



ADMINISTRATION COMMITTEE

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Agenda Report

File #: 2024-3674

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Agenda Item No: 2.

FROM: Robert Thompson, General Manager
Originator: Lan C. Wiborg, Director of Environmental Services

SUBJECT:

ENVIRONMENTAL REGULATORY REPORTS

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Receive and file the following environmental regulatory reports: Annual Biosolids Management Compliance Report CY 2023, Annual Pretreatment Program Report FY 2023 (July 2022-June 2023), Semi-Annual Pretreatment Program Report (July-December 2023), Annual Mandatory Reporting of Greenhouse Gas Emissions Report CY 2023, Annual Emissions Report CY 2023, and the Marine Monitoring Annual Report FY 2023 (July 2022-June 2023).

BACKGROUND

The Orange County Sanitation District (OC San) is subject to environmental regulatory oversight by the EPA, RWQCB, CARB, and SCAQMD. These regulatory bodies require routine reporting, which is prepared by OC San's Environmental Services Department. These reports include:

1. Annual Biosolids Management Compliance Report required by OC San's NPDES permit for ocean discharge. Due February 19th of every year. Reporting based on calendar year.
2. Annual and Semi-Annual Pretreatment Program Reports required by OC San's NPDES permit. Due March 31st and October 31st of every year. Reporting based on fiscal year.
3. Annual Mandatory Reporting of Greenhouse Gas Emissions required by CARB. This report uses an online portal for report preparation and submission. Due April 10th of every year. Reporting based on calendar year.
4. Annual Emissions Report required by SCAQMD. Due March of every year (exact date varies). Reporting based on calendar year.
5. Annual Marine Monitoring Report required by OC San's NPDES ocean discharge permit. Due March 15th of each year. Reporting based on fiscal year.

RELEVANT STANDARDS

- Comply with environmental permit requirements
- Safe, beneficial reuse of Biosolids
- Meet or surpass sanitary sewer overflow regulations

ADDITIONAL INFORMATION

Compliance and monitoring reporting is required by local, state, and federal regulatory agencies to ensure protection of water, air, and land resources. Some of the routine reporting is completed using online reporting portals, which may perform calculations based on user input of operational data. The following key regulatory reports were submitted.

Annual Biosolids Management Compliance Report:

The Annual Biosolids Management Compliance Report describes in detail the management of OC San's biosolids, including volume, quality, and management locations. During calendar year 2023, OC San produced approximately 529 tons of biosolids per day. The biosolids were anaerobically digested and dried to about 24-28% solids. The biosolids were managed via composting, land application, and heat-dried pellets. Reporting is based on calendar year and the Annual Biosolids Management Compliance Report was electronically submitted on February 15, 2024, via the Central Data Exchange as required by the EPA's Electronic Reporting Rule.

Annual and Semi-Annual Pretreatment Program Reports:

Under its NPDES permit, OC San is required to establish and implement an approved pretreatment program to control the level of pollutants discharged into the sewer system. OC San is also required to submit Pretreatment Program Annual and Semi-Annual Reports detailing the status of the approved program. The reports identified and characterized all dischargers permitted by OC San and SAWPA. All permittees were required to submit timely and accurate information to OC San and SAWPA in accordance with the EPA's Cross-Media Electronic Reporting Rule that sets the legal framework for reporting. Reporting is based on fiscal year and the Annual and Semi-Annual reports were successfully completed and submitted by the October 31, 2023 and March 31, 2024 deadlines, respectively.

Annual Emissions and Greenhouse Gas (GHG) Emissions Reports:

The SCAQMD's Annual Emissions Report (AER) represents a facility's annual inventory of criteria pollutants (VOC, NO_x, SO_x, CO, PM) and toxic air emissions. The emissions are calculated based on throughput volume and emissions measured at applicable process areas and emission units. The report assesses fees based on a facility's calendar year emissions of air contaminants for the reportable year, as specified in SCAQMD Rule 301. The AER reports for OC San Plant Nos. 1 and 2 are prepared and submitted using SCAQMD's web-based emission reporting tool.

In calendar year 2023, Plant No. 1 emitted approximately 35.41 tons of criteria pollutants and OC San submitted an on-time payment for the annual emissions fee of \$24,064.88. Plant No. 2 emitted

approximately 35.65 tons of criteria pollutants for which OC San paid \$24,551.58. The reports were electronically submitted on March 19, 2024.

In accordance with the California Global Warming Solutions Act (Assembly Bill 32, 2006), CARB requires all major sources that directly emit GHG's resulting from the combustion of fuel and importation of electrical power to report their GHG emissions each calendar year. The GHG inventory report is focused on the emissions of carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Similar to SCAQMD's AER reporting portal, the GHG report is electronically submitted via CARB's Cal e-GGRT reporting system. For calendar year 2023, Plant No. 1 reported roughly 24,478 metric tons of CO₂ emissions, while Plant No. 2 reported approximately 34,995 metric tons of CO₂ emissions. The reports were electronically submitted on April 5, 2024.

Annual Marine Monitoring Report:

OC San has completed its annual report for the marine monitoring program as required by its NPDES permit. The report evaluates and measures potential impacts of the final effluent to water quality, sediment chemistry, fish and invertebrate communities, fish health, and sediment toxicity. OC San's Ocean Monitoring Program has three required components: Core Monitoring, Regional Monitoring, and Strategic Process Studies. This comprehensive program is implemented through rigorous monitoring of benthic sediments for chemical deposition, changes in biological communities, and the health of fish living near OC San's ocean outfall. Additionally, the program is tasked with profiling plume dynamics from the effluent discharge and with monitoring water chemistry, oxygen availability, and physical conditions throughout the water column to ensure regulatory compliance.

OC San's Annual Marine Monitoring Report continues to demonstrate that the discharge of final effluent does not adversely affect the receiving environment and does not pose a risk to human health. Water quality measurements demonstrate no discernible environmental impacts from OC San's discharge. Sediment concentrations of metals and organic contaminants were well below the protective thresholds. The composition of marine invertebrates and fish communities is comparable near outfall and non-outfall stations alike. Concentrations of trace metals and chlorinated pesticides in fish liver tissue samples were comparable across outfall and non-outfall stations. Furthermore, concentrations of contaminants measured in muscle tissue of sport fish samples did not exceed California's "Do not consume" Advisory Tissue Level. Reporting is based on fiscal year and the report was electronically submitted on March 14, 2024.

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

- Annual Biosolids Management Compliance Report CY 2023
- Annual Pretreatment Program Report FY 2023
- Semi-Annual Pretreatment Program Report (July - December 2023)
- Annual Greenhouse Gas Emissions Reports CY 2023
- Annual Air Quality Emissions Reports CY 2023
- Annual Marine Monitoring Report FY 2023