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DATE: November 1, 2018

TO: Hearing Attendees and Commenters –
Oregon Administrative Rule 333-061-0400, "Reducing lead in school
drinking water"

FROM: Brittany Hall, Hearing Officer

cc: David Emme, Section Manager
Drinking Water Services

SUBJECT: Presiding Hearing Officer's Report on Rulemaking Hearing and Public
Comment Period

Hearing Officer Report

Date of Hearing: October 24, 2018

Purpose of Hearing: To receive testimony regarding the Oregon Health Authority (OHA), Public Health Division's proposed permanent adoption of Oregon Administrative Rule 333-061-0400 relating to testing school drinking water taps for lead; and removing, repairing or replacing the taps if necessary to deliver safe drinking water.

Hearing Officer: Brittany Hall

Testimony Received: Two individuals provided oral testimony at the hearing. Their comments are briefly summarized below.

Joe Crelier, ARM, Director of Risk Management, Portland Public Schools

Mr. Crelier noted that the Environmental Protection Agency (EPA) revised the 3Ts document referenced in the proposed rule in October 2018 and questioned if the final rule will reference the October 2006 and October 2018 revisions as applicable.

He also stated that Portland Public Schools recommends adding the words "cold water" or similar edits in various sections of the proposed rule in order to address the scope and intent of the EPA 3Ts to test cold water taps. Mr. Crelier submitted written comments that provide suggested edits to the proposed rule text.

His written comments further state that the "rulemaking process was very productive" and that "Portland Public Schools supports the proposed rule" with the two comments provided above for consideration.

Mr. Crelier's written comments are attached to this report as "Exhibit 1".

Agency response:

OHA appreciates Mr. Crelier's comments and the final rules have been modified to reference the most recent version of EPA's 3Ts guidance manual. References to specific sections within the manual are also updated. OHA has also modified section (4) of the final rule to indicate monitoring should take place only at cold water taps.

Lawrence Rossini, Volunteer, Environment Oregon

Mr. Rossini expressed concern that the proposed rule intends to continue 15 parts per billion (ppb) as the standard for presence of lead in school drinking water. He stated that "Any level of lead in drinking water puts kids at risk of cognitive and behavior impairment." He referenced declarations made by Oregon Health Authority staff to the Early Learning Council of the Department of Education that publicly acknowledged that the smallest amount of lead in drinking water is not safe for children, in reference to the ODE's adoption of a similar rule for childcare providers. He stated that the OHA has claimed that their proposed rule is based on the 15 ppb standard that the EPA has set for ease of implementation, although the EPA says that 0 ppb is the standard you would use if you're concerned about the health of children.

Mr. Rossini opined that "if we are to produce kids who are ready to learn and learn at their highest potential we need to create settings that foster their cognitive development. To do that we should actively remove exposure to toxins that damage their brains and their developing nervous systems. The proposed rule does not do that, and it should. At 15 ppb it makes extremely bad water less toxic, but it doesn't make school drinking water not toxic. It doesn't protect kid's health and to make matters worse, parents, students, teachers, staff and the public might think that it does." He urged the agency to "change the rule so it meaningfully and transparently protects kids' health and safety for now and in the future."

Agency response:

OHA appreciates Mr. Rossini's comments and acknowledges there is no safe level of lead in blood. The 15 ppb action level is not proposed as a drinking water standard. It is a threshold used to compare worst-case, first-draw sampling results with so that sources of lead can be identified and mitigated.

To capture a water sample that is representative of what a person is exposed to throughout the day poses a significant challenge. Current available protocols involve sampling the worst-case scenario after the water has been sitting overnight. The lead level in a first-draw sample is not representative of what consumers drink throughout the day. The longer the water sits in a pipe and faucet, the more lead can leach into the water. The intent of lead sampling in schools using this protocol is to identify sources of lead in premise plumbing and eliminate or reduce exposure at those taps with high levels. As water is routinely used throughout the day, lead levels are reduced. Some studies have shown that flushed samples were an average of 93% lower in lead than a first draw sample.

For regulatory purposes, OHA contends that mitigating for lead at 15 ppb is a reasonable balance of public health protection and feasibility. Schools are encouraged to mitigate at levels lower than 15 ppb if they are able.

Other Comments: Nine individuals submitted written comments to the Division within the period allotted for public comment. These comments are briefly summarized as follows:

Jim Seipel, Facilities Director, Oregon Trail School District 46

Mr. Seipel wrote that, being deeply concerned over available funding for schools, imposing testing and mitigation requirements upon practically every water source in each school seemed highly excessive, particularly with alternative solutions available such as instruction, supervision and signage. However, after reading the published changes being proposed he was relieved and believes these changes are "completely reasonable and manageable and fully supports them."

He suggested that "if it has not already been addressed that parameters for acceptable vs. unacceptable signage indicating non-drinking water be clarified."

Mr. Seipel's written comments are attached to this report as "Exhibit 2".

Agency response:

OHA welcomes Mr. Seipel's comment and has added to the final rule a signage provision for taps that are primarily used for sanitation purposes. If, for example, a restroom sink is determined to be used for drinking, and test results show 15 or more ppb, rather than remove access to the tap, a school may continue access to the sink until mitigation is complete and add signage that the water is not to be used for drinking. This signage may be in place for up to 30 days, If mitigation will take longer than that, a schedule must be approved by the Department of Education.

The rule requires only testing of taps that the school determines are used for drinking or food preparation. If a school determines that a certain tap is not used for drinking or food preparation, the water need not be tested. The school may wish to utilize any signage they feel is appropriate, such as a reminder that the tap is not to be used for drinking or food preparation. This is described in EPA's 3Ts guidance and OHA did not feel it necessary to include in the regulation as it is optional.

Scott Bradway, Water Quality Information Manager, Portland Water Bureau

Mr. Bradway wrote the "PWB supports these new rules and appreciates the opportunity to review and comment on them." He further stated that "PWB has worked with schools and childcare facilities to provide technical support and sample analysis in a targeted manner since 2016 and due to the experiences gained from this and other lead testing requirements, PWB is able to provide technical and practical insights for the development of these rules that will regulate testing and mitigation efforts." Mr. Bradway provided comments specific to five areas of the proposed rule:

1. 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities (2018) - Suggestion that OHA modify the language in the proposed rule with the newer 2018 version of the EPA 3Ts guidance manual.

2. Healthy and Safe Schools Plan - Recommendation that OHA include a reference to communication requirements found in ORS 332.334, adopted with the passage of SB 1062, "Healthy and Safe Schools Plan" in 2017, in the proposed rule.

3. Sample Bottles - Recommendation that the proposed rule is updated to clarify if a "detailed fixture evaluation" may be conducted using sample volumes other than 250-mL, as specified in the revised 3Ts manual.

4. Flushing of Plumbing as a Permanent Control Measure – Recommendation that language is removed from the proposed rule that references flushing as a permanent mitigation measure, as removed from the revised 3Ts manual.

5. Clarification of "First Draw" – Recommendation that OAR 333-061-0400(2)(b) pertaining to "first draw" samples is amended to say "...before any water is used from that tap the day it is tested" in order to clarify that more than one tap can be sampled per day.

Mr. Bradway's written comments are attached to this report as "Exhibit 3".

Agency response:

OHA appreciates Mr. Bradway's comments and the final rules have been modified to reference the most recent version of EPA's 3Ts guidance manual. References to

specific sections within the manual are also updated. OHA has also added a reference to the reporting requirements in the statute concerning the Healthy and Safe Schools plan, as suggested in the comment. The rule language referencing flushing as a permanent mitigation option was removed since it was no longer supported in the 3Ts guidance. OHA has also made the clarification recommended regarding first draw sampling.

Regarding a detailed fixture evaluation, since this is a process that may be used to further pinpoint the source of the lead such that the appropriate mitigation can be taken, OHA does not believe this needs to be included in regulation. The sampling required in the rule is the minimum required; if a school wants to collect additional samples for investigation rather than regulatory purposes, these samples need not meet all requirements in the rules as long as the minimum requirements are met. Therefore, the language was not changed.

Morgan Allen, Deputy Executive Director of Policy and Advocacy, Confederation of Oregon School Administrators (COSA)

Mr. Allen offered three comments on behalf of COSA members:

1. While acknowledging that the EPA's 3Ts guidance document has been updated in October 2018, he suggested "keeping the 3Ts guidance from October 2006 in Section 2 of the rule (Initial Testing) so that tests completed in 2016/17 by school districts, education service districts and charter schools are not invalidated or need to be repeated during the initial testing timeframe." He further suggested that the most up-to-date version of the 3Ts document be used for sections of the rule related to the on-going testing phase beginning July 1, 2020.
2. He opined that the rule "should make clear that any exempted plumbing fixture needs to be tested if it is used by the school as a source of drinking water or for food preparation."
3. He stated that COSA suggests that after the comment period for the rule has closed, stakeholders involved in crafting SB 1062 be convened to discuss proposed changes and provide feedback to OHA on public comments.

Mr. Allen's written comments are attached to this report as "Exhibit 4".

Agency response:

OHA welcomes Mr. Allen's comments and the final rules have been modified to reference the most recent version of EPA's 3Ts guidance manual where appropriate but will recognize and accept monitoring conducted according to the earlier guidance.

OHA has defined a tap as being one where water is used for drinking or food preparation. In the proposed rule, restroom sinks were specifically excluded, meaning restroom sinks did not need to be tested regardless of use. For the final rule, OHA removed restroom sinks from the list of exclusions, with the results that restroom sinks are not specifically called out. For taps other than those specifically excluded, schools must determine which taps are used for drinking or food preparation and ensure that those are tested.

OHA is open to further discussions regarding clarifications and implications of these rules. Any future revisions will need to be handled through a future rule-making process.

Celeste Meiffren-Swango, State Director, Environment Oregon

Ms. Meiffren-Swango provided some scientific information related to lead and its damaging effects to children, stating that "the science now makes it clear that there is no safe level of lead exposure for our children." She provided some information on the effectiveness of NSF certified filters as an affordable short-term solution to remove lead at taps and stated that although lead-bearing faucets and fixtures pose an inherent contamination risk and should be replaced over time, the use of certified filters should be used in the meantime. She urged the agency to consider requiring the installation of NSF certified filters at all taps used for drinking or cooking at schools in Oregon as a preventative measure to limit lead exposure.

She also took issue with the standard of 15 ppb for lead in children's drinking water and stated that "given the science on the health impacts of lead exposure for children, schools should be required to follow the American Academy of Pediatrics recommendation of one part per billion standard for lead in children's drinking water."

Ms. Meiffren-Swango's written comments are attached to this report as "Exhibit 5".

Agency response:

OHA appreciates Ms. Meiffren-Swango's comments and acknowledges there is no safe level of lead in blood. The 15 ppb action level is not proposed as a drinking water standard. It is a threshold used to compare worst-case, first-draw sampling results with so that sources of lead can be identified and mitigated.

To capture a water sample that is representative of what a person is exposed to throughout the day poses a significant challenge. Current available protocols involve sampling the worst-case scenario after the water has been sitting overnight. The lead level in a first-draw sample is not representative of what consumers drink throughout the day. The longer the water sits in a pipe and faucet, the more lead can leach into the water. The intent of lead sampling in schools using this protocol is to identify sources of lead in premise plumbing and eliminate or reduce exposure at those taps with high

levels. As water is routinely used throughout the day, lead levels are reduced. Some studies have shown that flushed samples were an average of 93% lower in lead than a first draw sample.

For regulatory purposes, OHA contends that mitigating for lead at 15 ppb is a reasonable balance of public health protection and feasibility. Schools are encouraged to mitigate at levels lower than 15 ppb if they are able.

Requiring mitigation at a lower level can be difficult to achieve. Installation of drinking water treatment units is a mitigation option in EPA's 3Ts and work under ideal circumstances but may not completely remove the lead because: 1) NSF compliance can be difficult to navigate, leading to potentially inappropriate installations; 2) requires routine maintenance and lead levels can increase if not maintained properly; 3) replacement of filter media can be costly thus may be postponed; 4) replacement of plumbing with lead solder is costly and therefore not always feasible.

Leanna Heiman

Ms. Heiman is the parent of a child who attends a public elementary school in the Salem-Keizer School District. She noted that "the proposed rule excludes certain classes of plumbing fixtures that are in fact regularly used by children of all ages as a source of drinking water, namely restroom sinks and shower heads." She stated that "a number of schools in the Salem-Keizer School District have fixtures that recently tested above 15 ppb and although restroom sinks and shower heads are less likely to serve as a regular source of drinking water, it is still very common for children to drink from these sources." She opined that since the proposed rule does not require schools to include any signage or warning on these fixtures exempted from lead testing, many parents and children will not be made aware of fixtures that might contain lead, yet are still used for drinking.

She further stated that she "would strongly advise the Oregon Health Authority to consider broadening its [*sic*] definition for fixtures deemed as 'regular sources of drinking water' to include other common sources like restroom sinks and shower heads."

Ms. Heiman's written comments are attached to this report as "Exhibit 6".

Agency response:

OHA appreciates Ms. Heiman's comments. OHA has defined a tap as being one where water is used for drinking or food preparation. In the proposed rule, restroom sinks were specifically excluded, meaning restroom sinks did not need to be tested regardless of use. For the final rule, OHA removed restroom sinks from the list of exclusions, with the results that restroom sinks are not specifically called out. For taps other than those

specifically excluded, schools must determine which taps are used for drinking or food preparation and ensure that those are tested.

The exclusions are listed to provide clarity to school districts as to taps can reasonably be considered non-potable. Shower heads, boilers, eye wash stations, irrigation heads, and science sinks meeting the criteria were determined by our stakeholder group to represent a limited list of taps that are not intended for drinking or food preparation and are not reasonably used for that purpose. While a person may allow some water from a shower head into their mouths, this does not represent normal usage.

If a school determines that certain taps are not used for drinking or food preparation, or are listed as an exclusion from testing, the water is not required to be tested. However, the schools may wish to utilize any signage they feel is appropriate, such as a reminder that the tap is not to be used for drinking or food preparation. This is described in EPA's 3Ts guidance and OHA did not feel is necessary to include in the regulation since it is optional.

Karl Granlund, Administrator for Risk Management, Beaverton School District

Mr. Granlund stated that the "Beaverton School district is committed to providing a safe environment for students and employees and supports the Oregon Health Authority rules for Reducing Lead in School Drinking Water." He provided three areas of the rule where the district proposes changes:

1. Section (1)(b)(B) – "Recommend ALL classes of plumbing fixtures in the draft (labeled (i) through (vii) inclusive) remain exempt from the definition of a "Tap". He cites information from the U.S. EPA *3T's for Reducing Lead in Drinking Water in Schools* as supporting information for the "best and most consistent way to address restroom sinks." He further states that "The EPA 3T's states that faucets that are not used for human consumption do not need to be sampled and clear signage should be used to notify people that it is not for drinking." He opines that testing all restroom sinks "will become an 'unfunded mandate' for all school districts across the state who will be faced with the possibility of shutting off sinks in restrooms in order to mitigate an issue."
2. He recommended adding the language "All test samples shall be collected from cold water."
3. He stated that "the rule should be clear that if any plumbing fixture, including restroom sinks, are KNOWN to be used as a drinking water source or food preparation, the fixture should be sampled and tested."

Mr. Granlund's written comments are attached to this report as "Exhibit 7".

Agency response:

OHA appreciates Mr. Granlund's comments and has modified section (4) of the rule to indicate monitoring must take place only at cold water taps.

In the proposed rule, restroom sinks were specifically excluded, meaning restroom sinks did not need to be tested regardless of use. For the final rule, OHA removed restroom sinks from the list of exclusions, with the results that restroom sinks are not specifically called out. This is because of comments that some restrooms sinks may be used for drinking. For taps other than those specifically excluded, schools must determine which taps are used for drinking or food preparation and ensure that those are tested.

OHA has added to the final rule a provision to place signs at taps that are primarily used for sanitation purposes. If, for example, a restroom sink is determined to be used for drinking, and test results show 15 or more ppb, rather than remove access to the tap, a school may continue access to the sink until mitigation is complete and add signage that the water is not to be used for drinking. This signage may be in place for up to 30 days, If mitigation will take longer than that, a schedule must be approved by the Department of Education.

If a school determines that certain taps are not used for drinking or food preparation, or are listed as an exclusion from testing, the water is not required to be tested. However, the schools may wish to utilize any signage they feel is appropriate, such as a reminder that the tap is not to be used for drinking or food preparation. This is described in EPA's 3Ts guidance and OHA did not feel is necessary to include in the regulation since it is optional.

Michael Wolfe, Chief Operations Officer, Salem Keizer Public Schools

Mr. Wolfe wrote that Salem Keizer Public Schools (SKPS) "supports the OHA's proposed rule as submitted. We strongly support the exclusion of restroom sinks from the sampling requirements, which reflects the consensus of stakeholders."

Mr. Wolfe cited the 2018 revision to the EPA's *3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities* and referenced information in the manual regarding communication and signage for faucets in bathrooms, locker room showerheads, and non-traditional drinking water outlets, providing information from the manual that if those "non-traditional drinking water outlets are known to be used for drinking and cooking (e.g., fill water jugs), sampling should be conducted." "Do Not Drink or Cook" signs may also be considered.

He opined that if a restroom sink tested above the 15 ppb standard of lead and had to be shut down, this may cause a need to shut down the restroom due to sanitation issues, which could then lead to school closures should the restroom to occupancy ratio

no longer meet building code, demonstrating the associated downstream consequences of such an event.

Mr. Wolfe stated that "SKPS proposes to follow the 3Ts guidance on posting signs, pictures and education around not consuming water from restroom sinks."

Mr. Wolfe's written comments are attached to this report as "Exhibit 8".

Agency response:

OHA welcomes Mr. Wolfe's comments.

In the proposed rule, restroom sinks were specifically excluded, meaning restroom sinks did not need to be tested regardless of use. For the final rule, OHA removed restroom sinks from the list of exclusions, with the results that restroom sinks are not specifically called out. This is because of comments that some restrooms sinks may be used for drinking. For taps other than those specifically excluded, schools must determine which taps are used for drinking or food preparation and ensure that those are tested.

OHA has added to the final rule a provision to place signs at taps that are primarily used for sanitation purposes. If, for example, a restroom sink is determined to be used for drinking, and test results show 15 or more ppb, rather than remove access to the tap, a school may continue access to the sink until mitigation is complete and add signage that the water is not to be used for drinking. This signage may be in place for up to 30 days, If mitigation will take longer than that, a schedule must be approved by the Department of Education.

If a school determines that certain taps are not used for drinking or food preparation, or are listed as an exclusion from testing, the water is not required to be tested. However, the schools may wish to utilize any signage they feel is appropriate, such as a reminder that the tap is not to be used for drinking or food preparation. This is described in EPA's 3Ts guidance and OHA did not feel is necessary to include in the regulation since it is optional.

Brian Hodges-French, Healthy and Safe Schools Coordinator, Oregon Department of Education

Mr. Hodges-French thanked the OHA for its partnership and many hours of support provided during stakeholder meetings. He wrote that "for the most part, ODE supports the proposed rule. However, ODE is concerned that there is a serious flaw in the proposed rule, which needs to be addressed in order to ensure public confidence in the safety of water in Oregon's public schools and to protect students from exposure to elevated levels of lead in the water they consume at schools." The concern of ODE about the proposed rule surrounds the exclusion of restroom sinks from being tested for

elevated levels of lead, opining that "excluding restroom sinks from testing will likely lead to some students being exposed to unsafe levels of lead" since it is known that students consume water from restroom sinks for a variety of reasons, including teeth brushing.

Mr. Hodges-French acknowledged that school districts are concerned about the financial impact of including restroom sinks in the fixtures required to be tested. He provided some data to show that the cost of testing all fixtures and replacing those that tested high is not as burdensome as thought, based on information from a 2016 voluntary reimbursement program for testing for elevated levels of lead in drinking water at schools that ODE administered.

Mr. Hodges-French also addressed the suggestion that signage may help solve the problem of excluding restroom fixtures from testing, stating that "signage is not a viable permanent solution" for several reasons, including young children not being able to read or comprehend the signage. This could cause young children to be exposed to lead by drinking that water or create the assumption that the water is not safe at all and lead to other health risks from not washing hands. He pointed out that the proposed rule makes no mention of signage being required and there are no standards for the signage or provisions to ensure that signage remains in place and readable.

Mr. Hodges-French stated that the ODE "recommends explicitly requiring testing for restroom sinks in the proposed school drinking water rule OAR 333-061-0400. The health risks, loss of public confidence and potential legal ramifications are not worth leaving these water sources untested."

Mr. Hodges-French's written comments are attached to this report as "Exhibit 9".

Mr. Hodges-French also submitted additional written comments stating that he and a colleague from the ODE "are both in agreement that the wording of the rule, section (6c) should be amended to reflect the change that the newly revised 3T's no longer endorse flushing as a permanent solution." He also suggested that the "rule should reflect that if flushing is to be used as a temporary measure, until a permanent solution can be executed, that testing be required to prove the flushing was bringing the lead level down below the 15 ppm [*sic*] action level.

Mr. Hodges-French's additional comments are attached to this report as "Exhibit 10".

Agency response:

OHA appreciates the comments of and sustained collaboration with the Department of Education on this issue. The final rules have been modified to reference the most recent version of EPA's 3Ts guidance manual where appropriate but will recognize and accept monitoring conducted according to the earlier guidance. References to specific sections

within the manual are also updated. The rule language referencing flushing as a permanent mitigation option was removed since it was no longer supported in the 3Ts guidance.

In the proposed rule, restroom sinks were specifically excluded, meaning restroom sinks did not need to be tested regardless of use. For the final rule, OHA removed restroom sinks from the list of exclusions, with the results that restroom sinks are not specifically called out. This is because of comments that some restrooms sinks may be used for drinking. For taps other than those specifically excluded, schools must determine which taps are used for drinking or food preparation and ensure that those are tested.

OHA has added to the final rule a provision to place signs at taps that are primarily used for sanitation purposes. If, for example, a restroom sink is determined to be used for drinking, and test results show 15 or more ppb, rather than remove access to the tap, a school may continue access to the sink until mitigation is complete and add signage that the water is not to be used for drinking. This signage may be in place for up to 30 days. If mitigation will take longer than that, a schedule must be approved by the Department of Education.

Beth Myers, Waterlab Corp.

Ms. Myers provided a comment about the use of an Oregon Environmental Laboratory Accreditation Program (ORELAP) accredited lab, writing "specifically the lab in use should be accredited for Lead Testing in the matrix of Drinking water (or accredited for Lead in Drinking Water)." She provided some background on how ORELAP accreditation works to support her comment.

Ms. Myers' written comments are attached to this report as "Exhibit 11".

Agency response:

OHA appreciates Ms. Myers' comments. OHA has amended the final rule to specify that sample analysis must be conducted by a laboratory accredited to perform the analysis, not merely accredited in a general sense.