



Orange County Sanitation District

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ADMINISTRATION COMMITTEE

Agenda Report

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Agenda Item No: 10.

FROM: James D. Herberg, General Manager
Originator: Lan C. Wiborg, Director of Environmental Services

SUBJECT:

ENVIRONMENTAL REGULATORY REPORTS

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Receive and file environmental regulatory reports: Biosolids Management Compliance Report 2019; Annual Pretreatment Program Report Fiscal Year 2018-2019; Semi-Annual Pretreatment Program Report Fiscal Year 2019-2020 (July-December); Annual Greenhouse Gas Emissions Report 2019; Annual Emission Report 2019; and Marine Monitoring Annual Report 2018/2019.

BACKGROUND

The Orange County Sanitation District (Sanitation District) is subject to environmental regulatory oversight by the U.S. Environmental Protection Agency (EPA), Regional Water Quality Control Board (Santa Ana Region), California Air Resources Board, and South Coast Air Quality Management District (SCAQMD). These regulatory bodies require routine reporting, which is prepared by the Sanitation District's Environmental Services Department. These reports include:

1. Annual Biosolids Report (40 CFR Part 503) required by the Sanitation District's NPDES permit for ocean discharge. Due February 19th of every year.
2. Annual and Semi-Annual Pretreatment Program Reports required by the Sanitation District's NPDES permit. Due October 31st and March 31st, respectively, of every 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.
4. Annual Emission Report required by SCAQMD. Due early-mid March of every year.
5. Annual Marine Monitoring Report required by the Sanitation District's NPDES ocean discharge permit. Due March 15th of every year.

RELEVANT STANDARDS

- Comply with environmental permit requirements

- Safe, beneficial reuse of biosolids
- Comply with transparency and communication requirements, including the Brown Act

ADDITIONAL INFORMATION

Environmental regulatory reporting is required by local, state, and federal regulatory bodies 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 filed recently.

The Biosolids Annual Report contains details about the management of the Sanitation District's biosolids, including volume, quality, and locations. In 2019, the Sanitation District produced approximately 632 tons of biosolids per day, including digester cleanings. The biosolids are anaerobically digested and dried to about 24-25% solids. The biosolids are managed via composting and land application. The Biosolids Annual Report was submitted electronically as required by EPA's Electronic Reporting Rule.

Under its National Pollutant Discharge Elimination System permit, the Sanitation District is required to establish and implement an approved pretreatment program to control the level of pollutants discharged into the sewer system. The Sanitation District is also required to submit Pretreatment Program Annual and Semi-Annual Reports detailing the status of the approved program. The reports identified herein contain information about all industrial dischargers permitted by both the Sanitation District and the Santa Ana Watershed Project Authority (SAWPA). The Annual and Semi-Annual reports were successfully completed and submitted prior to the October 31, 2019 and March 31, 2020 deadlines, respectively.

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 emissions of air contaminants for the reportable year, as specified in SCAQMD Rule 301. The AER reports for Plants Nos.1 and 2 are prepared and submitted using SCAQMD's web-based emission reporting tool. For calendar year 2019, Plant No. 1 emitted approximately 27.0 tons of criteria pollutants and the Sanitation District paid total fees in the amount of \$12,786.93. For the same reporting period, Plant No. 2 emitted approximately 27.4 tons of criteria pollutants and the Sanitation District paid total fees in the amount of \$12,511.17. The reports were completed and submitted prior to the March 17 deadline.

In accordance with the California Global Warming Solutions Act (Assembly Bill 32, 2006), the California Air Resources Board (CARB) requires all major sources that directly emit Greenhouse Gases (GHG) to report their GHG emissions resulting from their combustion of fuel and importation of electrical power for each calendar year. The GHG inventory report focuses primarily 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 2019, Plant No. 1 reported roughly 23,359 metric tons of CO₂ emissions, while Plant No. 2 reported approximately 34,920 metric tons of CO₂ emissions. The reports were electronically submitted on April 10, 2020.

The Sanitation District has completed its annual report for the marine monitoring program as required by its National Pollutant Discharge Elimination System permit which evaluates and measures potential impacts to water quality, sediment chemistry, fish and invertebrate community, fish health, and sediment toxicity. The Sanitation District's ocean monitoring program has three required components: Core Monitoring, Regional Monitoring, and Strategic Process Studies, and 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 the Sanitation District'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. This report summarizes data collected from July 2018 through June 2019 and was electronically submitted by the March 15, 2020 deadline.

As the Sanitation District continues to make advancements to the wastewater treatment processes, our marine monitoring program continues to show improvement of environmental health around the outfall and outer monitoring area. Water quality measurements demonstrate no negative environmental impacts from the Sanitation District's effluent and brine discharge. Sediment concentrations of metals and organic contaminants were well below the protective thresholds. Marine invertebrates and fish have shown comparable abundances near the outfall and non-outfall stations alike. Concentrations of trace metals and chlorinated pesticides in fish tissue (muscle and/or liver) were well below federal and state human consumption thresholds and comparable across outfall and non-outfall stations.

CEQA

N/A

FINANCIAL CONSIDERATIONS

N/A

ATTACHMENT

The following attachment(s) may be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- 2019 Biosolids Management Compliance Report (*separate electronic file*)
- 2019-2019 Annual Pretreatment Program Report Fiscal Year (*separate electronic file*)
- 2019-2020 (July-December) Semi-Annual Pretreatment Program Report Fiscal Year
- Annual Greenhouse Gas Emissions Report 2019
- Annual Emission Report 2019
- 2018-19 Marine Monitoring Annual Report (*separate electronic file*)