

DEPARTMENT OF THE ENVIRONMENT
WATER AND SCIENCE ADMINISTRATION
RESPONSE TO COMMENTS

related to proposed regulations to COMAR 26.16.07

for the

PUBLIC HEARING held on February 28, 2018

and Written Comments

Purpose of Hearing: The purpose of the public hearing was to allow for public comment on the Department's proposed regulations for COMAR 26.16.07 Lead in Drinking Water-Public and Nonpublic Schools.

The purpose of this action is to require public and nonpublic schools to test for the presence of lead in all drinking water outlets at a frequency of every three years.

Date and Location: The public hearing was held on February 28, 2018 at 4 p.m. at the Department of the Environment, 1800 Washington Boulevard, 1st Floor Conference Room, Baltimore, Maryland 21230.

Attendance: Virginia Kearney, Heather Barthel, Saeid Kasraei, Christine Nagle, Christina Ardito, Sean Kenny, Tim Rule, Lan VanDe Hei, from MDE; Laura Stewart, Montgomery County Council Parent Teacher Association Capital Improvements Program; Kathy Hefner, Karen Witcraft, from Fredericktowne Labs; Rebecca Koons, Maryland Spectral Services; Deborah Watson, Baltimore City Schools; Rosa Urquhart, Parent from Montgomery County.

Statement: Christine Nagle, Deputy Program Manager of the Water Supply Program of the Water and Science Administration, served as Hearing Officer. The Department's statement was read by Christina Ardito, Regulatory and Compliance Engineer of the Water Supply Program of the Water and Science Administration.

Comments and Responses: Comments were received from the Montgomery County Council Parent Teacher Association Capital Improvements Program. The written comments received have been summarized and the Department's response given below.

General Comments

1. COMMENT: The Maryland Department of the Environment (MDE) received multiple comments in support of the proposed regulations. Many share our mission to promote public

health and safety in schools through requiring periodic testing for lead in all drinking water outlets. Commenters acknowledge and appreciate the collaborative efforts that have gone into developing these regulations.

RESPONSE: The Department thanks the commenters for their support.

02. Scope

2. COMMENT: A commenter noted “.02 Scope excludes schools addressed through 26.04.01. However, this section is not as extensive or complete as the proposed regulation, i.e. outlet testing not as extensive as proposed regulation leaving many drinking water outlets as defined in section 03.B(6) untested.”

RESPONSE: MDE agrees. The main intent of the Lead and Copper Rule is to assure that there is no systemic causative factor allowing the leaching of lead and copper into drinking water, which typically occurs as a result of higher levels of corrosivity in the water. Fewer sample taps are needed to make this determination. The intent of HB270, in contrast, is to test on an outlet-by-outlet basis to ensure that conditions specific to a particular fixture are not contributing lead to the drinking water. Please see response to Comment #3.

03. Definitions

3. COMMENT: A commenter noted “Why are we using 20 ppb instead of 15 as is the federal standard? Recommend that the federal standard of 15 be instituted, as allowing 20 may cause public concern.”

RESPONSE: HB270, the legislation that the regulations are being drafted to implement, directed use of a sampling method consistent with technical guidance issued by the EPA for reducing lead in drinking water in schools. As stated in EPA’s technical guidance “3Ts for Reducing Lead in Drinking Water in Schools,” it is important to note that the lead testing protocol used by public water systems is aimed at identifying system-wide problems rather than problems at outlets in individual buildings. Moreover, the protocols for sample size and sampling procedures are different. Under the Lead and Copper Rule for public water systems, a lead action level of 15 parts per billion (ppb) is established for 1 liter (1000 milliliters) samples taken by public water systems at high-risk sites. If more than 10 percent of the samples exceed 15 ppb, system-wide corrosion control treatment may be necessary. The 15 ppb action level for public water systems is therefore a trigger for treatment rather than an exposure level. EPA recommends that schools collect 250mL first-draw samples from water fountains and other outlets used for consumption, and that the water fountains and/or outlets be taken out of service if the lead level exceeded 20 ppb. This sampling technique was designed to pinpoint specific fountains and outlets that require remediation. The school sampling protocol maximizes the likelihood that the highest concentrations of lead are found because the first 250 mL are analyzed for lead after overnight stagnation. Understanding this difference may help to alleviate public concern.

4. COMMENT: A commenter noted “.06 Testing Requirements specifically notes that bathroom sinks are considered drinking water outlets but is not included in 03 Definitions. Given the large number of bathroom sinks in schools, shouldn’t this outlet type be included in the definition?”

RESPONSE: Bathroom sinks are not explicitly defined, but they are included in the definition under .03.B.6.a(x) of the regulation. Typically in schools, drinking water fountains are most frequently used for consumption, along with kitchen sinks, teachers’ lounge sinks, classroom combination sinks and bubblers, nurse’s office sinks, and home economics sinks. While occupants may drink from bathroom sinks, they are not considered a primary consumption tap. If bathroom sinks are used for consumption in a school, they must be tested in accordance with the regulations. Bathroom sinks not used for consumption do not have to be tested; however, untested bathroom sinks will need to be clearly labeled as not for human consumption. Please see Comment #5.

5. COMMENT: MDE received multiple comments requesting MDE provide guidelines for signage that will be placed on the water fixtures designated as non-potable (e.g., where we have banks of sinks, does each sink require signage and asked if there going to be a standard label for outlets.

RESPONSE: MDE will provide guidelines for signage in technical guidance for *Technical Guidance: Maryland Lead Testing in School Drinking Water* and on the Department’s website.

6. COMMENT: A commenter asked “If a fixture exceeds the lead level can you go back and label it after the fact?”

RESPONSE: Testing is intended only for drinking water outlets; signage is only applicable to outlets not intended for use as drinking water outlets. All drinking water outlets exhibiting elevated levels of lead must be removed from service, remediated and re-tested before being placed back into service; signage or labelling is thus not acceptable in the case of a drinking water outlet with test results indicating an elevated level of lead. The regulations only require schools to test for the presence of lead in all outlets that are used for human consumption. However, schools may elect to test additional outlets that are not typically used for drinking or food preparation. If an outlet not used for human consumption, such as a bathroom sink or a utility sink, is tested and an elevated level of lead is found, a school may only go back and label that particular outlet as not to be used for drinking.

.05 Waivers

7. COMMENT: A commenter noted that the threshold at 5 ppb as a part of the requirement to obtain a waiver is arbitrary and sets forth a standard that does not take into account jurisdictions that proactively performed lead testing ahead of the legislation and would force jurisdictions with results under the 20 ppb standard to retest. Another commenter requested that the 5 ppb limit in Section (A)(1)(b) should be increased to 15 ppb to be consistent with EPA guidelines for water utilities.

RESPONSE: Since a waiver is effectively an exemption from testing of indefinite length (i.e., until the conditions of the waiver are no longer met), it is critical to have a high degree of

assurance that lead will not enter a school's drinking water. At this time, the minimum detection limit of EPA-approved lead analysis method for drinking water is 5 ppb or less, which is considered non-detected. Results at or below the detection limit throughout the school thus indicate a higher probability that the outlet does not contain lead in quantities that will result in elevated levels in the drinking water. Detectable results that are below the action level of 20 ppb may be consistent with the presence of lead in the absence of corrosive water; such a situation may thus be more susceptible to increased lead leaching if the characteristics of the water supply change, even slightly. Again, since a waiver is a potentially long-term exemption from testing, such caution is warranted.

8. COMMENT: One commenter noted that a waiver should be not granted on the basis that a school has previously tested for lead and all results were at a level of 5 ppb or lower. Such a waiver would allow a school to go untested indefinitely, and the age and condition of plumbing can significantly contribute to lead leaching into the water.

RESPONSE: If the water quality of the public water supplied to a school is consistent, it should have little to no effect on the condition of plumbing in the school. In fact, with consistent and proper corrosion control treatment, a protective coating builds up over time and reduces the likelihood of lead in the plumbing leaching into the water. One of the conditions to obtain a waiver requires a school to demonstrate that there have been no changes to the water quality of the public water supplied since the most recent date of testing. Waivers are not permanent and may become invalid if substantial plumbing renovations occur or if there are changes to the corrosivity of the public water supplied. MDE established a threshold of 5 ppb, which is the detection limit for EPA-approved lead testing methods. A detection limit is the level below which lead cannot be detected by laboratory equipment. As long as there have been no changes in plumbing, a school that has previously tested below 5 ppb in each drinking water outlet does not and is not likely to have widespread lead issues if the water quality of the public water supplied to the school is consistent.

9. COMMENT: A commenter noted "Fixtures or drinking water outlets should be waived if the unit was replaced in the facility after 1988."

RESPONSE: Individual drinking water outlets do not qualify for a waiver. Waiver requests must document that all drinking water outlets in a school building as well as all plumbing inside the building and the service line meet the criteria for a waiver. Many fixtures installed in 1988 do not meet the current definition of lead-free.

10. COMMENT: A commenter noted "It appears that after the initial testing and remediation, that to obtain a waiver and avoid the three year testing cycle would require retesting to the 5 ppb threshold. Is this correct?"

RESPONSE: Yes. After initial testing and remediation, to obtain a waiver and avoid the three year testing cycle, schools will have to retest. All lead sample results must be at or below 5 ppb.

11. COMMENT: MDE received multiple comments asking when the waiver application form will be ready.

RESPONSE: The waiver application form will be made available on or before the effective date of the regulations.

12. COMMENT: A commenter asked “What is the intended duration for a waiver? Does the waiver effectively exempt a school from the three year testing requirement until such time as the waiver conditions are no longer met?”

RESPONSE: Waivers are indefinite in length. The waiver effectively exempts a school from the three year testing requirement until such time as the waiver conditions are no longer met. Those conditions include substantial plumbing upgrades and renovations, as well as changes to the corrosivity of the public water supplied to the school.

13. COMMENT: A commenter noted “A one year waiver it would be beneficial to have next school year to complete the testing. The final regulation won’t be posted until April 9th at the earliest. Since the sampling must be completed during the regular school year this would only allow us from mid-April till mid-June to complete all of the sampling at 44 schools.”

RESPONSE: A waiver is intended to be indefinite in length and thus is not the appropriate mechanism by which to facilitate a delay in testing. However, a school or school system may apply for a twelve-month deferral if the school has a plan in place for testing all drinking water outlets and the plan details actionable steps to be taken if an elevated level of lead is found in any drinking water outlet.

14. COMMENT: Is MSDE going to differ [sic] to MDE pertaining to the waiver?

RESPONSE: The Department, in consultation with MSDE, may grant waivers.

15. COMMENT: There were multiple comments requesting that a provision for partial waivers be added into the regulations. Schools that have previously tested some but not all outlets could be waived from testing those particular outlets again if the results were less than 5 ppb.

RESPONSE: MDE considered many approaches to handling waivers. We determined that granting waivers by school building (e.g., as opposed to school campus) is the smallest manageable unit for waiver issuance, both in terms of our resource capabilities and the ability to ensure that the granting of waivers does not result in individual outlets being overlooked.

16. COMMENT: Multiple commenters noted “We also suggest the following addition to Section (A)(1)(a) in the proposed regulations – “All drinking water outlets in the school building were tested, no more than five years before the effective date of this regulation, for the presence of lead in a manner that complies with this chapter, or in a manner that complied with EPA’s technical guidance in place at the time of the testing.”

RESPONSE: The testing protocols set forth in the law are based on the standards established in EPA’s technical guidance “3Ts for Reducing Lead in Drinking Water in Schools.” This is consistent with previous EPA guidance for lead testing in schools. To qualify for a deferral or a waiver based on prior testing, schools must meet all of the testing requirements set forth in the regulations.

17. COMMENT: A commenter noted “Brass is produced with 8% lead, legislation should be proposed to restrict the use in all consumption fixtures.”

RESPONSE: All new plumbing must meet the definition of lead-free, as defined by the Annotated Code of Maryland, Business Occupations and Provisions Article, §§ 12-101, 12-605.1, and 12-605.2.

.06 Testing Requirements

18. COMMENT: A commenter noted “Recommend column testing NCNT systems that are on well water, if the water is hard then do primary testing for evaluation. If the water is found to be soft then complete the required facility testing.”

RESPONSE: Schools that are non-transient non-community (NTNC) water systems are already testing for lead in drinking water under the Lead and Copper Rule. The “Lead Testing in Drinking Water - Public and Nonpublic Schools” regulation requires schools that are supplied drinking water from a public water system/utility to test for lead. With either regulation, lead testing must occur regardless of whether the water is determined to be hard or soft.

19. COMMENT: A commenter asked “Does a deferral pertain to initial testing only? The waiver also seems to pertain to initial testing?”

RESPONSE: A deferral pertains to initial testing only, and, depending on the type, may last a maximum of either twelve months or three years. A waiver may apply to initial testing as well, but in contrast to a deferral, a waiver is indefinite in length. Schools that receive a waiver will not be subject to the testing requirements under this regulation unless there are substantial plumbing upgrades/renovations and/or changes in the corrosivity of the public water supplied to the school building(s).

20. COMMENT: A commenter asked “Can a deferral be issued for those outlets previously tested while allowing a jurisdiction to perform testing on only those outlets left untested as defined by the regulation?”

RESPONSE: No. Schools can only receive a deferral of three years if all of the drinking water outlets in the school building have been previously tested for lead. All drinking water outlets must be sampled within the same school calendar year.

21. COMMENT: MDE received multiple comments requesting a provision to “phase in” initial testing and extend the timeline for the 12-month deferral (which requires a plan in place), such that a school would have three to five years to implement its plan for testing and/or allow the school to test over a three-year period.

RESPONSE: MDE recognizes the substantial burden placed on schools in terms of resources and time. The legislation specifies that the initial phase of testing be completed by July 1, 2018; consisting of schools constructed before 1988 and/or serving students grades K through 5. A school may apply for a twelve-month deferral if the school has a plan in place for testing all drinking water outlets and the plan details actionable steps to be taken if an elevated level of lead is found in any drinking water outlet. If the school meets the conditions for a deferral, this effectively allows an additional year beyond the originally scheduled time to complete their testing. All samples from a school building must be collected within the same school calendar year.

22. COMMENT: A commenter noted “Testing should be conducted in a limited manner first, 50% of drinking water fountains and kitchen outlets if the 90th percentile exceeds 15 ppb then secondary testing of all units and plumbing applies.”

RESPONSE: HB 270 requires schools test for the presence of lead in all drinking water outlets in school buildings to ensure that conditions specific to a particular fixture are not contributing lead to the drinking water.

23. COMMENT: A commenter noted “The number of samples required each year per level will exceed the capability of labs to do timely analysis, thus causing a delay in reporting, limit the number as proposed [in Comment #22] as to accelerate detection notice and action.”

RESPONSE: MDE recognizes the burden to laboratories. However, all drinking water outlets are required to be tested for lead under HB270. The prioritization of testing based on building construction date and age of students distributes the initial sampling over a three-year period. MDE will develop a standardized form for laboratories to use to facilitate reporting of sampling information. In addition, it is important to note that once acidified, a sample may be held by the laboratory for up to six months before analysis.

24. COMMENT: A commenter asked “How are renovations or partial renovations to be taken into account when determining building construction date? How are additions to be addressed?”

RESPONSE: Schools must test based on the original construction date unless the school is able to demonstrate to the Department that all interior plumbing was replaced after 1987 and the service line does not contain lead. Upon approval by the Department, the school may be allowed to collect samples in a later testing period.

25. COMMENT: A commenter noted “Recommend delaying the initial testing until July 1, 2019. The aggressive timeline does not provide an adequate planning and execution period, especially in the absence of final regulation. The current timeline would be overly burdensome given current staffing levels and financial resources. Additionally, the regulation states that testing must be performed “...during the regular school year and while school is in session.” This means LEAs will need to complete testing prior to June 15, 2018, depending on their last day of instruction.”

RESPONSE: MDE recognizes that the initial timeline for testing is aggressive. However, the legislation establishes the deadline for initial sample collection on July 1, 2018. The regulations must be consistent with the law. A school may apply for a twelve-month deferral if the school has a plan in place for testing all drinking water outlets and the plan details actionable steps to be taken if an elevated level of lead is found in any drinking water outlet.

26. COMMENT: One commenter asked “Can the Sampling period be changed to requiring testing be completed by July 1st instead of by the end of the normal school year since we are flushing?”

RESPONSE: No. All schools must complete sampling by July 1 and while school is in session. Schools are required to test while they are in session because this reflects normal consumption patterns and exposure to the water in the building(s). Flushing is not sufficient to ensure normal consumption patterns.

27. COMMENT: One commenter expressed concern about the timeline for testing by July 1, 2018 and schools' ability to allocate sufficient staff and resources. The commenter also expressed concern about the time constraint for requesting and receiving approval for deferrals, and requested that there be an expedited administrative process for responding to deferral applications.

RESPONSE: MDE recognizes that these issues are linked, since it is likely that a major reason for a school's need for a testing deferral may well be an absence of funding for testing during the current school calendar or fiscal year. MDE is aware of the aggressive timeline for requesting and receiving approval for deferrals. The deferral application will be made available on or before the effective date of the regulations. The Department is striving to make the deferral application form and review process as simple and straightforward as possible. MDE, in consultation with MSDE, will expedite the process for reviewing applications for deferrals to the best of our ability. To assist schools, MDE will conduct training sessions with instructions on sampling and completion of deferral and waiver applications.

28. COMMENT: A commenter asked "How soon will the deferral form be made available?"

RESPONSE: The deferral form will be made available on or before the effective date of the regulations.

29. COMMENT: A commenter noted "Page 171 - Pursuant to Section ".06 Testing Requirements" - Under Section (D)(1)(b), we recommend adding the language to the end of that provision that would read in its entirety: "*The request documents that all drinking water outlets in the school building have been tested for the presence of lead in a manner that complies with this chapter, or in a manner that complied with EPA's technical guidance in place at the time of the testing.*"

RESPONSE: The testing protocols set forth in the law are based on the standards established in EPA's technical guidance "3Ts for Reducing Lead in Drinking Water in Schools." This is consistent with previous EPA guidance for lead testing in schools. To qualify for a deferral or a waiver based on prior testing, schools must meet all of the testing requirements set forth in the regulations.

30. COMMENT: A commenter asked "What is required if a fixture is out of service when performing the initial sampling?"

RESPONSE: If a fixture is out of service during initial sampling, a sample must be collected at a later date after the fixture has been placed back into service and during the same school calendar year as the rest of the initial sampling.

0.07 Standard Sampling Method

31. COMMENT: One commenter noted "Current proposed testing should follow the standards that are in place for the lead and copper rule."

RESPONSE: HB270 requires the regulation to establish a sampling method for the required testing that is consistent with EPA's 3Ts technical guidance. Please see Comment #2 and #3, for

further explanation of the differences between HB270 regulations and the federal Lead and Copper Rule.

32. COMMENT: MDE received multiple comments that a provision should be added to allow MDE to invalidate any samples that are not properly collected, handled, or analyzed.

RESPONSE: It is of the utmost importance that sampling is performed correctly and test results accurately reflect lead levels in the drinking water outlets. MDE will provide training to schools regarding sample collection. Laboratories have the ability to determine if a valid sample analysis cannot be reported based on sample preservation, sample holding time, or laboratory equipment malfunction.

33. COMMENT: MDE received multiple comments noting “We also recommend that Section B be amended to the following:

- “Schools *should* ensure that samples have appropriate water age in the following ways...”
- “*Ideally*, samples should be collected...”

RESPONSE: It is critical that sampling be conducted exactly as described in Section .07 Standard Sampling Method of the regulation.

0.11 Reporting

34. COMMENT: One commenter noted that local health departments should not be responsible for receiving and maintaining all sample results and certifications, but instead should only receive the results and notifications pertaining to elevated levels of lead.

RESPONSE: The legislation requires that schools submit all sample results containing elevated levels of lead and certifications to the appropriate local health department. Neither MDE nor MSDE has the authority to change this requirement. Our intent for the future is to have an electronic data reporting and tracking system to allow shared access among the various agencies involved. We anticipate that this will greatly reduce the burden on local health departments and other entities.

35. COMMENT: A commenter noted “It is understandable that failed results be reported to these agencies. However, it is burdensome to request all results be reported to all agencies. Reporting a summary for each building should be adequate with a recordkeeping requirement for all of the information requested. Then, if there are concerns about compliance, it can be addressed in an audit, or perhaps a provision for a special request for the detailed information.”

RESPONSE: MDE appreciates the commenter’s concern about reporting all results. However, we feel it is important to maintain a database of all results for tracking and analytical purposes as this endeavor moves forward. Reporting all data is likely to be to the schools’ advantage in putting elevated test results into a realistic context. MDE is in the process of procuring a tracking system to facilitate reporting, management and analysis of the data. Once in place, this should greatly reduce the burden on all involved.

36. COMMENT: A commenter noted “This program should be mandated by MDE, not both MDE and MSDE. Violation notifications should be directed both the district and MSDE.”

RESPONSE: The legislation requires that MDE work in consultation with MSDE to oversee lead testing in public and nonpublic schools. The regulations must be consistent with the law.

37. COMMENT: There were multiple comments asking about the methods to be used for reporting to MDE, MSDE and local health departments.

RESPONSE: MDE has developed specific forms for reporting sample collection, remedial plans of action, remedial actions taken, and notification of elevated levels of lead. The forms will be standardized across MDE, MSDE, and local health departments. All forms will be made available on or before the effective date of the regulations. Additionally, MDE is in the process of procuring a tracking system to facilitate reporting, management and analysis of the data. Once in place, the tracking system should greatly reduce the burden on all involved.

38. COMMENT: A commenter noted “Notifications to Parents of violations with the 10 day period can be an issue unless it can be done electronically rather than by paper.”

RESPONSE: MDE will make available to schools a notification form that will facilitate expeditious notification of elevated lead results to parents and legal guardians. Notification may be conducted electronically or via U.S. Mail, provided that the notification is emailed or postmarked within the specified ten school-day period.

39. COMMENT: One commenter noted that schools should be required to report all test results to parents, not only the results with elevated levels of lead.

RESPONSE: MDE understands the importance of transparency with regard to monitoring lead exposure in drinking water. The legislation only requires that elevated levels of lead be reported to parents or legal guardians, but MDE will strongly encourage schools to report all results. Reporting all data is likely to be to the schools’ advantage in putting elevated test results into a realistic context. See Comment #35.

Economic Impact

40. COMMENT: A commenter noted “The Estimate of Economic Impact does not reflect the local government impact. This regulation will add tens of thousands of dollars to the local budget for testing services and require additional staff resources to address the testing, reporting, remediation and record keeping. Some local impact should surely be estimated.”

RESPONSE: The fiscal note published with the proposed regulation recognizes that implementation of the regulation will have a direct negative economic impact on local government. Since implementation costs will vary by school district and depend on the number of drinking water outlets that require remediation, the Department was unable to provide a reliable estimate of the impact to local governments.

41. COMMENT: Multiple commenters noted that nonpublic schools have not been provided with maintenance funding for the sort of testing endeavor required by the regulations and strongly encouraged that some funding for testing be provided elsewhere in the State or departmental budget for schools that must undergo testing. Commenters also requested that a less arduous path to a waiver for schools that have recently tested for the presence of lead in their

drinking water supply could likely alleviate much of the need for a funding source for testing expenses.

RESPONSE: Comment noted.