, lead level variability, and

other factors. The internship also attempted to examine how remedial efforts by schools tried/helped to identify and refine best practices and long-term solutions related to mitigating or reducing lead levels in drinking water in school environments. The objectives were revised due to the challenges presented in response to the pandemic and the duration of the internship.

September 9, 2020 – School superintendents and other school representatives were contacted by the Department electronically to provide guidance developed by EPA for flushing internal plumbing system in school buildings prior to reopening. This guidance was provided to address concerns about water quality in buildings that had either no or little occupancy because of the pandemic response. The resulting stagnant water in the internal plumbing is conducive to the growth of bacteria, and can cause leaching of metals, such as lead, from internal plumbing materials, pipes, and water fixtures. A flushing program is important to evacuate stagnate water, stabilize water quality measures within the internal plumbing and restore water quality.

As schools reopened with various reopening and contingency plans due to COVID-19,

School building occupancy and water usage will likely be in flux. In recognition of these unusual circumstances, the Department extended the 2020 lead sampling period to June 30, 2021. This extension provided schools additional time to complete proper testing in accordance with the requirements specified in Subpart 67-4.

October 13, 2020 - School superintendents and their representatives were contacted by the Department electronically notifying them that the initial sampling deadline for the 2020 compliance year testing requirements was being extended from December 31, 2020, to June 30, 2021. As schools reopened in the fall following closures due to COVID-19, the Department extended the lead sampling deadline to provide schools additional time to complete proper testing in accordance with the requirements specified in Subpart 67-4.

March 1, 2021 – The Department sent an electronic notice to School Superintendents and other school representatives announcing that the <u>Lead Testing in School Drinking Water Program Guidance Manual</u> was available on the Department's <u>Lead Testing in School Drinking water website</u>.

May 3, 2021 – The Department sent an electronic notice to school Superintendents and other school representatives reminding them of the deadline to complete their initial sampling requirements for the 2020 compliance period; ending on June 30, 2021.

Results to Date (Reflecting results reported as of November 11, 2021)

Through outreach activities, the Department confirmed that all schools in NYS conducted sampling during the 2020 compliance period, which was extended to June 2021 due to operational challenges posed by the pandemic. Some schools have not completed all of the steps required to finalize reporting to the Department, therefore, not *all* sampling information or results are captured in this report. The Department makes the reported data publicly available through the Health Data New York (HDNY) platform found at health data.ny.gov. This data is routinely updated by the Department and represents the most current information.

Of the roughly 4,700 schools in NYS, 3,916 (nearly eighty-three percent) have reported test results to the Department for over 300,000 individual outlets. Approximately ninety-six percent of these outlets yielded results under the lead action level of 15 ppb. The remaining four percent of outlets reported as exceeding the lead action level represent several potential scenarios including:

- 1. Some outlets were verbally reported by school representatives to the Department as remediated and returned to service, but the school has not successfully reported post remediation sampling results;
- 2. Some outlets remain out of service or have engineering controls to ensure they are not used for drinking or cooking; and
- 3. Some outlets have yet to be confirmed as remediated, addressed through engineering controls, or removed from service. The Department continues to review the data reported and work with local health departments to identify and contact such schools to ensure appropriate actions were completed and to direct the schools to complete reporting.

Next Steps

The Department and local health departments will continue to make strides to improve compliance; engage stakeholders to identify best practices; understand implementation challenges and develop and disseminate solutions moving forward. Concurrently, the Department and local health departments will continue to ensure compliance through enforcement, as necessary.

The Department is working with NYS Office of Information Technology Services to modify the <u>lead testing in school drinking water dataset</u> displayed on HDNY to accommodate the results for compliance year 2020 and future sampling rounds while maintaining the compliance year 2016 data.

In December 2021, Governor Kathy Hochul signed a bill amending PHL § 1110, lowering the lead action level applicable to schools from 15 ppb to 5 ppb; increasing the frequency of compliance testing from every five years to every three years; requiring that all laboratory results from testing be made available on a schools website; and making expenses for remediation reimbursable from funds appropriated through the Department of Environmental Conservation (NYS DEC) for clean water infrastructure projects. The Department is working to amend Subpart 67-4 to reflect the changes to PHL and develop tools and guidance to assist with implementation of the revised requirements. The amendments to Subpart 67-4 will need to incorporate the following changes:

- Lowering the lead action level for school drinking water from 15 ppb to 5 ppb;
- A requirement for schools to make available a copy of all test results, including laboratory reports and lead remediation plans on the school's website;
- A requirement for schools to provide an adequate supply of potable water free of charge to school occupants;
- In conjunction with the commissioner of education, the commissioner of health must publish a report triennially based on the finding from the tap water testing conducted. (This report was previously required on a biannual basis).
- Expenses for remediation under 67-4 will be fully reimbursable from funds appropriated through NYS DEC.
- Elimination of the testing exemption for buildings deemed "lead-free" as defined by section 1417 of the federal safe drinking water act.

Regulation Requirements

10 NYCRR Subpart 67-4 requires schools to perform monitoring, response, public notification, reporting, and recordkeeping. Below is a summary of the regulatory requirements.

Part A: Compliance Dates

The following table summarizes important compliance dates for the lead testing in school drinking water regulation.

Table 1: Compliance Dates				
Compliance Period 2020				
June 30, 2021	Schools must complete initial sampling for the 2020 compliance period.			
Every five years	Schools shall continue to collect first-draw samples at least every 5 years thereafter or at an earlier time as determined by the Commissioner of Health.			

Part B: Monitoring Requirements

Samples must be collected in accordance with the schedule above, following the requirements in Table 2. All samples must be analyzed by a laboratory that is certified by the Department's Environmental Laboratory Approval Program (ELAP).

Table 2. Sampling Requirements and Action Level				
Sample type	le type First draw samples			
Action Level	15 ppb (consistent with the U.S. EPA's Lead & Copper Rule)			
Sample volume	250 mL			
Bottle type	Wide mouth, plastic bottle recommended.			
Sample collection Avoid collecting samples in the mornings after vacations, weekends, or holidays unless specifically directed to do so				
Water stagnation time in pipes	8 to 18 hours			

Part C: Response

Schools are required to immediately respond when there has been an action level exceedance (>15 ppb) as outlined below.

Table 3. Response to Action Level Exceedance			
If the lead concentration of water at an outlet exceeds the action level, the school must:	1. Prohibit use of the outlet (take out of service or turn off) until a lead remediation plan is implemented to mitigate the lead level of such outlet, and test results indicate that the lead levels are at or below the action level.		
	2. Provide building occupants with an adequate supply of potable water for drinking and cooking until remediation is performed and testing shows lead levels at or below the action level.		
	3. Report test results to the local health department (LHD) as soon as possible, but no more than one business day after receipt of lab report.		

- 4. Notify all staff and parents/guardians of the test results in writing as soon as possible, but not more than 10 business days after receipt of lab report.
- 5. Report test results in the Department's reporting application within 10 business days after receipt of lab report.
- 6. Perform remediation and resampling before an outlet is placed back in service.
- 7. Report post remediation test results in the Department's reporting application within 10 business days after receipt of lab report.
- 8. Provide post remediation test results on the school's website, as soon as practicable, but no more than 6 weeks after the school received the laboratory reports

Part D: School Reporting and Record Keeping Requirements

Schools are required to report data relating to their lead testing to the Department through a reporting application accessed through HCS, to their local health department, and to their school community, as prescribed in the table below.

Table 4. Notification and Reporting Requirements for School Districts				
Reporting Requirements	Where/To Whom	When		
Posting lead test results	School Website	As soon as practicable, but within 6 weeks of receipt of lab report		
Reporting data related to lead test results	To the Department via HCS	As soon as practicable, but within 10 business days of receipt of lab report		
Notification of a lead action level exceedance	Local health department (phone and/or email)	Within 1 business day of receipt of lab report		
Notification of a lead action level exceedance	School Community*	Within 10 business days of receipt of lab report (Notification must be made in writing)		
*School Community means all teachers, staff, and parents/guardians of the student body.				

Schools are required to keep records as outlined below.

Table 5. Record-keeping Requirements			
Schools must retain all records for 10 years	Test Results		
following document creation. Copies of documents must be provided to the Department/Local Health Department, or State Education Department upon request. Records	Lead remediation plans		
	Determinations of buildings with lead free		
	plumbing		
may include, but are not limited to:	Waiver requests/approvals		

Part E: Program Implementation

Guidance and Resources

The Department has created numerous reference and guidance documents, as well as hosted numerous webinars and other outreach activities to assist schools with implementation of this regulation. The Department created a website dedicated to the Lead Testing in School Drinking Water Regulation which serves as a central repository for implementation tools and guidance for schools and local health departments. New information is posted to the website as it is developed. The website includes the following guidance and resources:

Information for Schools

- New York State Regulation for Lead Testing in School Drinking Water Subpart 67-4
- Sampling Quick Reference Guide
- Video: "Sampling for Lead in Drinking Water in NYS Schools"
- Certified Laboratories for Conducting Lead Testing in School Drinking Water
- Public Notification Letter Template (DOC)
- Example Outlet Signage (English and Spanish)(PDF)
- EPA Guidance: 3Ts for Reducing Lead in Drinking Water in Schools

Reporting Guidance

Gaining Access to Health Commerce System (HCS) (PDF)

Webinar Presentations

Program Update 2020 Testing, Remediation and Reporting

Communications with Schools

The Department also developed and manages an email account for school representatives and the public to send inquiries and attain information, at lead.in.school.drinking.water@health.ny.gov

Part F: Roles and Responsibilities

The following table outlines the roles and responsibilities of the stakeholders responsible for implementation, compliance, and enforcement of 10 NYCRR Subpart 67-4.

Table 6. Roles and Responsibilities			
Schools	Implement the requirements of 10 NYCRR Subpart 67-4. This includes identifying, testing, and remediating all outlets (where applicable); reporting results to the school community on the school's website; and reporting data using the Department's electronic reporting system.		

Local Health Departments	Assist schools with implementation of 10 NYCRR Subpart 67-4 by answering implementation and compliance questions, reviewing, and evaluating waiver requests, conducting data quality checks and compliance reports, and following up with schools as appropriate, and assisting with enforcement actions, when needed.		
Department of Health	Develop tools and resources for implementation of the regulation, assist schools and local health departments by answering implementation and compliance questions, review and approve or disapprove waiver requests, and manage the electronic reporting system for schools to report their results.		
Education Department	Review and approve applications for State Aid for expenses related to testing and remediation pursuant to Education Law § 3602(6-h) and for BOCES testing costs pursuant to Education Law § 1950(5)(b).		

Part G: State Aid for Testing and Remediation Costs

The state has helped and continues to reimburse school districts for the cost of testing and remediation pursuant to Education Law § 3602(6-h) (and for BOCES testing costs only, pursuant to Education Law § 1950(5)(b)). New York State was the first state in the nation to do so. School districts submit their claims for State Aid to the State Education Department and receive payment as part of General Aid pursuant to Education Law § 3609-a. To determine aid amounts, an aid ratio is applied to approved expenses such that school districts with less local fiscal capacity to support the expenses receive proportionately more State Aid.

Testing

The costs associated with testing in all occupied buildings owned or leased by a school district or BOCES are eligible for aid provided that such expenses are not reimbursable from another state or federal source. The costs associated with testing for lead in water outlets located on the site of a school district or BOCES building, such as outlets in a concession building, or an exterior drinking fountain, are also considered an approved expense for aid. Testing costs also include samples collected following remediation to confirm the lead levels are below the action level. Collectively, the cost of testing reimbursed through State Aid were \$15,541,090 for school year 2015-2016, \$22,749,267 for school year 2016-2017, \$1,950,470 for school year 2017-2018, \$9,280,542 for school year 2018-2019, \$3,486,576 for school year 2019-20, and \$7,091,083 for school year 2020-21.

Remediation

The installation of filters and/or other effective remedial measures for immediate remediation is aidable in cases where a finding of lead contamination is made. The cost of filter installation and other effective remedial measures must be incurred prior to July 1st, 2019. Remedial measures that are aidable expenses must be permanently installed devices, as opposed to costs associated with controls of access.

Aidable remediation measures include activities such as: replacing outlets including water faucets, drinking fountains and bubblers; replacing or reconfiguring piping; or installation of filters. Collectively, the cost of remediation activities varied depending on type; the costs associated with several types of remediation (but not all) are reflected in the table below. The

total cost of remediation to State Aid for school year 2016-2017 was \$9,915,326, \$15,094,692 for school year 2017-2018 and \$8,149,737 for school year 2019-20. Chapter 53 of the laws of 2019 provide that, beginning in the 2019-20 school year, only expenditures for water testing are aidable under this provision.

For additional information see the links below:

- •NYS DOH Regulation Section 67-4
- •Guidance on State Aid for Water Testing and Remediation

Select Remediation Costs Reported to NYS Education Department by Schools

School Year Region Total Cost of Filters purchased and installed (\$) Total Cost of replacing taps (purchase and installation) (\$) Total cost of replacing fountains (purchase and installation) (\$) Total cost of replacing fountains (purchase and installation) (\$) Total cost of replacing fountains (purchase and installation) (\$) Total cost of replacing fountains (purchase and installation) (\$) 2015-2016 NYC - 962,550 1,024,800 - ROS 86,361 390,583 600,286 76,756 NYC - 3,276,000 2,178,000 - ROS 336,587 2,835,131 1,535,726 178,445 2017-2018 NYC - 8,653,106 5,827,602 - ROS 30,078 347,358 183,372 82,965 Statewide 22,372 5,671,166 2,466,991 4,681 NYC - 5,435,520 2,381,080 - ROS 22,372 235,646 85,911 4,681						
2015-2016		Region	of Filters purchased and	of replacing taps (purchase and installation)	of replacing fountains (purchase and installation)	replacement or reconfiguration of
ROS 86,361 390,583 600,286 76,756 Statewide 336,587 6,111,131 3,713,726 178,445 NYC		Statewide	86,361	1,353,133	1,625,086	76,756
Statewide 336,587 6,111,131 3,713,726 178,445 NYC - 3,276,000 2,178,000 - ROS 336,587 2,835,131 1,535,726 178,445 Statewide 30,078 9,000,464 6,010,974 82,965 NYC - 8,653,106 5,827,602 - ROS 30,078 347,358 183,372 82,965 Statewide 22,372 5,671,166 2,466,991 4,681 NYC - 5,435,520 2,381,080 -	2015-2016	NYC	-	962,550	1,024,800	-
NYC		ROS	86,361	390,583	600,286	76,756
ROS 336,587 2,835,131 1,535,726 178,445 Statewide 30,078 9,000,464 6,010,974 82,965 ROS 30,078 347,358 183,372 82,965 Statewide 22,372 5,671,166 2,466,991 4,681 NYC - 5,435,520 2,381,080 -	2016-2017	Statewide	336,587	6,111,131	3,713,726	178,445
Statewide 30,078 9,000,464 6,010,974 82,965 2017-2018 NYC - 8,653,106 5,827,602 - ROS 30,078 347,358 183,372 82,965 Statewide 22,372 5,671,166 2,466,991 4,681 NYC - 5,435,520 2,381,080 -		NYC	-	3,276,000	2,178,000	-
2017-2018		ROS	336,587	2,835,131	1,535,726	178,445
ROS 30,078 347,358 183,372 82,965 2018- 2019	2017-2018	Statewide	30,078	9,000,464	6,010,974	82,965
2018- 2019 Statewide 22,372 5,671,166 2,466,991 4,681 NYC - 5,435,520 2,381,080 -		NYC	-	8,653,106	5,827,602	-
2018- 2019 NYC - 5,435,520 2,381,080 -		ROS	30,078	347,358	183,372	82,965
2019 NYC - 5,435,520 2,381,080 -		Statewide	22,372	5,671,166	2,466,991	4,681
ROS 22,372 235,646 85,911 4,681		NYC	-	5,435,520	2,381,080	-
		ROS	22,372	235,646	85,911	4,681

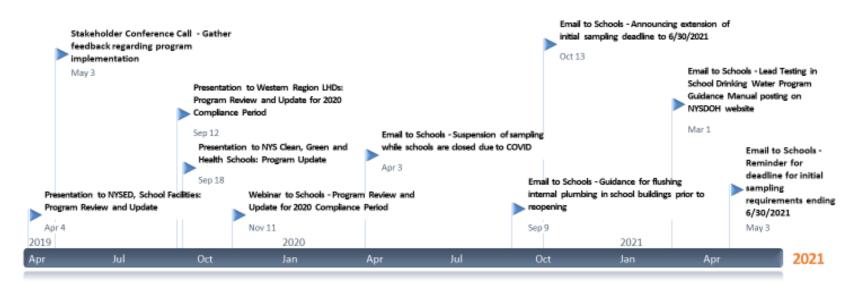
Notes: ROS = Rest of State excluding NYC

State Aid covers a percentage of the total remediation costs.

The selection of remedial activities to mitigate exposures and reduce lead levels in the water depends on several factors which include use, plumbing configurations, and hydraulics. It is important that schools consult with a professional versed in remediation of lead in school drinking water to determine the appropriate short- and long-term remediation measures for the specific school and outlet. The EPA's 3Ts program provides recommendations for routine, short and long remediation or "control" measures which can be found at https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit.

The cost of remedial measures that are eligible for regular Building Aid pursuant to Education Law § 3602(6) are not eligible for State Aid under Education Law § 3602(6-h). These would most likely be larger scale, long-term remediation projects that would qualify as capital construction projects, for which districts would apply for project approval through the State Education Department.

Part I: Timeline and Department's Outreach Activities



2018-2020: Development of Lead Testing in School Drinking Water Program 2020 Guidance Manual

2018-2020: Development of the 2020 Lead in School Drinking Water reporting application in Health Commerce System

2019-2021: Department responds to hundreds of emails and phone calls assisting schools with program implementation questions