



EAST BAY DISCHARGERS AUTHORITY
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A Joint Powers Public Agency

ITEM NO. 12

OPERATIONS & MAINTENANCE COMMITTEE AGENDA

Monday, March 13, 2023

4:00 P.M.

**East Bay Dischargers Authority
2651 Grant Avenue, San Lorenzo, CA 94580**

Committee Members: Johnson (Chair); Azevedo

OM1. Call to Order

OM2. Roll Call

OM3. Public Forum

OM4. EBDA Permit Compliance

(The Committee will be updated on EBDA's NPDES compliance.)

OM5. Status Report

(The Committee will be updated on EBDA's O&M activities.)

OM6. Adjournment

Any member of the public may address the Commission at the commencement of the meeting on any matter within the jurisdiction of the Commission. This should not relate to any item on the agenda. It is the policy of the Authority that each person addressing the Commission limit their presentation to three minutes. Non-English speakers using a translator will have a time limit of six minutes. Any member of the public desiring to provide comments to the Commission on an agenda item should do so at the time the item is considered. It is the policy of the Authority that oral comments be limited to three minutes per individual or ten minutes for an organization. Speaker's cards will be available in the Boardroom and are to be completed prior to speaking.

In compliance with the Americans with Disabilities Act of 1990, if you need special assistance to participate in an Authority meeting, or you need a copy of the agenda, or the agenda packet, in an appropriate alternative format, contact Juanita Villasenor at juanita@ebda.org or (510) 278-5910. Notification of at least 48 hours prior to the meeting or time when services are needed will assist the Authority staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

In compliance with SB 343, related writings of open session items are available for public inspection at East Bay Dischargers Authority, 2651 Grant Avenue, San Lorenzo, CA 94580. For your convenience, agenda items are posted on the East Bay Dischargers Authority website located at <http://www.ebda.org>.

**The next O&M Committee meeting will be held
Monday, April 17, 2023, at 4:00 p.m.**

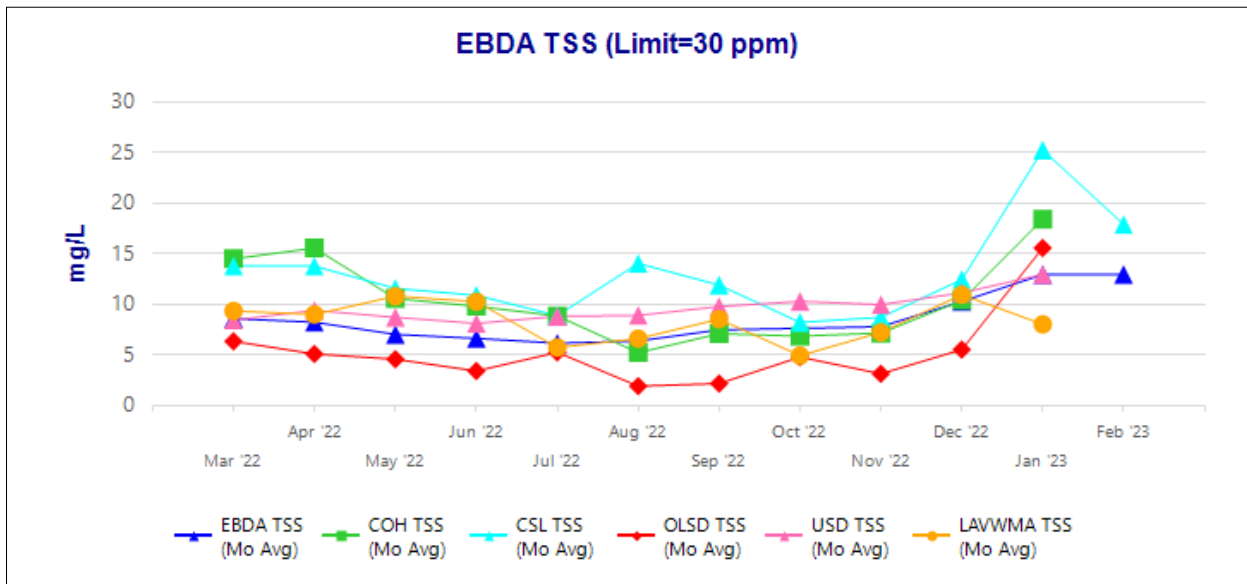
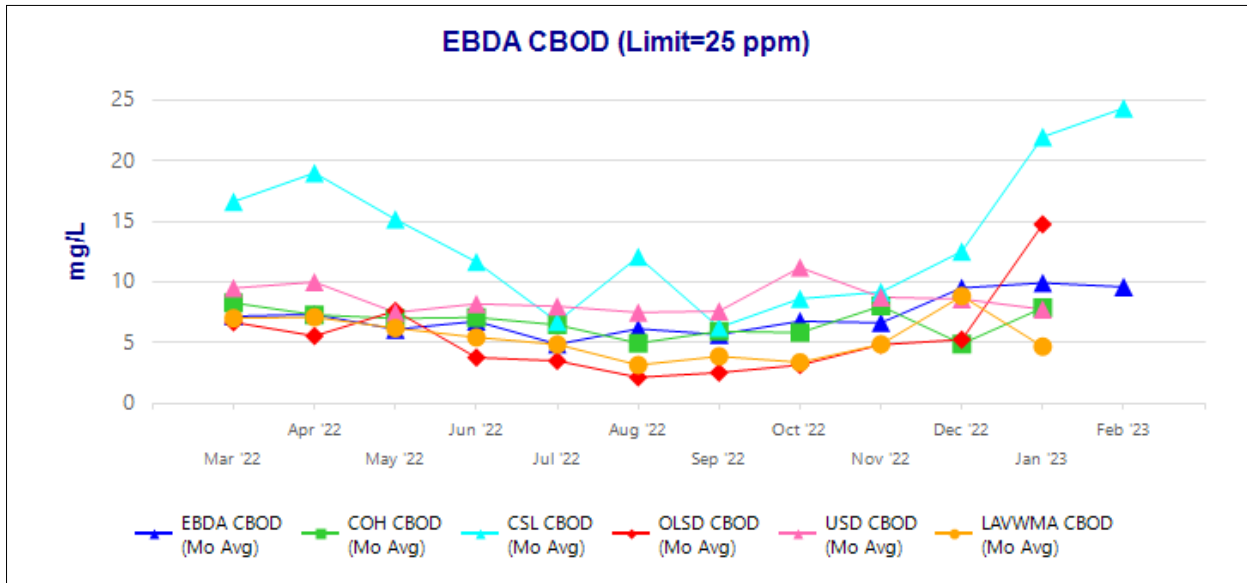
ITEM NO. OM4 EBDA PERMIT COMPLIANCE

Recommendation

For the Committee’s information only; no action is required.

Discussion

There were no NPDES permit violations in January, and preliminary data from February are also free of permit exceedances. Member Agency CBOD and TSS performance are shown below. A table with bacterial indicators is also included.



EBDA Bacterial Indicators

Date	FECAL	ENTERO
	MPN/ 100mL	MPN/ 100mL
Limit (90th Percentile)	1100	1100
Limit (Geomean)	500	280
March 2022 Geomean	7	4
April 2022 Geomean	2	7
May 2022 Geomean	5	48
June 2022 Geomean	5	57
July 2022 Geomean	20	6
August 2022 Geomean	15	34
September 2022 Geomean	43	28
October 2022 Geomean	12	4
November 2022 Geomean	6	6
December 2022 Geomean	21	9
1/2/2023	< 2	40
1/3/2023	36	51
1/9/2023	240	1842
1/10/2023	< 2	8
1/16/2023	21	24
1/17/2023	4	4
1/23/2023	33	6
1/24/2023	8	4
1/30/2023	7	< 2
1/31/2023	8	2
January 2023 Geomean	12	14
2/1/2023	NA	2
2/6/2023	4	2
2/7/2023	2	6
2/8/2023	NA	2
2/13/2023	7	< 2
2/14/2023	2	2
2/20/2023	< 2	6
2/21/2023	4	2
2/27/2023	7	< 2
2/28/2023	5	< 2
February 2023 Geomean	4	2

ITEM NO. OM5 STATUS REPORT

Union Effluent Pump Station (UEPS)

Effluent Pump No. 6 Variable Frequency Drive (VFD)

On December 29, 2022, the VFD for Effluent Pump No. 6 failed. USD maintenance staff ordered new fuses and EBDA staff is in the process of scheduling Rockwell Automation Field Service to further troubleshoot the issue.

Hayward Effluent Pump Station (HEPS)

Effluent Pump Replacement Project

At its January 2023 meeting, the Commission approved a motion authorizing the General Manager to negotiate and execute an agreement with Pump Repair Service Company, Inc. (PRS). PRS's bid was \$725,900, and EBDA has successfully negotiated a negative Change Order for a total contract cost of \$623,606. The breakdown of the total cost is as follows:

- Furnish and install four new pumps, motors and couplings. Including factory testing, dynamic analysis, startup, field testing, and tax - \$533,606
- Time and materials work includes core drilling holes to anchor the pumps, preparation of and coating the metal sump rings, painting the pumps, motors, and couplings, and additional field labor as necessary - \$90,000

The lead time for the new pumps is 28 weeks after submittal approval.

Oro Loma Effluent Pump Station (OLEPS)

Emergency Outfall Upgrade

Carollo Engineers (Carollo) completed an evaluation of the OLEPS emergency outfall to determine the outfall's maximum capacity and whether modifications to the outfall weir would increase system detention time and delay or prevent an unanticipated bypass in the event of a catastrophic failure at OLEPS. Carollo recommended that the existing lumber weir be replaced with a permanent weir at an increased elevation. Carollo completed the drawing and specifications that will be used for construction of the new elevated weir. Staff received bids for this project and will be discussing them with the MAC. Funds will then be added to the RRF project list for FY 2023/2024 to complete the project.

Main Electrical Switchboard Upgrade

On February 23, 2023, EBDA received a credit issued by Schneider Electric, the project contractor, in the amount of \$4,772.60. Schneider Electric owed EBDA this credit to reimburse the Authority for expenses incurred during the June 23, 2022, shutdown that

was cancelled due to their oversights. To complete the project, Schneider Electric, must now fabricate and install new blanks or spacers to cover the space between the new breakers and the front panels.

Skywest Pump Station

Recycled Water Production

During the month of February 2023, the Skywest Recycled Water System did not produce any recycled water.

Marina Dechlorination Facility (MDF)

No change; all equipment is operational.

Force Main

No change; all equipment is operational.

Operations Center

No change; all equipment is operational.

Miscellaneous Items

Underground Service Alerts

EBDA received four (4) Underground Service Alert (USA) tickets during the month of February 2023.

Wet Weather

During the month of February 2023, there were no significant rain events that required the operation of an OLEPS diesel pump, and there were no capacity exceedance events.

Total rainfall for the month of February 2023 (in inches) was as follows:

Oakland	Hayward	Livermore
2.87	2.97	1.58

Significant daily rainfall for the month of February 2023 (in inches) was as follows:

Date	Oakland	Hayward	Livermore
2/23/2023	0.51	0.69	0.36

As discussed with the Commission previously, the atmospheric river storm events that struck the Bay Area on December 31, 2022 and into January 2023 caused significant impacts on wastewater collection systems and treatment facilities around the region. The

attached excerpt from the Regional Water Quality Control Board's March 2023 Executive Officer's Report provides a helpful summary of regional impacts.

EBDA Vehicle

On September 16, 2022, a Purchase Order was submitted to National Auto Fleet Group for EBDA's new F-150 Truck. On September 26, 2022, staff traded in EBDA's 2008 Ford Ranger for \$9,100. Due to the high trade-in value, it was necessary to trade-in the truck as soon as possible before the trade-in value was reduced. The new F-150 is on order, and EBDA is waiting for an estimated delivery date from Ford.

Special Projects

Roof Replacement Projects

During the week of January 23, 2023, the old MDF SBS Building roof was removed, and several layers of the new roof were installed. Installation of these layers made the roof water tight. Before additional layers of the new roof can be installed, a waiting period of several weeks is necessary. As weather allows, work will be completed on the MDF SBS Building roof and the OLEPS roof, and work will begin on the Administration Building roof.

Cargill Brine Project

EBDA received twelve comment letters in response to the Draft Environmental Impact Report (EIR) for the Cargill Mixed Sea Salts Processing and Brine Discharge Project. Staff is working with our CEQA consultant, Ascent Environmental, to develop responses to comments, which will be posted on EBDA's [website](#) when complete, along with a Final EIR. Staff is targeting completion of the EIR by May 2023.

Staff has also begun negotiations with Cargill on a Project Development and Operating Agreement, which would be brought to the Commission for consideration coincident with EIR certification. A draft agreement was transmitted to Cargill in late February, following MAC review. A draft technical addendum has also been developed that outlines water quality limitations and monitoring requirements to ensure EBDA's continued compliance with our NPDES permit once brine discharge commences. The addendum will also include a corrosion monitoring plan, with triggers for action if accelerating corrosion is observed.

Advanced Quantitative Precipitation Information (AQPI) Project

The regional AQPI project continues to move forward with a goal of improving prediction of rainfall events in the Bay Area. Following a series of delays, the East Bay radar was installed at Rocky Ridge on the week of December 6, 2022. The system is now being commissioned and tested. In the meantime, EBDA members can access regional data through AQPI's data portal. Staff met with AQPI's new Program Manager from the Center for Western Weather and Water Extremes (CW3E) at Scripps Institution of Oceanography, UC San Diego, on February 13, 2023 to discuss our data needs going forward and plans for the future user interface. An updated website and data management tools will be in place by this time next year.

New Year's Storm Impacts Update (Mike Chee)

In the [February 2023 Executive Officer's Report](#), we provided an overview of the wastewater and stormwater-related spills and other incidents reported during the almost three-week onslaught of storms that began on New Year's Eve. That report included preliminary information, and this month we are updating that information to reflect more detailed reporting.

From December 31 through January 19, we received 170 California Office of Emergency Services (Cal-OES) incident reports totaling over 74 million gallons of unauthorized discharges of wastewater and stormwater to surface waters (over 186 million gallons were released from wastewater collection and treatment systems and about 112 million gallons were recovered resulting in the 74 million gallons discharged). As a reminder from our last report, roughly 10 billion gallons of authorized wastewater discharges took place during that period, so the spills represented a relatively small percent of all wastewater discharges.

Sanitary sewer collection systems and wastewater agencies in all nine Bay Area counties notified Cal-OES about these discharges, which can be categorized as combined sewer overflows (CSOs), i.e., overflows from San Francisco's combined sewer systems; sanitary sewer overflows (SSOs); and treatment plant spills reflecting various levels of treatment. These discharges were caused by the influx of stormwater into sewage systems, overwhelming collection system and treatment capacities. Due to the high volumes of stormwater infiltrating the sanitary sewer collection systems, the nature of the combined sewer overflows and sanitary sewer overflows were comparable. They were mostly stormwater mixed with routine sanitary flows.

As noted last month, untreated or partially treated sewage spills contain solids, pathogens, biochemical oxygen demand, and nutrients. These pollutants affect water quality; however, the rain and related runoff from the recent storms greatly diluted these pollutants. We received no reports of dead fish.

Below is a summary of the top ten spills by volume. They illustrate the range and nature of the various incidents that took place.

- **West County Wastewater District** reported an unauthorized discharge of 41.4 million gallons of stormwater and wastewater from its treatment plant to Wildcat Creek Marsh. The discharge occurred on January 11, when the plant's equalization and storage basins overtopped due to a surge in influent entering the plant.
- **The Martinez Marathon Refining Company** reported an unauthorized discharge of 11.2 million gallons of stormwater and wastewater from its treatment plant to a marsh leading to the Carquinez Strait. The discharge occurred on January 4, when heavy rainfall overwhelmed a stormwater retention pond.
- **East Bay Municipal Utility District (EBMUD)** reported three large sanitary sewer overflows totaling about 4.8 million gallons. The sanitary sewer overflows occurred on New Year's Eve at EBMUD's Alice Street and San Leandro Creek overflow structures (both in Oakland) and its Webster Street overflow structure (in Alameda).

These sanitary sewer overflows occurred when wastewater and stormwater in the collection system overwhelmed EBMUD's south interceptor.

- **Sewer Authority Mid-Coastside (SAM)** reported that two large sanitary sewer overflows, totaling over 4.1 million gallons, occurred on New Year's Eve and New Year's Day. The largest, at 3.8 million gallons, occurred in Half Moon Bay due to the failure of the Montara Force Main that conveys wastewater to SAM's wastewater treatment plant. The failure was caused by a deteriorated section of the force main that was exacerbated by a surge in combined wastewater and stormwater volume. Due to the force main failure, SAM shut down the Montara Pump Station to make temporary repairs, which caused a sanitary sewer overflow at the Montara Pump Station manhole for over 3.5 days as temporary emergency repairs were undertaken. Simultaneously, Pilarcitos Creek overtopped its banks and flooded the adjacent SAM treatment plant, threatening critical electrical infrastructure. The permanent force main repair was completed in February. The second sanitary sewer overflow occurred on Highway 1 behind 140 and 150 Wienke Way due to another force main rupture. Both sanitary sewer overflows discharged to the Pacific Ocean.
- **The City and County of San Francisco** reported an estimated 2.3 million gallons of combined wastewater and stormwater discharged from its bayside combined sewer system to San Francisco Bay through storm drains in the Marina Green parking lot. San Francisco used a computer model to simulate the storm and showed that approximately 18.6 million gallons of combined sewage and stormwater overflowed its collection system and flooded an area along Marina Boulevard. San Francisco assumed that all modeled flows on the Marina Green parking lot discharged to San Francisco Bay and about 16.3 million gallons of combined sewage and stormwater was returned to the collection system for discharge through authorized outfalls. Meanwhile, San Francisco estimated that over 74 million gallons of combined wastewater also flooded the area along Folsom Street and Harrison Street, over 20 million gallons flooded the Lower Alemany area, and about 1.5 million gallons flooded the area near Marin Street and Indiana Street near Islais Creek. These sewer overflows from the combined sewer system occurred when San Francisco's transport/storage boxes exceeded their capacity and the outfalls carrying authorized combined sewer discharges could not keep up with all the combined wastewater. Most of the combined sewage and stormwater was eventually returned to the collection system for discharge through authorized outfalls.
- **The City of Burlingame** reported a 2.3-million-gallon sanitary sewer overflow on New Year's Eve that occurred at four manholes and discharged to Lower San Francisco Bay.
- **The City of Oakland** reported three large sanitary sewer overflows on New Year's Eve and January 10 that totaled over 1.2 million gallons. The sanitary sewer overflows occurred at three manholes. One discharged to Lion Creek and the others discharged into Lake Temescal.
- **The City of Millbrae** reported an unauthorized discharge of over 930,000 gallons from its treatment plant to an unpermitted outfall leading to Lower San Francisco Bay. The discharge occurred on New Year's Eve when influent to the plant

exceeded the plant's biological treatment capacity, forcing the City to discharge primary-treated wastewater and stormwater from its equalization and storage basin.

- **The City of Richmond** reported an approximately 910,000-gallons sanitary sewer overflow on New Year's Eve that occurred from a manhole that discharged to Meeker Slough.
- **The City of San Mateo** reported two large sanitary sewer overflows on New Year's Eve and January 4 that totaled approximately 770,000 gallons. Both sanitary sewer overflows occurred from manholes that discharged into Borel Creek and then to Marina Lagoon.

We were able to compile this data because we have strong wastewater reporting requirements. However, we should not lose sight of the other substantial impacts of these storms. They caused significant property damage by inundating homes and businesses and damaging critical infrastructure. The weather caused tidal surges, high winds, downed trees, power outages, saturated soils, sink holes, and mud slides. Significant flooding blocked roadways and trapped people in their cars for hours. More than a dozen people died.

Flooding occurred in San Francisco, San Mateo, Alameda, Pleasanton, and coastal areas, to name just some examples. The City of San Mateo's Marina Lagoon, which captures stormwater runoff within San Mateo, overflowed into adjacent neighborhoods during the storms, transporting the sanitary sewer overflows noted above with the floodwaters. The Belmont Mobile Home Community was flooded up to 4 feet deep after the New Year's Eve storm, displacing the community for almost a week before residents could return. The Arroyo Mocho overtopped its



banks and flooded a Vulcan Materials gravel mining operation in Pleasanton. The flood waters eroded the banks of a treatment pond and breached the levee between the creek and the pond (see photo of pond in the foreground with creek beyond).

We received reports of flooding at wastewater treatment plants, as well. The Oro Loma and Castro Valley Sanitary Districts treatment plant in San Lorenzo, and the City of San

Leandro treatment plant in San Leandro, flooded on New Year's Eve from surges in influent wastewater. While these floods did not result in unauthorized discharges, floodwaters did reach up to 3 feet deep, threatening critical infrastructure. The Delta Diablo treatment plant reported an overflow at its plant headworks totaling approximately 84,000 gallons. Delta Diablo captured and routed about 80,000 gallons of the overflow back to its headworks for treatment but discharged about 4,000 gallons to a drainage channel.

These storms highlight infrastructure vulnerabilities and provide an opportunity to better prepare for and mitigate the impacts of intense storms. We continue to implement actions to prepare for such storms. For example, new Statewide Waste Discharge Requirements for Sanitary Sewer Systems that become effective in June will strengthen asset management requirements for wastewater collection systems. The Board issued Cleanup and Abatement Order R2-2021-0021 to the City and County of San Francisco requiring actions to reduce flooding risks at three low-lying areas by 2028. Other enforcement orders, including an East Bay Communities consent decree and several cease and desist orders, aim to better manage wet weather flows. The San Francisco Bay Beaches TMDL requires the City of San Mateo to improve its collection system to reduce infiltration and inflow. We also continue to engage stakeholders to promote infrastructure improvements, including nature-based solutions, that provide resilience in the face of climate change.