



DATE: May 21, 2023

TO: Members of the Board of Directors

FROM: John Gibson, Chief Plant Operator
*Reviewed by GM Chad Davisson

SUBJECT: OPERATION REPORT: April, 2023

Regulatory Compliance

- CIWQS: Submitted April “No Spill Report” confirming that the District did not have any sanitary sewer overflows during the month of April 2023.
- CIWQS: Submitted 1st Quarter Electronic Self-Monitoring Report & Discharge Monitoring Report as required by the GCSW Wastewater Discharge Permit.
- Permit Exceedance: The monthly average for ammonia in February at monitoring location EFF-002 exceeded the permit limit. The monthly average reported value was based on one single sample. GM Davisson instructed Operators to collect additional samples in any event there is an exceedance of an “Average” limit based on only one sample value. **See 1st Q cover letter attached.**

Sampling and Monitoring as Required by the GCSW Wastewater Discharge Permit

- Daily lab sampling and analysis at monitoring locations EFF-001, EFF-002.
- Weekly sampling and analysis at monitoring locations EFF-001, RWS-001, RSW-002, & REC-001.
- Monthly sampling and analysis for monitoring locations INF-001, EFF-002, REC-001, RSW-001, & RSW-002.

Monitoring Locations

- INF-001 (24 hr. composite sample taken from the plant influent at the headworks)
- EFF-001 (plant tertiary treated and disinfected wastewater)
- EFF-002 (discharge to Atascadero Creek)
- RWS-001 (upstream Atascadero Creek)
- RSW-002 (downstream Atascadero Creek)
- REC-001 (irrigation - frost protection)

Operations Report: Operations, Process Control, and Maintenance

1. Equipment Cleaning and Maintenance:
 - Conducted weekly flushing of the Suspended Air Flotation (SAF) rotary gear pump and froth system using a rust inhibitor. Historically, failure of this pump and froth system created significant overtime to reset and restart the equipment. This maintenance measure has reduced overtime associated with the pump seizing due to rust and particulate collecting and impacting the pump.
 - Performed a CIP (Clean-in-Place) process on the Froth system, utilizing chlorine for thorough cleaning and disinfection. The Froth system produces microbubbles, approximately 7 to 25 microns, created with

a charged surfactant. The SAF unit injects charged microbubble froth into the influent stream to grab and lift solids to the flotation vessel surface for skimming and removal.

- Implemented a CIP procedure on the SAF system with chlorine, followed by a flush with well water. Additionally, the influent screen was cleaned to optimize system performance. Cleaning and flushing of the system is critical to prevent any remaining solids to settle within the system, while it's off-line which would cause corrosion and sediment build up.

2. Frost Protection:

- Provided recycled water for frost protection measures at both Chenoweth Vineyards and Kendall Jackson to prevent frost damage on vineyard vines. GM Davisson will provide the Board with the volumes of recycled water provided.

3. SCADA Control Backup:

- Replaced the failed battery backup for the main wastewater treatment plant Supervisory Control and Data Acquisition (SCADA) controls in the electrical room. SCADA ensures that the critical plant parameters are continuously monitored and operations staff are notified in the event of any issues. SCADA also allows the Operators to change operational settings remotely if needed.

4. Sludge Pump Failure and Repair:

- The SAF peristaltic sludge pump failed due to the need to replace bearings and set screws. Installed new bearings and set screws on the original rollers of the sludge pump. Ordered backup roller assemblies and a peristaltic tube. Having these spare parts on hand, and instituting a regular inspection and maintenance plan will eliminate failures and reduce equipment downtime in the event of any unexpected issues.

5. Chemical Pump Servicing:

- Serviced both the polymer and coagulant chemical pumps, which included installing new valves, diaphragms, and seals. Additionally, replaced the chemical feed tubing connecting the polymer chemical pump to the aging tank.

6. Polymer Aging Tank Service:

- Carried out maintenance on the polymer aging tank, which involved removing the mixing motor and top plate. The tank was thoroughly cleaned, including the sight glass, and any accumulated polymer was flushed out. This ensures optimal functioning and longevity of the system.

7. Sewer Lateral Inspection:

- Conducted comprehensive CCTV sewer lateral inspection for the property at 2920 Brush St. The inspection was to assess the condition of the sewer lateral and ensure compliance with the District's regulatory standards. After completing the inspection, it was determined that no maintenance or repairs were required and a "Sewer Lateral Certificate of Compliance" was issued, by the District, to the property owner.

8. Weed Abatement:

- Performed weed removal/abatement measures around plant roadways and pond skirts.

9. Discharge Shutdown:

- On April 26th, the District discontinued any further discharge to the Atascadero Creek. Staff is working with the District's recycled water customers and Forestville Water District to maximize recycled water distribution as well as preparing the spray fields (Mowing, etc.) for land application of treated water as a means of disposal. Creek discharge is an operating option during the wet season when creek levels are high and the District's spray fields are saturated and cannot be irrigated with recycled water. The District will reevaluate the need to discharge into the creek again next winter depending on the amount of rainfall experienced.