



May 28, 2024

Adam Loveless (adam@affordablehousingsource.com)
Spar Tree MHP

Sent by email only.

Re: Corrosion Control (PR#129-2023)
Spar Tree MHP – WS # 01264)
Conditional Approval

Dear Adam:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the corrosion control treatment for Spar Tree Mobile Home Park. On September 25, 2023, our office received plans, water quality parameters and a plan review fee of \$248. On May 20, 2024, our office received pH data from a pH testing of the well.

The project includes the installation of corrosion control using soda ash. The soda ash will be injected into a 2500 gallon Norwesco tank using a Stenner feed pump. The water system exceeded the lead action level in August 2022, and is required to install corrosion control treatment by June 30, 2024. The proposed treatment will have an initial target of a pH of 7.7.

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 corrosion treatment 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 #129-2023 and can be emailed to me at keith.male@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 mobile home park).
 - Two demonstration rounds of lead and copper tap samples at 5 sites will also be needed in the first 12 months following construction and Final Approval.
 - Once this increased monitoring is complete, a minimum pH and alkalinity will be established for both the entry point and distribution system.
 - Sampling for pH and alkalinity 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 in 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).

What Parameter	Where	When	Purpose	Enter 90 th percentile lead and copper and individual pH and alkalinity sample dates and results		
Lead and Copper (Round 1)	5 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)	5 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 to first useable tap).	Every 14 days following Final Approval	Results along with lead and copper tap sampling will be used to establish a minimum pH that will have to be maintained at the entry point	EP-A Results		
				Date	pH	Alk
pH & Alkalinity	Distribution	Take 1st sample	Results along with			

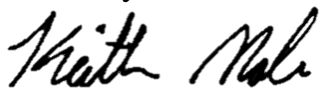
(DIST-A)	system – select either 1 lead or copper tap sample site or 1 coliform sample site representative of the water quality in distribution system in the school (document the sample site “e.g., Unit #14”	on the day of each round of lead and copper tap sampling. Take a 2nd sample – within 14 days of the 1 st sample.	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			

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	Year 1 Sample Date: _____ Lead = ___ppb Copper = ___mg/l Year 2 Sample Date: _____ Lead = ___ppb Copper = ___mg/l Year 3 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 minimum pH	Report the results by the 10 th of the following month every month using the “Entry Point” form (provided later)
pH in the Distribution system	Same site as DIST-A pH sampling in Table 1	1 st sample during lead and copper tap sampling and 2 nd sample within 14	Results must be above the required minimum	Report results by the 10 th of the following month using the “Distribution” form

		days of 1 st sample	distribution pH	(provided later)
Minimum Water pH requirements and reported pH results will be viewable online here: https://yourwater.oregon.gov/lcr.php?pwsno=01264				
Lead and copper 90 th percentile results are viewable online here: https://yourwater.oregon.gov/leadcopper.php?pwsno=01264				

If you have any questions, please feel free to call me at 503-939-1322 or email me at keith.male@oha.oregon.gov.

Sincerely,



Keith Male, PE
Regional Engineer
Drinking Water Services

cc: Julie Wray, DWS
Joel Ferguson, REHS, Clackamas County Health Department