

# TCSD CPO Monthly Operation/Maintenance Report

## October 2023

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### General Plant Operation/Maintenance

- Daily plant maintenance/housekeeping
- Daily/Monthly/Semi-Annual sampling and reporting
- Data collecting/recording /reporting
- SCADA monitoring
- Compliance enforcement
- Scheduling
- Equipment cleaning/maintenance/calibrating
- Exercise equipment/valve
- SSO prevention
- Safety enforcement/prevention is performed daily through a facility safety walk and regular inspections.

### Safety Report

- No safety accidents or near misses
- Staff had a safety meeting Earthquake Readiness on October 27<sup>th</sup>.

### Call out/Plug up/Spill/Collection System

Multiple USAN line location and markings were performed.  
High school private lateral and outfall line is checked regularly.

- No call-outs occurred during the month of October.
- The Wastewater Collection System Project is in its final construction phase. Crews are currently wrapping up final punch list items, such as customer complaints. One such complaint was an odor issue that followed after we had their private lateral rerouted to connect to a new sewer mainline. When digging up the lateral to correct the issue a leaking propane line was discovered. We believe that because the complaint came following rerouting the private lateral that the gas line was hit from construction activities. Out of an abundance of caution for the customer's safety we shut off the propane at the tank. Urgent notices were left on the customers' doors advising them of the situation and how we needed to proceed. The gas line was repaired the next day by a certified propane technician who was able to ensure appliance pilot lights were reignited.

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### Plant Operations

**Additional activity performed at the Plant, above and beyond daily general operations and maintenance**

- There was a mix up with the on-call/weekend staffing schedule between October 2<sup>nd</sup> and 7<sup>th</sup>. During this time, any callout would have been addressed because it would have fallen on the previously scheduled operator; however, the weekend shift on the 7<sup>th</sup> went unstaffed. As a result, no operator worked on the October 7<sup>th</sup> and influent and effluent flows were missed for that day. Daily flows are the only daily reporting requirement per the discharge permit. Upcoming improvements to the SCADA system will log all flows in a historian with a redundant server.
- The District assisted with educational institutions for events such as Career Day at Summerville Elementary School, and a demonstration on victim extraction from wrecked vehicles by the Fire Department for a college fire science class. A college tour of the WWTP was scheduled for October 31<sup>st</sup> but has not occurred as of this writing. The name of that class is Water Resources Management.

### Apply Colony Lift Station

- Daily Apple Colony lift station inspections performed as required by SDRMA.

### Bakers Reservoir and Dam/Outfall line

- Freeboard is roughly at 25.6 ft. as of October 26<sup>th</sup>.
- Last winter, John Baker's supplemental water diversion had washed out due to severe weather. Mr. Baker made the repairs and he is now diverting creek water to the reservoir. This supplemental water supply improves our discharge water quality by diluting high dissolved solids (TDS) present in

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our effluent. Without the supplemental water the District would have difficulty meeting TDS limits outlined in the discharge permit.

- The irrigation pump is having abnormal vibrations. An oil change found water present in the oil housing and likely resulted in excessive bearing wear. Seeing how we are a couple of weeks away from the end of the irrigation season, we plan to leave the pump in service until John Baker ceases irrigation for the year. We will then immediately pull the pump and send it in for evaluation.
- Reservoir pH continues to be out of compliance. This is not an immediate concern with the Waterboards as they have accepted the two-year study Carollo Engineers is heading to determine this seasonal reoccurrence. A likely solution to this issue that was discussed with Carollo would be the installation of a Parkson retro-fit kit called the WaveOx System. The purpose of this system is to denitrify nitrates in the Aeration Basin instead of that process occurring naturally in the reservoir. When denitrification occurs, alkalinity is created as a byproduct, which is believed to be the driver for elevated pH. Denitrifying wastewater at the WWTP would prevent the high pH phenomenon with an added benefit; we would be able to recapture roughly half of the alkalinity needed for nitrification. This possible future improvement project has the potential to save the District half the cost spent on purchasing sodium hydroxide, or approximately \$18,000 annually.

**End of Report**

Ben Kikugawa, Chief Plant Operator

October 27, 2023