2023 Compliance Update

July 18, 2024

Board of Public Utilities Meeting

Presented by Heather Johnson Environmental Services Officer



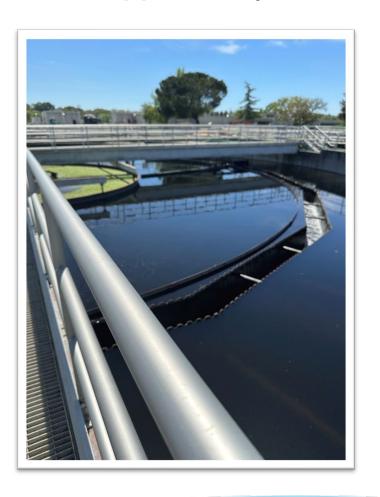
Overview

- Applicable Rules, Regulations, Permit Requirements and any Non-Compliance Events:
 - Wastewater Treatment
 - Biosolids
 - Recycled Water
 - Air Quality and Emissions
- Discharge Season Phosphorus Compliance
- Reporting Milestones and Updates
- LTP NPDES Permit Renewal

Wastewater Treatment, Recycled Water, and Biosolids

- NPDES Discharge Permit
- Recycled Water Notice of Applicability
- Biosolids Notice of Applicability







NPDES Permit, Recycled Water, and Biosolids Compliance Summary

Non-compliant Events	Description	Cause
Monitoring	Missed monitoring for Total Coliform.	Vials cracked during the analysis.
Reclamation System	Incidental Runoff - Largest runoff event in 2023 was ~800 gallons.	Leaking valves, over irrigation, and pipeline breaks.
Ultra-Violet (UV) Disinfection	Low UV dose, low UV transmittance – total of ~21 million gallons of off-spec water was sent to the Geysers or stored for re-treatment.	Unknown UV transmittance interference caused additional low UV dose.
Total Coliform	7-day median exceedance (greater than 2.2 MPN/100mL) and exceeded 23 MPN/100mL more than once in a 30-day period.	Exact reasons are unknown, theoretically possible that algae caused particle shielding in the UV channels

Title V Air Quality Permit and Permit to Operate:

- Federal Clean Air Act Title V Air Permit for Major Sources
- Permit to Operate





Air Quality and Emissions Compliance Summary

Non-compliant Events	Description	Cause			
Exceeded permit limits for carbon monoxide (CO) and Precursor Organic Compounds (POC)	Annual Monitoring on Combined Heat and Power Engines 1-4 exceeded the limits for POC on all engines and for CO on engines 3 and 4.	Incorrect testing method used for POC. The CO limit was exceeded due to necessary maintenance on the oxidation catalysts.			
High Strength Waste throughput exceedance	The City exceeded the throughput limits for our High Strength Waste Receiving Station which is 46,000 gallons per day.	Staff error subsequently remedied by installing remote monitoring and alarm sensors.			
Settlement of past Notice of Violation	The Air District provided a civil penalty settlement offer of \$6,000 for permit exceedances that occurred in 2020.	Testing on Engines 3 and 4 showed an exceedance of the engine's firing rate along with a miscalculation of compliance.			

23/24 Discharge Season Phosphorus Compliance

SUMMARY OF DISCHARGE SEASON 2023-2024

	2023-2024 Phosphorus Credits Generated							
Phosphorus Credits Available At Start of Discharge Season	Beretta	Pepperwood	Laguna 1 & 2	Colgan Creek	Purchased	Credits Retired	Credits Used	Total Credits Available
5,350.5	412	337.5	92	16,049	0	0	4,955	17,286

Reporting Milestones

Special Provision

Description

Salt and Nutrient Management Plan (SNMP) Groundwater Monitoring Work Plan City worked closely with Regional Board staff and partner agencies to revise our previously submitted SNMP monitoring plan to focus more closely on areas where recycled water is applied and stored. In 2023, five new monitoring wells were installed as part of this ongoing project.

Disaster Preparedness
Assessment Report and Action
Plan

Completed an assessment of potential climate change and natural hazard vulnerabilities of the Regional Water Reuse System. This report was submitted to the Regional Board in August of 2023.

Pathogen Special Study

City completed the necessary *E.coli* monitoring in our recycled water storage ponds, including DNA marker analysis to determine sources of pathogen. The final report will be submitted with our Report of Waste Discharge.





Laguna Treatment Plant NPDES Permit Renewal

- Report of Waste Discharge (ROWD) due in October 2024
- Permit Review
 - Staff review of current NPDES Permit
 - Conduct series of meetings with consultants and staff to identify key issues of concern
- Next steps
 - Meet with Regional Board Staff
 - Conduct a preliminary Reasonable Potential Analysis to determine potential permit limits



Questions?

Thank you.

