

2025 NPDES SELF-MONITORING PROGRAM ANNUAL REPORT

NPDES PERMIT NO. CA0037869

East Bay Dischargers Authority
City of San Leandro
Oro Loma Sanitary District
Castro Valley Sanitary District
City of Hayward
Union Sanitary District

January 29, 2026



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Section 1: Comprehensive Discussion of Treatment Plant Performance and Compliance

Major milestones and construction projects completed at the EBDA member treatment plants in 2025 included the following:

- Oro Loma/Castro Valley Sanitary Districts (OLSD/CVSan)
 - Installed new 580kW Tesla Megapack to shave peak energy loading from the utility. This is part of a new “micro-grid” battery system that ties all our energy producing equipment into one system. The stored energy will also assist with providing backup power to the treatment process in case of loss of utility connection. This will assist with continued operation of the treatment plant.
 - Continuing to operate a full scale sidestream nitrification process using Microvi’s biocatalyst. As constructed, approximately 100,000 gpd of belt press filtrate is treated each day. The sidestream contains approximately 17% of the total influent nitrogen. To date, the process reduces ammonia concentrations by 70%. Staff continues to work to improve the performance with a 90% removal target. The process is designed to reduce ammonia to nitrite or nitrate, which is readily available for denitrification in the mainstream process.
 - Much of the Oro Loma Sanitary District’s Capital Program spending has shifted to the collection system. The District is approximately 80% complete with its goal to replace 40 miles of sewer pipe by 2029 at an approximate cost of \$60M. The District has completed eight of ten planned contracts in 2025, with one currently in construction, and expects to award one more in 2026.
 - Oro Loma Sanitary District worked to improve chlorine dosing to EBDA by utilizing the EQ basin to remove peaks and valleys from our influent flow to maintain a chlorine residual setpoint at the disinfection channel.
 - Oro Loma Sanitary District is currently removing 98% ammonia from our influent flow. The District continues to monitor the process and evaluate ways to reduce the total nitrogen in their effluent.
- Union Sanitary District (USD)
 - Enhanced Treatment and Site Upgrade (ETSU) Program Phase 1A construction is ongoing. Phase 1A will modify the existing aeration basins, add an 8th aeration basin, and relocate existing administrative/operations/maintenance buildings to allow for phase 1B to be built.
 - Phase 1B completed the design phase and was recently awarded for construction. Phase 1B is expected to start construction late-spring or summer of 2026. Phase 1B will construct new secondary clarifiers, return

activated sludge pump station (RAS), waste activated sludge pump station (WAS) and new effluent pump station, including new chlorine contact channels. The completion of the ETSU program will allow USD to be an Early Actor with respect to nutrient removal.

- Construction of a new Standby Generator system was partially completed in 2025. The generators are awaiting the completion of a new switchgear and an interconnect agreement with PG&E (Electric Utility). Long lead times for electrical equipment and ongoing review by the electric utility have caused delays in the project's timeline.
- Replacement of the WAS Gravity Belt Thickeners is in the design phase, aimed at upgrading aging solids process equipment.
- Rehabilitation of Primary Digester No. 6, the plant's second-largest digester, is currently in the design phase.
- The Solids System Evaluation Study has commenced to review the scopes for currently budgeted CIP projects and to integrate the findings from various recent studies into a cohesive plan for the plant's solids system. The scope includes the development of process optimization strategies, evaluation of alternative technologies, and consideration of future regulatory impacts.

- City of Hayward

- The work for the Main Switch Board project began in early 2024. The 12KV Switch Gear replacement project was awarded to Carollo in late 2021 and since renamed the Main Switch Board project. The long lead items have arrived, and the contractors have begun installing the electrical equipment. The project is on track and is expected to be completed in the later part of 2026.
- The nutrient management upgrades and administration building design project was awarded to Brown and Caldwell in August of 2022. Construction of the administration building has begun and was 20% complete at the end of 2025.
- Design for Phase II nutrient upgrades was 100% complete in December 2025 as well as BAAQMD issued the City the approved permit for construction. The final documents should be completed in early 2026. The project will be put out to bid once funding has been secured.
- The North Vacuator concrete repairs, steel repairs and coatings were completed in 2025 and was put back into service.
- The City's Recycled Water Master Plan was 90% complete at the end of 2025. It is on track for full completion in 2026, after which the city will begin implementing its recommended projects.

- City of San Leandro
 - Construction of Phase I of the Treatment Wetland project began in September 2025 and is expected to complete February 2026. This phase includes stabilization of the existing material in the pond and import of soil to raise the pond surface to its final height. Geotechnical advice is to allow at least 12 months for settling before final grading and construction. The City expects to open bidding for the project in early 2027 with construction completing late 2027 and commissioning in 2028. Phase II of the project includes installation of package MABR units. One of these units will be installed in February 2026 to confirm they meet the design criteria.
 - The City completed a nutrient reduction planning project with HDR Engineering. The project included modeling of the plant based on additional testing. The report indicates that the combination of the Treatment Wetland, aeration upgrades and sidestream treatment will enable the City to meet its nutrient reduction obligations. The final report is expected in January 2026, after which the City will commence the design process.
 - The City expects to open bidding in early 2026 to reconfigure the main influent pipes. This project is a follow up to the 2015 plant upgrade and will connect the influent pipes more directly to the new influent pumping station.
 - Energy efficiency upgrades to the digester mixers and the aeration system are in design, with construction expected in 2026. A microgrid battery was installed in 2024 and is pending commissioning, pending approval from PG&E.

EBDA's major projects in 2025 included the following:

- EBDA continues to implement its Asset Management Plan to ensure appropriate renewal and replacement of infrastructure. The estimated total restoration cost over 20 years is approximately \$11.3 million. This includes \$420,000 annually through 2030 (for a total of \$4.2 million) that EBDA is contributing for capital improvements to the Union Effluent Pump station, per EBDA's Amended and Restated Joint Powers Agreement.
- EBDA completed the Hayward Effluent Pump Station (HEPS) Pump Replacement Project. This project to replace all four pumps and motors was completed in December 2025.
- EBDA continued the design of two new automatic transfer switches (ATSs) at the Oro Loma Effluent Pump Station (OLEPS). The two new ATSs will improve reliability of the pump station in the event of a power outage. If the PG&E power fails, the OLEPS emergency generator is the primary source of backup power. Currently, if the emergency generator fails to start, operators can manually switch to the secondary source of backup power from OLSD. The installation of two new ATSs will allow the switch from primary to secondary backup to occur automatically. This ATS work is being completed as part of Phase Two of the

OLEPS Electrical Upgrades. Replacement of the breakers and refurbishment of the Main Switchboard was completed in Phase One of the OLEPS Electrical Upgrades.

- In December 2025, EBDA completed an upgrade of the Supervisory Control and Data Acquisition (SCADA) System at the Marina Dechlorination Facility (MDF). This upgrade included a new SCADA computer and installation and implementation of the latest version of the SCADA software.
- In October 2025, EBDA completed restoration of the rip rap on the levee along the Bay in front of the MDF Meter Vault. This project restored a 60-foot wide section of the shoreline levee in front of MDF to its original condition, protecting the MDF Meter Vault following shoreline damage resulting from several large winter storms combined with King Tides. MDF sits along the San Leandro shoreline, just south of Marina Park. The Meter Vault in which EBDA's flow meters and effluent sample pumps are located sits across the bike path from the main facility, where the outfall extends to the Bay. This critical equipment is used for reporting and demonstrating compliance with EBDA's NPDES permit.
- Following the Water Board's adoption of the blanket permit amendment for total residual chlorine (TRC), EBDA turned off its continuous feed of sodium bisulfite (SBS) on January 2, 2024. EBDA implemented a new Chlorine Process Control Plan and programming at MDF to ensure that effluent consistently meets the new TRC limit of 0.98 mg/L as a one-hour average. The SBS savings at MDF continue to be substantial. The following table shows SBS usage before and after the new TRC effluent limit implementation:

YEAR	SBS GALLONS USED	SBS EXPENDITURE
2023	163,208	\$293,988
2024	12,230	\$22,793
2025	12,563	\$22,290

- EBDA continued its key role in multi-benefit shoreline adaptation along the Hayward Shoreline. These efforts, funded by an EPA Water Quality Improvement Fund grant, include design of a full-scale horizontal levee south of Oro Loma ("First Mile" Horizontal Levee Project), continued research at Oro Loma's horizontal levee pilot, advancement of pilot wetlands projects at San Leandro and Hayward, building capacity for nature-based solutions among Bay Area wastewater agencies. In close coordination with East Bay Regional Park District, Hayward Area Shoreline Planning Agency (HASPA), and San Francisco Estuary Partnership, EBDA has been managing the First Mile Project. In 2025, the First Mile team kicked off the 60% design phase, conducted several rounds of consultation with the Bay Restoration Regulatory Integration Team (BRRIT), and continued outreach to key stakeholders including the Alameda County Flood Control and Water Conservation District and Union Pacific Railroad. EBDA and partners also contracted with local non-profit organizations to initiate youth, tribal, and community engagement efforts along the shoreline, including facilitating a

Community Meeting attended by over 100 community members. EBDA is also engaging in HASPA's development of a Governance and Implementation Plan for their Hayward Shoreline Adaptation Master Plan.

- EBDA has been working closely with Cargill, Inc. to develop a project that would deliver mixed sea salt brine from Cargill's solar salt ponds in Newark to EBDA's transport system for dilution and discharge. Cargill now intends to pursue a strategy that involves lining and repurposing an abandoned jet fuel pipeline and constructing new pipelines that connect from their Newark facility to the jet fuel pipe and from the jet fuel pipe to EBDA's outfall, downstream of MDF. They are currently conducting due diligence on the jet fuel pipe and expect to complete design and entitlements in 2026. EBDA expects to resume CEQA analysis in 2026, and Cargill projects construction beginning sometime between 2027 and 2029 depending on permitting, with operation commencing between 2031 and 2033.
- EBDA's Member Agencies recycled 957 million gallons in 2025, an 11% increase from 2024. For consistency with recycled water totals submitted through GeoTracker, the totals presented below include in-plant reuse.

As shown in the following table, including the LAVWMA agencies, water recycling accounted for 2.9 billion gallons, about 13% of EBDA's outfall discharge last year of approximately 22.8 billion gallons.

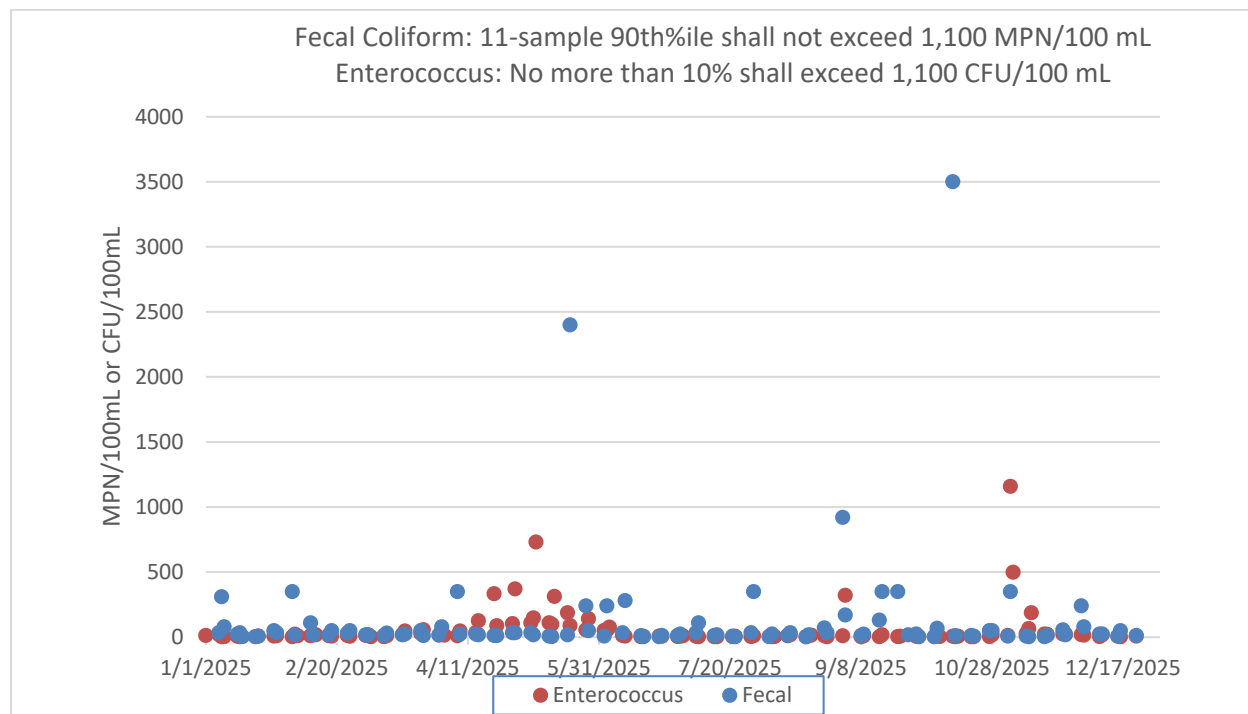
<i>Agency</i>	<i>2025 Recycled Water Production (MG)</i>
Hayward	475
San Leandro	86
EBDA Skywest Project	18
Oro Loma Sanitary District	36
Union Sanitary District	342
EBDA Total	957
Livermore	579
Dublin San Ramon Services District (DSRSD)	1396
LAVWMA Total	1975
Grand Total	2932

Bacterial Compliance

The chart that follows presents pathogen data from samples through the year. Note that permit limits are calculated as monthly geometric means or monthly 90%ile samples. Sporadically, at random intervals, a high sample can be detected. This outcome is probably due to the sloughing of pipe biofilms into the sample line. These non-representative events are why permit compliance is determined by geometric means. EBDA and its member agencies worked hard over the past few years to improve chlorine dosing to prevent periodic increases in bacterial contamination, which had occurred in prior years. This increased attention to chlorine dosing has led to consistent compliance with limits. That said, EBDA spends a considerable amount on chlorine to ensure that occasional high fecal coliform values do not compromise compliance, and therefore, we

look forward to the removal of fecal coliform limits from our permit, consistent with Basin Plan revisions that were made subsequent to permit adoption.

Figure 1 – EBDA Bacterial Contaminant Performance



Section 2: List of Analyses for Which the Discharger Is Certified

EBDA conducts no analyses of its own. Each member agency is certified by the State Water Resources Control Board for standard water quality tests such as BOD, TSS, pH, DO, enterococcus, and fecal coliform. City of San Leandro staff performs these analyses on the combined effluent. Beginning in 2024, Oro Loma Sanitary District allowed their ELAP certification to lapse, and all compliance samples were analyzed by certified contract laboratories.

All metals and organics analyses are performed by the Authority's contract laboratory, Caltest Analytical Laboratory. Caltest's lab is certified for these analyses. Caltest subcontracts for analytical work on some items, including dioxin and furan compounds and PCBs, to other certified labs.

Pacific Eco-Risk (PER), also a certified laboratory, conducts the required acute and chronic toxicity testing for the Authority.

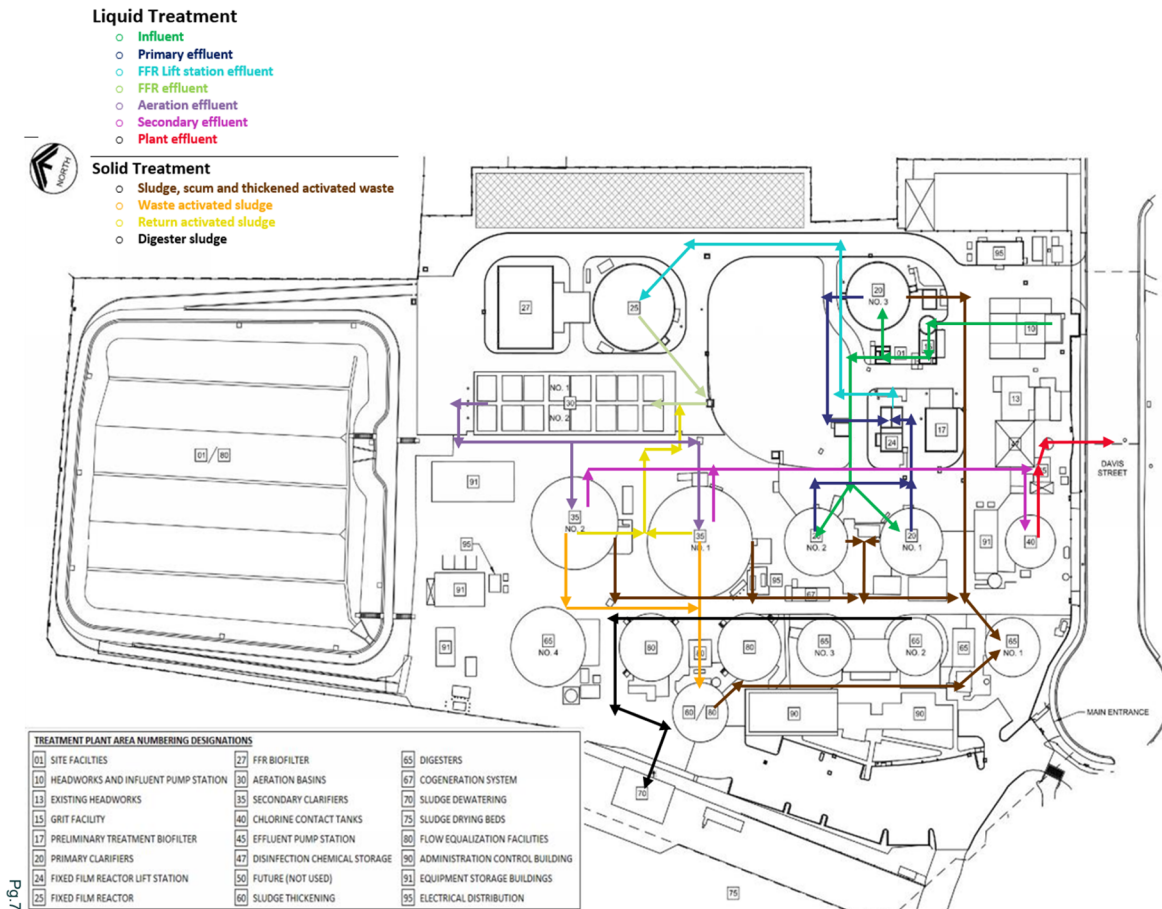
Copies of all laboratory reports are maintained on file at the Authority's office and are available for review upon request. Said reports are not included in this report.

Section 3: Plan View Drawing or Map Showing the Discharger's Facility, Flow Routing, Sampling and Observation Station Locations

Marina Dechlorination Facility



San Leandro Plant – Process Flow Diagram

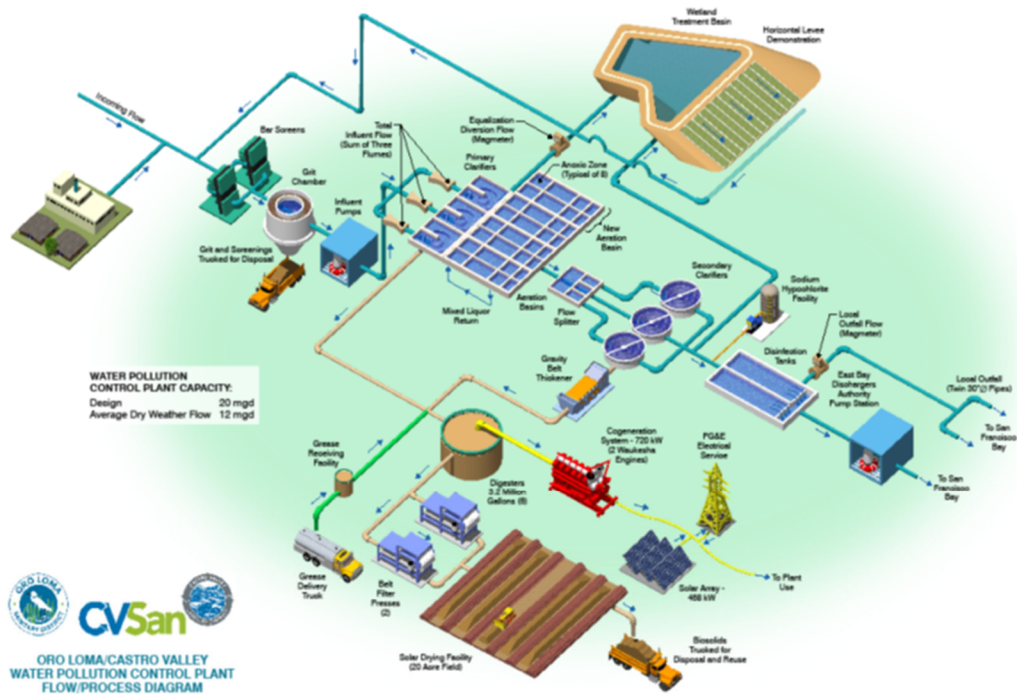


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San Leandro Plant – Sampling Locations



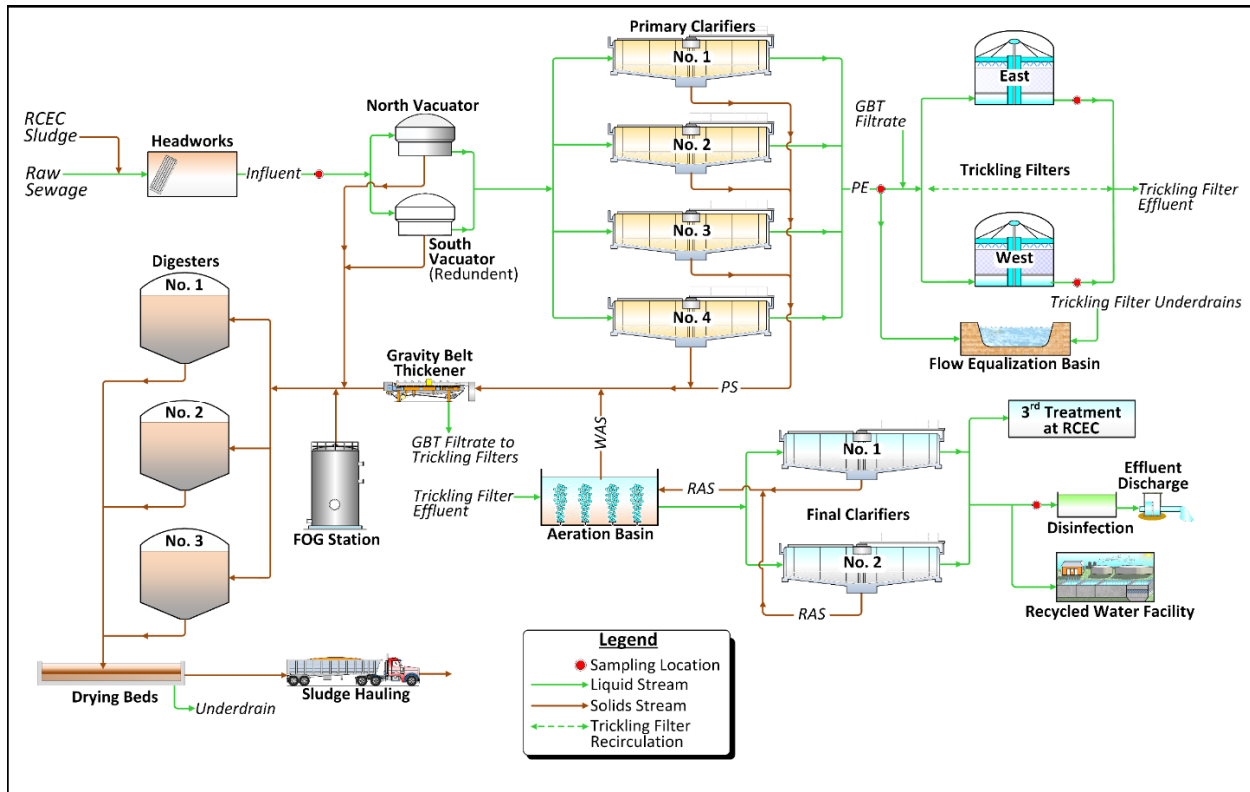
OLSD/CVSan Plant – Process Flow Diagram



OLSD/CVSan Plant – Sampling Locations



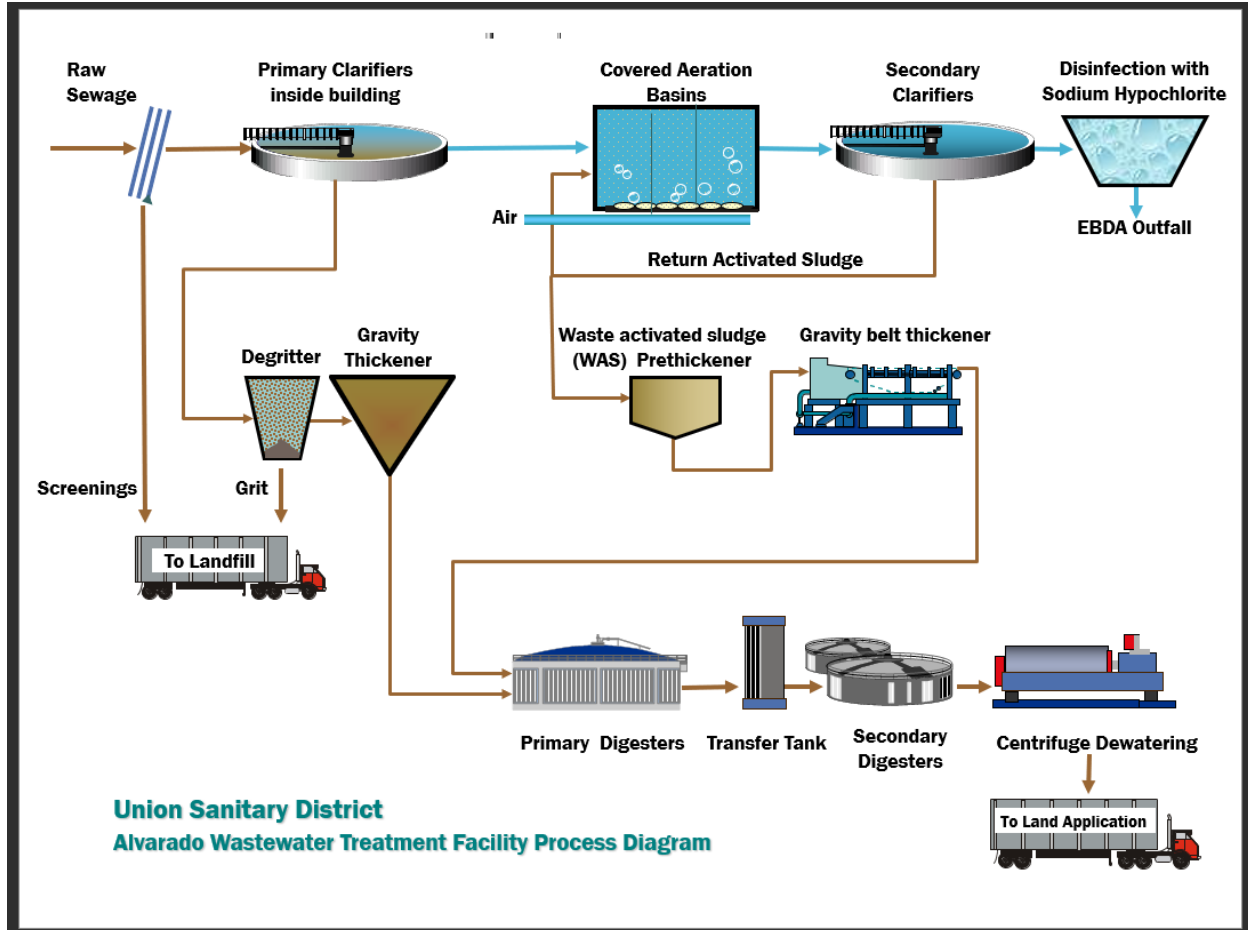
Hayward Plant – Process Flow Diagram



Hayward Plant – Sampling Locations



USD Plant – Process Flow Diagram



USD Plant – Sampling Locations



Section 4: Results of Facility Report Reviews

The tables in this section summarize the status of reviewing and updating the following documents: Operations & Maintenance (O&M) Manual, Contingency Plan, Spill Prevention Plan, and Wastewater Facilities Status Report.

EBDA Facilities

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Jan 2026	Updated on an as-needed basis and reviewed annually by the EBDA O&M Manager.	The Authority maintains a comprehensive O&M Manual for the joint-use facilities. Chapters of the Manual are regularly reviewed and updated. EBDA's Wet Weather SOP is reviewed annually and updated as needed. With the completion of the MDF SCADA Upgrade, EBDA is starting a comprehensive systemwide review and update of its SCADA System Operations Manual.	Performed annually
Contingency Plan	Jan 2026	Updated annually by EBDA O&M and Administration Managers. EBDA is included in the Alameda County's Office of Emergency Service's Utility Unit.	The Emergency Operating Contingency Plan is supported by Operations & Maintenance Agreements between Member Agencies, which are compatible with their existing plans and known to all other local and county agencies for emergency purposes. Operation and maintenance activities are contracted with the Member Agencies for routine work. Emergency work is performed sometimes by Member Agencies and sometimes through contracts with private specialty firms.	Performed annually
Spill Prevention Plan	The SPCC Plan was updated in April of 2024.	Reviewed annually by EBDA O&M Manager	No major changes planned for 2026.	Performed as needed
Wastewater Facilities Status Report	Jan 2026	EBDA continues to implement a comprehensive Renewal and Replacement Program. The Authority has an Asset Management Plan that covers all critical equipment.	In 2025, EBDA completed the following projects: • UEPS payment #5 of 10 for a total of \$4.2 M • HEPS Pump Replacement Project • MDF SCADA System Upgrade • MDF Levee Restoration Project In 2026, the Authority is continuing work on the following upgrade to the EBDA system: • OLEPS ATS Replacement The Authority is also proceeding with several additional upgrades at OLEPS and a force main manhole improvement project.	Anticipated Completion: OLEPS ATS Replacement, June 2027

San Leandro Treatment Plant

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Sections assigned and updated throughout the year	O&M manuals and SOPs are written and revised as necessary by designated Plant Operators and reviewed by the Operations Supervisor and Plant Manager	Review O&M chapters and SOPs as needed. Continue developing and revising SOPs for plant processes. Additional chapters have been added to the Online O&M Manual and SOPs have been organized for easy access in SharePoint. An upgrade to the Online O&M Manual is scheduled for 2026.	Performed continuously
Contingency Plan	January 2025	WPCP management reviews, edits and approves	The contingency plan is reviewed annually and updated as needed with changes. Vendor and emergency contact lists are verified as necessary.	Performed annually
Spill Prevention Plan	November 2023	WPCP management reviews, edits and approves	Currently up to date. No major changes planned for 2026	Performed as needed
Wastewater Facilities Status Report	January 2025		The City continues to execute on its 10-year Capital Improvement Plan. The sewer point repair project is scheduled to go to bid on in early 2026. Earthmoving and rough grading of the Treatment Wetland project will complete in early 2026. Final construction and commissioning are planned for 2027 and early 2028. This project will treat approximately 20% of the ADWF to remove nitrogen and other contaminants through both technological and nature-based processes. High level nutrient modeling and options analysis will complete in early 2026. Pre-design for the recommended aeration improvements is planned for 2026. Options analysis for sidestream treatment is planned for 2026, with pilot testing to follow as necessary thereafter.	10-year Capital Improvement Plan (completed in 2024)

Oro Loma/Castro Valley Sanitary District Treatment Plant

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Ongoing	Continual reviews and revisions as necessary when new processes come online or when modifications are made to current processes.	The District has completed developing a computer-based training program for the 25 unit processes in the treatment plant (including the EBDA OLEPS pump station). Staff will continue to train on the modules.	Ongoing
Contingency Plan	December 2025	Management team completed its review and updated document to reflect changes in contact information or equipment/facility changes.	Continue to make updates as needed, at least annually.	Annually
Spill Prevention Plan	April 2024	The District performed a significant update to its plan in 2022 to reflect administrative audit findings from CUPA. It was updated again in 2024 to reflect updated staff members.	Currently up to date and will update as necessary.	As needed
Wastewater Facilities Status Report	January 2025		The District continues to execute its planned 10-year, \$168M capital program. The program includes extensive sewer pipe renewal (1.5% of system/year; the District is working to replace 40 miles (15%) of its 271-mile collection system by 2029), Digester Design and Cothickening improvements are underway and will likely be in construction in 2026, and Cogeneration System Replacement in 2030. By the end of 2025, the District had completed 80% of the construction to replace 40 miles of the collection system and began the design for the Digester Rehabilitation Project.	10-Year Capital Plan (Updated December 2025)

Hayward Water Pollution Control Facility

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Ongoing	COH WPCF electronic O&M manuals, including SOP's, are reviewed and updated throughout the year by staff. Revisions are made to Sections and SOP's	Create new SOPs as required and review and update older SOPs throughout the year. Continually review and update O&M sections. Brown and Caldwell will be looking into a fully revised O&M as part of the nutrient management project.	SOP's and O&M sections are reviewed continuously
Contingency Plan	January 2025	The entire plan is reviewed by the WPCF manager with updates and edits made by the Senior Secretary.	Continue to make updates as needed.	Performed annually
Spill Prevention Plan	January 2025	Plan reviewed by WPCF Manager every January. Changes made by Senior Secretary.	Make updates as needed.	Performed annually
Wastewater Facilities Status Report	January 2025	The phase II Facilities Plan was completed in 2020. The city will implement projects as recommended in the 2020 Phase II Facilities Plan.	Complete Capital Improvement Projects according to the 10-year Master Plan CIP. Construction of the new MSB replacement project will be completed in 2026. The administration and lab building construction will continue throughout 2026. The Phase II Nutrient project is expected to go out to bid in 2026. The rock slope project intended to prevent erosion in the ponds will go out to bid in spring of 2026 and construction should be complete by the end of the summer in 2026. Design of the new return pump station at the old oxidation ponds should be completed in 2026.	10-year Master Plan CIP planning changes are made every year in July with mid-year adjustments made in January/February

Union Sanitary District Treatment Plant

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Ongoing	Plant O&M documents are incorporated into the District's Competency-Based Training Program. USD utilizes Microsoft Sharepoint software to track document review.	Plant management reviews training documents and SOP's as changes occur (i.e., following construction) or as scheduled.	Each individual training module and SOP has a review frequency of 3 years.
Contingency Plan	December 2025	Plant Manager reviews and updates the Contingency Plan annually.	None. Contingency Plan was updated in December 2025.	Complete next review by December 2026.
Spill Prevention Plan	December 2025	Spill Prevention Plan is incorporated into our Contingency Plan and is reviewed at the same time.	None. Spill Prevention Plan was reviewed in December 2025.	Complete next review by December 2026.
Wastewater Facilities Status Report	December 2025	USD's Master Plans address most of the Facilities Evaluation requirements. Our Plant Master Plan is updated every 5 years and Pump Station and Collection System Master Plans are updated as needed. Asset management data is updated on an ongoing basis. CIP and Operating plans and budgets are reviewed and revised annually. 2025 Projects Completed/in-progress: - Standby Power Generation System Upgrade (Construction in progress) - Plant Miscellaneous Improvements (Construction in progress) - Primary Scum Pipeline Replacement (Construction in progress) - Alvarado Influent Valve Box Improvements (Construction completed) ETSU: Phase 1A: - Aeration Basin Modifications (Construction in progress) - New Campus Building (Construction in progress)	Complete capital improvements in accordance with 20-year CIP plan. Implement annual rate adjustments for Sewer Service Charges and Capacity Fees in accordance with 10-year financial plan. 2026 Projects Planned: - WAS Thickener Replacement (Construction to begin) - Primary Digester No. 6 Rehabilitation (Construction to begin) - Switchboard No. 3 and MCC No. 25 Replacement (Construction to begin) - Thickener No. 3 and No. 4 Overflow Line Replacement (Construction to begin) - Thickener No. 1 and No. 2 Rehabilitation (In Design) ETSU: Phase 1B: - New Secondary Clarifiers (Construction to begin) - New Effluent Facilities (Construction to begin) - New RAS/WAS Pump Station (Construction to begin)	20-year CIP annual update in June. Master Plans: - Alvarado Basin MP 2029-31 - Newark Basin MP 2025-27 - Irvington Basin 2027-29 - Pump Station Asset Condition Assessment 2028-31 - Plant Asset Condition Assessment 2027-29 - Plant Solids System/ Capacity Assessment 2032-34 - Solids System Evaluation 2025-26

Section 5: BACWA Watershed Permitting and Monitoring

EBDA participates in a number of group processes coordinated by the Bay Area Clean Water Agencies (BACWA) to fulfill permit requirements, including Receiving Water Quality Monitoring, TMDL/SSO Support, Mercury and PCBs Watershed Permit Support, Nutrients Watershed Permit Support, and Implementation of Copper Action. Participation in these items is described in an annual BACWA letter to the Regional Water Board found here:

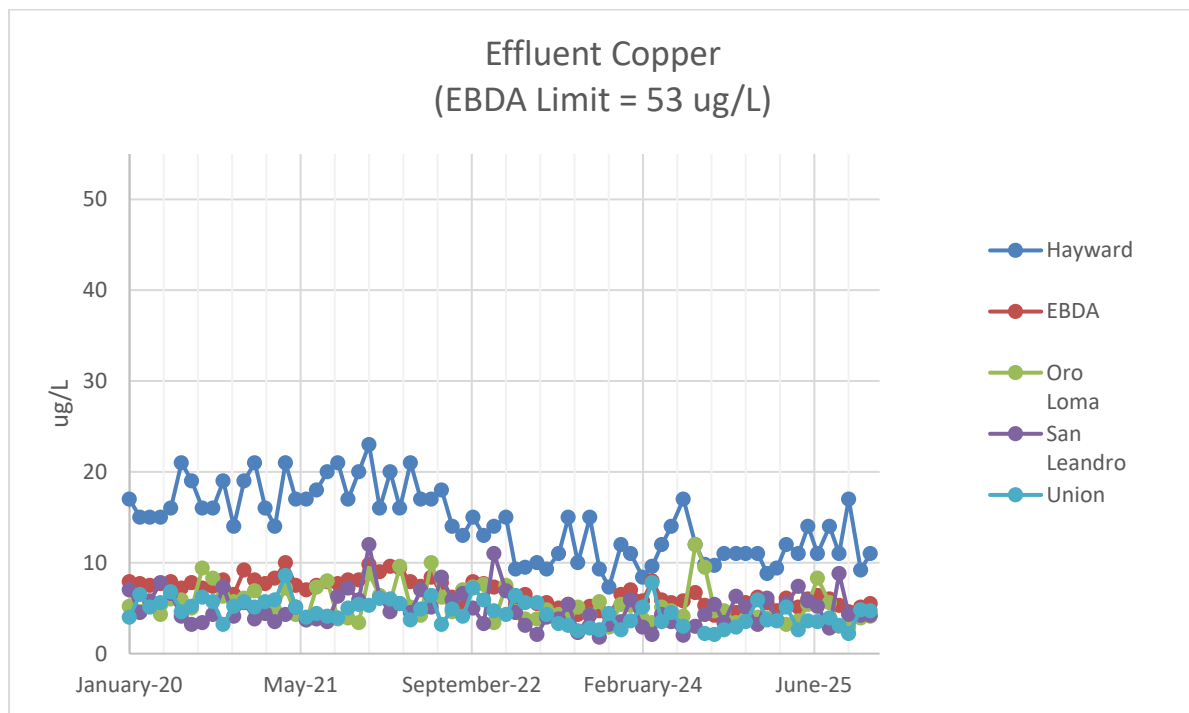
<https://bacwa.org/document/bacwa-npdes-permit-compliance-letter-for-cy25-2026-01-07/>

Section 6: Effluent Characterization Study and Report

EBDA regularly monitors and evaluates discharges from the common outfall and each contributing plant's effluent to identify any concerning trends. No significant increases over past performance were noted in 2025 data.

EBDA's five-year trend for copper shows that while individual member agency effluent concentrations have varied, EBDA's common outfall concentration consistently averaged less than 20 ppb, versus a permit limit of 53 ppb (see Figure 3).

Figure 3 – Effluent Copper Trend



EBDA's effluent mercury concentrations also continue to be well below permit limits, as shown in Figure 4.

Figure 4 – Effluent Mercury Trend

