PUBLIC HEALTH DIVISION
Drinking Water Services
Tina Kotek, Governor

Oregon Health Authority

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March 26, 2024

Micah Cisneros, EIT
Project Designer
HBH Consulting Engineers, Inc.
Via email: mcisneros@hbh-consulting.com

Re: Corrosion Control Installation (PR#23-2024)
Nestucca Valley Elementary School (PWS ID#90595)
Conditional Approval

Dear Micah:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the corrosion control project for Nestucca Valley Elementary School. On February 1st, 2024, our office received plans and a corrosion control evaluation memorandum. A plan review fee of $248 was received on March 11, 2024.

The project includes installation of caustic soda for the purpose of reducing the lead action levels. The water system exceeded the lead action level in July 2023, and is required to install corrosion control treatment by June 30, 2024. The proposed treatment will have an initial target of a pH of 7.4.

The plans are approved with the following conditions:

- All items in contact with potable water must meet NSF Standard 61 (equipment) and NSF Standard 60 (chemicals) or equivalents.
- Testing equipment must be available to measure the appropriate water quality parameters (pH and alkalinity).
- The operations and maintenance manual must be updated to include details on operating and maintaining the new treatment system.

Until we receive verification that the conditions have been met and final approval has been issued, the facility is not approved for use. Upon completion of the project, the engineer must verify in writing that construction was completed according to the submitted

plans. If substantial changes are made, a set of as-built drawings must be submitted. Documentation demonstrating how the above conditions were met should reference Plan Review #23-2024 and can be emailed to me at Carrie.L.Gentry@oha.oregon.gov.

In addition to the above conditions, I have the following comments:

- Following construction and Final Approval of this project:
  - increased sampling for water quality parameters (pH and alkalinity) will need to be sampled at both the entry point and in the distribution system (i.e., other locations throughout the school).
  - Two demonstration rounds of lead and copper tap samples at 10 sites will also be needed in the first 12 months following construction and Final Approval.
  - Once this increased monitoring is complete, a minimum pH will be established for both the entry point and distribution system.
  - Sampling for pH will be ongoing and needs to be reported monthly.
  - Reductions in lead and copper tap sampling is also possible, depending upon the results of the increased demonstration testing rounds.
  - Increase sampling is summarized in Table 1 (required) and reduced sampling once the increased sampling is done is summarized in Table 2 (anticipated, but subject to change based on the results from sampling in Table 1).

The following sampling assumes the treatment system will be placed into service soon after Final Approval has been granted.

Table 1. Required sampling to demonstrate compliance following Final Approval

What Parameter	**Where**	**When**	**Purpose**	**Enter 90th percentile lead and copper and individual pH and alkalinity sample dates and results**		
Lead and Copper **(Round 1)**	**10 tap sample sites**	**Round 1** – within 2 months of Final Approval	Demonstrate corrosion control	Round 1 Date: _____ Lead = _____mg/l Copper = _____mg/l		
Lead and Copper **(Round 2)**	**10 tap sample sites**	**Round 2** – 6 months after round 1 sampling	Demonstrate corrosion control	Round 2 Date: _____ Lead = _____mg/l Copper = _____mg/l		
pH & Alkalinity (**EP-A**)	**Entry Point A** or "EP-A" (prior	Every 14 days following Final	Results along with lead and copper tap	**EP-A Results**		
				Date	pH	Alk

	to first useable tap).	Approval	sampling will be used to establish a minimum pH that will have to be maintained at the entry point			
pH & Alkalinity (**DIST-A**)	**Distribution** system – select either 1 lead or copper tap sample site or 1 coliform sample site representative of the water quality in distribution system in the school (document the sample site "e.g., Teacher's Lounge"	Take **1st sample** on the day of each round of lead and copper tap sampling. Take a **2nd sample** – within 14 days of the 1st sample.	Results along with lead and copper tap sampling will be used to establish a minimum pH that will have to be maintained in the distribution system. _____ Taken with lead and copper rounds 1 & 2: Taken w/Round 1 => 14 days later => Taken w/Round 2 => 14 days later =>	(26 results needed) **Distribution Results** Date / pH / Alk Taken w/Round 1 => 14 days later => Taken w/Round 2 => 14 days later =>		

Table 2. Sampling anticipated following the demonstration sampling in Table 1				
What Parameter	Where	When	Purpose	Results
Lead and Copper	5 tap sample locations	Every 1 or 3 years (depending upon results of 6-month demonstration rounds)	Reduced Monitoring	**<u>Year 1</u>** Sample Date: _____ Lead = ____ppb Copper = ____mg/l **<u>Year 2</u>** Sample Date: _____ Lead = ____ppb Copper = ____mg/l **<u>Year 3</u>** Sample Date: _____ Lead = ____ppb Copper = ____mg/l
pH at EP-A	Same site as EP-A pH sampling in Table 1	Every 14 days (on-going requirement)	Results must be above the required	Report the results by the 10th of the following month

			minimum pH	every month using the "Entry Point" form (provided later)
pH in the Distribution system	Same site as DIST-A pH sampling in Table 1	1st sample during lead and copper tap sampling and 2nd sample within 14 days of 1st sample	Results must be above the required minimum distribution pH	Report results by the 10th of the following month using the "Distribution" form (provided later)
Minimum Water pH requirements and reported pH results will be viewable online here: https://yourwater.oregon.gov/lcr.php?pwsno=90595 Lead and copper 90th percentile results are viewable online here: https://yourwater.oregon.gov/leadcopper.php?pwsno=90595				

If you have any questions, please feel free to call me at (971) 201-9794.
Sincerely,

Carrie Gentry, PE
Regional Engineer
Drinking Water Services

cc: Nicole Alfafara, REHS, OHA/DWS
Jaime Craig, REHS, Tillamook County Health Department
Curtis Olson, Field Manager, Hiland Water Services, curtis@hilandwater.com
Chad Holloway, Facilities Director, Nestucca Valley School District #101, chadh@nestucca.k12.or.us