COOS BAY-NORTH BEND WATER BOARD
P O BOX 539 – 2305 Ocean Boulevard
Coos Bay, Oregon 97420

Minutes
Regular Board Meeting

October 3, 2019
7:00 a.m.

Coos Bay-North Bend Water Board met in open session in the Board Room at the above address, date, and time with Chair Bob Dillard presiding. Other Board members present: Greg Solarz, Dr. Sharps and Melissa Cribbins. Board members absent: None. Water Board staff present: Ivan D. Thomas, General Manager; Bryan Tichota, Customer Relations Supervisor; Jeff Howes, Finance Director; Jeff Page, Operations Manager; Karen Parker, Administrative Assistant; Mark Merry, Water Treatment Operator; Board Legal Counsel Jim Coffey was absent. Media present: None. Chair Dillard opened the meeting at 7:00 a.m. and lead the Board and assembly in the Pledge of Allegiance.

Chair Dillard asked if there were any corrections or additions to the September 12, 2019, Regular Board meeting minutes. Dr. Sharps moved the minutes be approved as written. The motion was seconded by Ms. Cribbins and passed unanimously.

Chair Dillard asked if there were any public comments, and there were none.

At the September 12th Regular Board meeting staff agreed to bring back more information to the Board regarding changes to pH adjustment procedures at Pony Creek Treatment Plant (lime to caustic soda) and cost comparisons.

Operations Manager Jeff Page stated lime has been typically fed prior to the chlorine contact basins to increase the pH from the filtered water level of ~7.3 to 7.8, and then the caustic is injected after the chlorine contact basins prior to the high service pumps in the same area as the ammonia feed with a target level of 8.5. This level is good for both corrosion control purposes as well as maintaining proper chloramine disinfectant levels.

The feeding of lime has been problematic for years as it is prone to clogging pipes and valves even with the use of a sequestering agent in the lime slurry. Staff performs regular maintenance of the lime system but recently it was discovered that much of the piping on the outlet side of the peristaltic pumps had significant restrictions so staff took the lime offline in order to fix this issue. During these types of maintenance periods, we maintain our pH level solely using caustic. Staff has been adjusting and maintaining pH levels using only caustic since late June 2019 and has seen greater stability of the pH levels within the various areas of the distribution system. The likely cause of this is due to the difficulty of dosing lime accurately. Feeding the caustic is more precise and thus allows staff to improve water quality.

The problems associated with feeding lime are stated numerous times in the 2010 Conceptual Design Report for the plant upgrades. The report recommended that a combination of both caustic and soda ash is used for the pH adjustment as the soda ash will add alkalinity to aid in further pH level stability within the distribution system. Neither lime, nor caustic add alkalinity to the water so in essence they are performing the same function. The report also states that aluminum sulfate (alum) was used as the primary coagulant at one point in the past and that lime was fed prior to the current sedimentation basins to counteract the depressed pH caused by its addition. In this scenario, it may have made sense to use lime due to its cheaper cost and the amounts needed to raise the pH to a then target of 7.0 from most likely the mid-six range. Perhaps using caustic wasn't a feasible option at that time.

Adjusting the pH prior to the chlorine contact basins as has been done in the past may be unnecessary. Staff has been successful since mid-July adjusting the pH by injecting caustic only after the chlorine contact basins, which is where it has been typically injected as the final adjustment. The results have been positive as we have record of stable target pH levels within the distribution system over this period. Additionally, the free chlorine disinfection occurring within the chlorine contact basins should be more effective at the lower filtered water pH level of 7.3 than a pH of 7.8 when using lime. Based upon staff's observations, operating in this manner will significantly lower pH adjustment costs.

Currently, the utility's cost for lime (100%) is $414/ton, while caustic is $249.45/ton in a 25% solution. Lime is cheaper than caustic, but the cost advantage disappears when including maintenance, sequestering agent costs and staff time.

Adjustment Costs for pH FY 2018-19						
	Chemical Costs	Sequestering Agent	Maintenance Item Costs	Main Hours	Ave. $/MH	Totals:
Caustic	$16,154.47	N/A	$35.00	4	$43.72	$16,364.35
Lime	$ 8,525.23	$3,949.80	$10,320.00	99	$43.72	$27,123.31
					Total Cost	$43,487.66

Approximated Costs of Using Caustic Only at Final Injection Point for 1-Year						
Chemical Cost/Ton	Approx. Tons Needed/MG Produced	MG Produced for Calendar Year 2018	Maintenance Item Costs	Man-hours	Ave. $/MH	Total:
$249.45	0.036	1,313	$100.00	5	$43.72	$12,109.60

The aforementioned costs for using only caustic to adjust pH is based upon an average of what was used since mid-July and extrapolated over a one year period. The actual cost will differ as it is unknown how seasonal variations in water quality will affect usage.

Mr. Page stated he contacted Oregon Health Authority (OHA) to see what would be required to discontinue the use of lime. Because the pH adjustment is linked to the utility's corrosion control compliance for the Lead and Copper Rule (LCR), staff will need to conduct two rounds of lead and copper sampling six months apart. OHA is currently revising the Water Board's sample schedule to reflect this change. If the Board agrees for staff to move forward Mr. Page stated he anticipates beginning to sample in early November; all samples for the first round must be submitted to the lab by December 31st. The second round will be 6 months later. The sample pool is required to have 60 sites in total. The utility's sample pool will consist of the usual 30 sample sites used for its tri-annual LCR testing along with another 30 sites which we hope to pull from the original sample site list determined in the early 1990s. Site selection was based upon EPA criteria, and consists of single family residences that have plumbing constructed of copper with lead solder joints. The laboratory cost for the samples are $30/sample. There will be 120 samples for a total of $3,600 plus the hours of staff time which has not been determined yet.

Staff is asking that the Board supports going forward with the above described project of conducting the required Lead and Copper Rule sampling to meet the goal of discontinuing the use of lime for pH adjustment.

Ms. Cribbins inquired if staff would leave the lime in place until all the OHA testing is complete. Mr. Page confirmed staff would do so. It was the Board's consensus for staff to move forward working with OHA and conducting the required lead and copper rule sampling to meet the goal of discontinuing the use of lime for pH adjustment.

Operations Manager Jeff Page updated the Board regarding the contract award made to Northwest Building Specialists, Inc. (NWBS) for the open storage building roof repair. The insurance documents provided by NWBS for the roof replacement of the open storage building indicated coverage below what is required in the contract for this project. Mr. Page contacted the utility's insurance agent and was advised that while the coverage NWBS has does meet the minimum state standards, the coverage limits are not high enough for the nature of the work to be performed and staff should not change the contract. The owner, Michael Wallace, of NWBS was notified of the situation and he expressed he was not willing to raise his coverage to meet the Water Board's requirements. Mr. Wallace rescinded his proposal.

The second lowest quote received to perform this work was from Rich Rayburn Roofing LLC. Staff contacted Rich Rayburn Roofing and received verification their estimate in the amount of $17,600 is still valid and they will be able to meet the Water Board's insurance requirements. The agreed upon completion date has not been established however staff will push for a completion date of December 31, 2019. The scope of work does not include any maintenance or modifications to the Service Center roof like the proposal from NWBS. After a brief discussion, motion was made by Ms. Cribbins to rescind the award of the contract to Northwest Building Specialist, Inc. based on their inability to meet the Water Board's minimum insurance requirements for the contract. The motion was seconded by Dr. Sharps and passed unanimously. Ms. Cribbins moved to authorize the General Manager to award the work to Rich Rayburn Roofing LLC for the proposed roofing work to be completed on the open storage building in the

amount of $17,600, plus additional costs associated with needed repairs of uncovered damage discovered during the course of the project. The motion was seconded by Dr. Sharps and passed unanimously.

The Board's next regular meeting was set for Thursday, October 17, 2019, at 7:00 a.m.

Updates were given as follows:

- Computer Upgrade and Server – Equipment has been received and Comp-U-Talk will be upgrading at the end of October. The Springbrook update will take place in mid-December.
- Tank maintenance – Waiting to hear from SUEZ regarding scheduling of the Isthmus Heights and Radar tanks. Most likely these will be set for next spring or summer when the weather is better which gives more cure time. There may be issues with Radar tank because the water main over the bridge is off line so staff is working with The Dyer Partnership to manage modeling to determine what happens if certain pump stations are down.
- FY2019 Audit – Working on the actuarial review. FY2019 Audit will be presented to be Board most likely at the November 21st Board meeting.
- Coos River Highway Main Replacement – Staff will be scheduling once the crew has completed 6th Avenue and McCullough Bridge.
- Water Treatment Plant Supervisor – John McKevitt has accepted the offer and will begin employment on October 21, 2019.

At 7:30 a.m. Chair Dillard directed they go into executive session for the purpose of discussing potential litigation pursuant to ORS 192.660(2)(h). They returned to open session at 7:47 a.m. There being no other business to come before the Board, Chair Dillard adjourned the meeting at 7:47 a.m.

Approved: _____, 2019 By: _____
Chair Robert Dillard

ATTEST: _____