

February 28, 2025

VIA E-MAIL, UPLOADED TO CIWQS

Ms. Alessandra J. Moyer  
SF Bay Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

**RE: East Bay Municipal Utility District 2024 Pollution Prevention Annual Report**

Dear Ms. Moyer:

The East Bay Municipal Utility District (EBMUD) hereby submits the 2024 Pollution Prevention Annual Report, which was developed in accordance with Order No. R2-2020-0024, National Pollutant Discharge Elimination System Permit No. CA 0037702.

If you have any questions regarding this report, please contact Adam Kern, Supervisor of Source Control, at 510-287-1622 or adam.kern@ebmud.com.

Sincerely,



Alicia R. Chakrabarti, P.E.  
Manager of Wastewater Environmental Services

Enclosure

cc: Amit Mutsuddy, P.E. EBMUD

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2024

# Pollution Prevention Report



**EBMUD**

**Wastewater  
Department**

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**EAST BAY MUNICIPAL UTILITY DISTRICT  
2024 POLLUTION PREVENTION REPORT  
COVER SHEET**

National Pollutant Discharge Elimination System (NPDES) permit number:  
**Order No. R2-2020-0024, NPDES No. CA0037702**

For further information concerning this report, contact:

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Supervisor of Source Control  
East Bay Municipal Utility District  
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Period covered in this report: **January 1, 2024 to December 31, 2024**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



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**Amit Mutsuddy, P.E.**  
**DIRECTOR OF WASTEWATER**

2/26/25

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This report covers East Bay Municipal Utility District's (EBMUD) Pollution Prevention (P2) program for the January 1, 2024, through December 31, 2024, reporting period. The report was prepared in accordance with the EBMUD National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037702, R2-2020-0024 adopted on September 9, 2020.

## 1. DESCRIPTION OF TREATMENT PLANT AND SERVICE AREA

EBMUD is a publicly-owned utility formed under the Municipal Utility District (MUD) Act that was passed by the California state legislature in 1921. In accordance with the MUD Act's provisions, voters in the East San Francisco Bay Area created EBMUD in 1923 to provide water service. In 1944, voters in six East Bay cities – Alameda, Albany, Berkeley, Emeryville, Oakland, and Piedmont – elected to form EBMUD's Special District No. 1 (SD-1) to provide treatment of wastewater discharged to the San Francisco Bay (Bay). EBMUD formed the Wastewater Department following approval of SD-1. Wastewater treatment began in 1951. In 1971, the Stege Sanitary District, which includes the City of El Cerrito, the Richmond Annex and unincorporated Kensington, was annexed to SD-1.

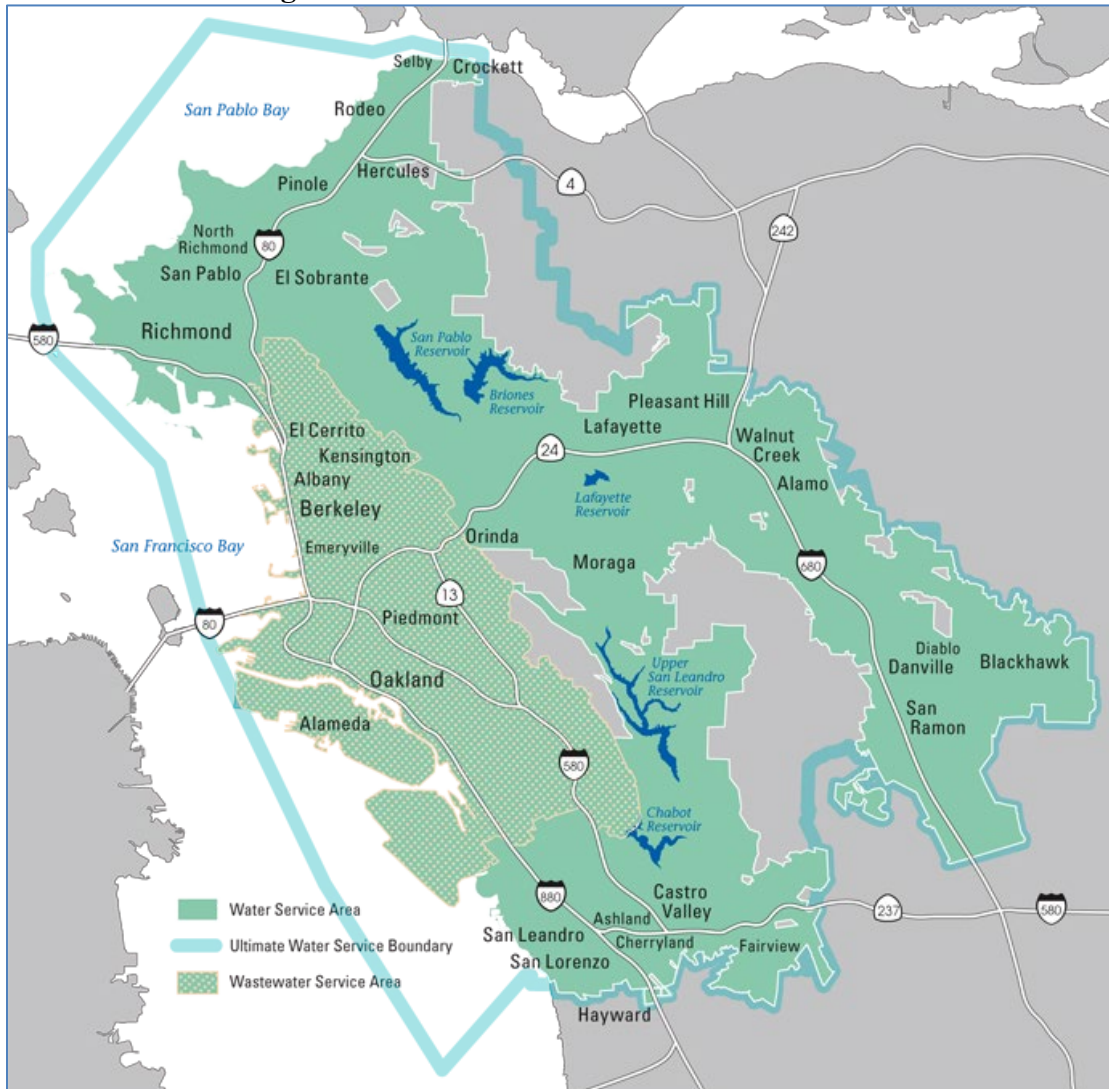
The individual communities own and maintain their collection systems (sewers and pumping stations) and discharge to one of five EBMUD interceptors. The EBMUD Wastewater Department owns and operates the interceptors, the Main Wastewater Treatment Plant (MWWTP), a deep-water outfall into the Bay, and three wet weather facilities. The EBMUD collection system and service area has the following characteristics:

- EBMUD's wastewater service area is 88 square miles, which includes approximately 1,600 miles of community-owned and maintained sanitary sewers.
- EBMUD owns and operates 29 miles of gravity sewer interceptors, 15 pumping stations, and 9 miles of sewer force mains.
- EBMUD's Wastewater Department serves a population of approximately 740,000, including approximately 180,000 accounts, of which over 19,000 are commercial, industrial, and institutional users.

All wastewater is conveyed to the MWWTP, which provides secondary treatment through a high-purity oxygen activated sludge (HPOAS) process. The dry weather influent flow rate ranges between 45 and 50 million gallons per day (MGD). It has a permitted dry weather secondary treatment design capacity of 120 MGD and a primary treatment capacity of 320 MGD. The peak wet weather flow rate is 415 MGD, which includes short-term diversion of 95 MGD to the onsite 11 million gallon wet weather storage basin during peak storm events. The MWWTP liquid process train includes coarse and fine bar screens, aerated and vortex grit chambers, primary sedimentation basins, HPOAS reactors, secondary clarifiers, disinfection, recycled water facilities, and dechlorination. The solids process train includes scum thickening, secondary solids thickening using gravity belt thickeners, anaerobic digestion, and digested solids dewatering using solid-bowl centrifuges. Treated final effluent from the MWWTP is discharged through a deep water outfall located approximately 1.2 miles off the East Bay shoreline immediately south of the San Francisco-Oakland Bay Bridge. Biosolids are hauled off-site by an outside contractor for beneficial use.



Figure 1 – EBMUD Wastewater Service Area





## 2. DISCUSSION OF CURRENT POLLUTANTS OF CONCERN

EBMUD identifies pollutants of concern as follows:

- By reviewing monitoring data from influent, effluent, biosolids, and industrial dischargers
- When pollutants are assigned effluent limits in EBMUD’s NPDES permit (Order No. R2-2020-0024) or are identified in watershed permits issued by the San Francisco Bay Regional Water Quality Control Board (Regional Board)
- When pollutants are addressed by the Bay Area Pollution Prevention Group (BAPPG) or Bay Area Clean Water Agencies (BACWA)

Table 1 presents the pollutants of concern for EBMUD and the basis for this determination.

**Table 1 - Pollutants of Concern and Reason for Determination**

<b>Pollutant of Concern</b>	<b>Basis for Determination</b>
Fats, Oils, and Grease (FOG)	Potential to cause sanitary sewer overflows; Requested by collection system agencies to operate the Regional FOG Control Program
Mercury	Permit No. CA0037702, Order No. R2-2020-0024; Permit No. CA0038849, Order No. R2-2022-0038 (Watershed Permit), Existing Local Limit
Copper	Order No. R2-2020-0024 - Copper Action Plan, Existing Local Limit
Cyanide	Order No. R2-2020-0024 - Cyanide Action Plan, Existing Local Limit
Polychlorinated Biphenyls (PCBs)	Permit No. CA0038849, Order No. R2-2022-0038 (Watershed Permit)
Other Metals (Cadmium, Chromium, Lead, Nickel, Zinc)	Historical concern, Existing Local Limits
Pharmaceuticals	Emerging concern



### 3. SOURCES OF POLLUTANTS OF CONCERN

EBMUD continues to inventory potential sources of pollutants of concern by monitoring influent data, monitoring known permitted dischargers, using its billing databases to identify certain industry lists, and staying up to date on emerging information from industry groups such as BACWA and BAPPG. Regional, collaborative outreach and education efforts can be found in the BAPPG annual report, see <https://bacwa.org/document/2024-bappg-annual-report>.

Table 2 presents the pollutants of concern for EBMUD and their identified sources.

**Table 2 - Pollutants of Concern and Sources Identified**

<b>Pollutant of Concern</b>	<b>Sources Identified</b>
FOG	<ul style="list-style-type: none"> <li>• Commercial facilities (mostly restaurants)</li> <li>• Residential cooking/food preparation</li> </ul>
Mercury	<ul style="list-style-type: none"> <li>• Dental facilities</li> <li>• Residential users with mercury thermometers</li> <li>• Medical facilities and hospitals</li> <li>• Industrial users</li> </ul>
Copper	<ul style="list-style-type: none"> <li>• See Section 4.1, Copper Action Plan</li> </ul>
Cyanide	<ul style="list-style-type: none"> <li>• See Section 4.2, Cyanide Action Plan</li> </ul>
PCBs	<ul style="list-style-type: none"> <li>• Pumping of PCB-contaminated groundwater from construction sites or other facilities</li> <li>• PCB-contaminated stormwater entering the sewer system</li> </ul>
Other Metals (Cadmium, Chromium, Lead, Nickel, Zinc)	<ul style="list-style-type: none"> <li>• Industrial users</li> <li>• Pumping of metal-contaminated groundwater from construction sites or other facilities</li> <li>• Metal-contaminated stormwater entering the sewer system</li> </ul>
Pharmaceuticals	<ul style="list-style-type: none"> <li>• Bodily excretion</li> <li>• Improper residential disposal of pharmaceuticals from flushing medications</li> </ul>



#### 4. TASKS TO MINIMIZE POLLUTANTS OF CONCERN

Table 3 discusses the actions taken by EBMUD to minimize pollutants of concern. Unless an alternative timeline is specified, all tasks listed below are ongoing and will continue to be implemented in the future.

**Table 3 - Pollutants of Concern and Minimization Tasks**

Pollutant of Concern	Tasks to Minimize
FOG	<p>Commercial:</p> <ul style="list-style-type: none"> <li>• Coordinates the Regional FOG Control Program within its wastewater service area, excluding the City of Oakland.</li> <li>• Collection system agencies identify FOG “hotspots,” and EBMUD staff conducts field investigations to determine if blockages are caused by nearby Food Service Establishments (FSE) or residential drainage basins.</li> <li>• Reports all work activities and progress in quarterly hotspot reports and provides routine database management.</li> <li>• Conducts commercial FOG outreach.</li> <li>• Established new Local Limit for oil and grease of animal/vegetable origin</li> </ul> <p>Residential:</p> <ul style="list-style-type: none"> <li>• Maintains EBMUD website to provide information to residential FOG producers on proper disposal and residential FOG drop-off locations (<a href="http://www.ebmud.com/cleanbay">www.ebmud.com/cleanbay</a>). EBMUD hosts a drop-off bin at the MWWTP for residential cooking grease disposal.</li> <li>• Provides FOG outreach materials for collection system agencies to distribute to FSEs and residents in the field.</li> <li>• Conducts targeted annual holiday FOG campaign in partnership with Baykeeper.</li> <li>• Continues residential FOG/trash outreach, mailing letters and outreach materials to residential hotspot areas.</li> </ul>
Mercury	<p>Commercial:</p> <ul style="list-style-type: none"> <li>• Continues to meet the requirements of the Watershed Permit for Mercury.</li> </ul> <p>Dental Facility Mercury:</p> <ul style="list-style-type: none"> <li>• Tracks the number of dental facilities that have completed and returned a compliance report verifying use of an amalgam separator, in accordance with the 2017 United States Environmental Protection Agency (EPA) Dental Effluent Guidelines.</li> <li>• Continues to identify new facilities and maintain the database.</li> <li>• Provides information on EBMUD website <a href="http://www.ebmud.com/wastewater/bay-friendly-waste-disposal/mercury/dental-facilities">http://www.ebmud.com/wastewater/bay-friendly-waste-disposal/mercury/dental-facilities</a> about the 2017 EPA Dental Effluent Guidelines and how to achieve compliance.</li> </ul>



Pollutant of Concern	Tasks to Minimize
	<ul style="list-style-type: none"> <li>• Continues outreach through BAPPG and BACWA to educate dental assistant and dental hygienist students about proper amalgam management and disposal.</li> </ul> <p>Residential Mercury:</p> <ul style="list-style-type: none"> <li>• Continues to provide information on its website about how to properly dispose of mercury thermometers in the home (<a href="http://www.ebmud.com/mercury">www.ebmud.com/mercury</a>).</li> </ul>
Copper	<ul style="list-style-type: none"> <li>• Continues to control for copper through permitting, sampling, and monitoring of permit holders and new applicants.</li> <li>• Implements NPDES Copper Action Plan (see Section 4.1 below).</li> </ul>
Cyanide	<ul style="list-style-type: none"> <li>• Continues to permit, sample, and monitor permit holders and new applicants that use cyanide.</li> <li>• Implements NPDES Cyanide Action Plan (see Section 4.2 below).</li> </ul>
PCBs	<ul style="list-style-type: none"> <li>• Continues to control for PCBs through permitting, sampling, and monitoring of permit holders and new applicants.</li> <li>• Continues to meet the requirements of the Watershed Permit for PCBs.</li> </ul>
Other Metals (Cadmium, Chromium, Lead, Nickel, Zinc)	<ul style="list-style-type: none"> <li>• Continues to permit, sample, and monitor industrial facilities, construction site dewatering, and groundwater remediation sites.</li> <li>• Monitors influent, effluent, and biosolids.</li> </ul>
Pharmaceuticals	<ul style="list-style-type: none"> <li>• Sponsors pharmaceutical collection sites within the wastewater service area <a href="http://www.ebmud.com/wastewater/bay-friendly-waste-disposal/medicine-disposal">www.ebmud.com/wastewater/bay-friendly-waste-disposal/medicine-disposal</a>.</li> </ul>



**4.1 Copper Action Plan**

EBMUD continued to meet the requirements of the Copper Action Plan with the following efforts:

**Table 4 - Summary of Copper Action Plan Requirements**

<b>Task</b>	<b>Action</b>	<b>Compliance Date</b>
Review Potential Copper Sources	<ul style="list-style-type: none"> <li>Continues to inventory all sources of copper and permit, sample, and regulate dischargers who may be contributing to copper loadings at the MWWTP .</li> </ul>	Ongoing
Implement Copper Control Program	<ul style="list-style-type: none"> <li>Maintains EBMUD website to provide information on Best Management Practices (BMPs) for pool and spa maintenance for both residential and commercial users. (<a href="http://www.ebmud.com/wastewater/bay-friendly-waste-disposal/copper-free-pools">http://www.ebmud.com/wastewater/bay-friendly-waste-disposal/copper-free-pools</a>)</li> <li>Works with BAPPG to provide copper education for commercial and residential dischargers on baywise.org.</li> <li>Works with BAPPG to provide consolidated education to plumbers regarding BMPs to minimize copper discharges.</li> <li>EBMUD’s potable water is a source of copper in the wastewater influent. EBMUD adjusts the pH of its potable water to reduce corrosiveness.</li> </ul>	Original plan submitted 2/28/2011. Current Copper Control Program is Ongoing
Implement Additional Measures	<ul style="list-style-type: none"> <li>The Regional Monitoring Program for Water Quality in the San Francisco Estuary (RMP) collected samples for copper during the 2019 Water Cruise. Results from 2021 indicate rolling average ambient copper concentrations remain below triggers in all five regions of the Bay.</li> </ul>	Ongoing
Undertake Studies to Reduce Copper Pollutant Impact Uncertainties	<ul style="list-style-type: none"> <li>Continues to partner with BACWA and contributes funding to the RMP.</li> </ul>	Ongoing
Report Status of Copper Control Program	<ul style="list-style-type: none"> <li>Continues to report to the Regional Board documentation of its implementation of the Copper Control Program.</li> </ul>	Annually with P2 Report



The businesses listed in Table 5 have been identified as potential contributors of copper. EBMUD has issued permits to each of these dischargers. Permits, including Zero Discharge (ZD) permits, contain required BMPs, and all dischargers are required to comply with EBMUD’s local limit for copper (5 milligrams per liter [mg/L]). ZD permit holders are required to submit a Discharge Prevention Compliance Report annually, certifying that there have been no discharges of regulated process wastewater to the sanitary sewer. In addition, ZD permit holders are scheduled for inspection at least once during the five-year permit cycle to ensure no discharges are occurring.

**Table 5 - Inventory of Permitted Potential Copper Contributors**

<b>Discharger</b>	<b>Service Address</b>	<b>Industry Category</b>
Able Metal Plating, Inc.	932 86th Ave, Oakland	Metal Finishing (ZD)
Aramark Uniform Services	330 Chestnut St, Oakland	Industrial Laundry
Berkeley Forge & Tool Inc.	1331 Eastshore Hwy, Berkeley	Aluminum Forming (ZD)
CASS, Inc.	2730 Peralta St, Oakland	Non-Ferrous Metals (ZD)
Coulter Forge Technology	1494 - 67th St, Emeryville	Aluminum Forming (ZD)
Electro-Coatings of California	893 Carleton St, Berkeley	Metal Finishing (ZD)
Excellent Metal Processing, Inc.	9905 San Leandro St, Oakland	Metal Finishing (ZD)
Fryer Industries, Inc./dba Dougco	1073 34th St, Oakland	Metal Finishing
Gold Seal Plating	3125 E 7th St, Oakland	Electroplating (ZD)
Lawrence Berkeley National Laboratory, Bldg. 77	1 Cyclotron Rd, Berkeley	Metal Finishing (ZD)
Melrose Metal Finishing, Inc.	10222 Pearmain St, Oakland	Electroplating (ZD)
Mercurius Company	3224 Brookdale Ave, Oakland	Metal Finishing (ZD)
Metro Lighting	2240 San Pablo Ave, Berkeley	Metal Finishing (ZD)
Artworks Foundry, LLC	729 Heinz Ave #10, Berkeley	Metal Molding and Casting (ZD)
Oakland International Airport	Doolittle & Airport Dr, Oakland	Air Transportation
Panache Lighting Inc	2743 9 <sup>th</sup> St, Berkeley	Metal Finishing (ZD)
Performance Structures	499 Embarcadero, Oakland	Metal Finishing (ZD)
Pressure Cast Products	4210 E 12th St, Oakland	Metal Molding and Casting (ZD)
Qualawash Holdings, LLC	9957 Medford Ave, Oakland	Transportation Equipment Cleaning
Scientific Platers, Inc.	9809 Kitty Ln, Oakland	Metal Finishing
SKS Die Casting Machining	1849 Oak St, Alameda	Metal Molding and Casting (ZD)
Union Pacific Railroad Co.	1851-B 5th St, Oakland	Railroad Transportation

ZD = Zero Discharger





**4.2 Cyanide Action Plan**

EBMUD has taken the following measures in response to the regional Cyanide Action Plan, required through Permit No. CA0037702. Permits, including ZD permits, contain required BMPs, and all dischargers are required to comply with EBMUD’s local limit for cyanide (5 mg/L). ZD permit holders are scheduled for inspection at least once during the five-year permit cycle to ensure no discharges are occurring.

**Table 6 - Summary of Cyanide Action Plan Requirements**

<b>Task</b>	<b>Action</b>	<b>Compliance Date</b>
Review Potential Cyanide Sources	<ul style="list-style-type: none"> <li>Continues to inventory all sources of cyanide and permit, sample, and regulate dischargers who may be contributing to cyanide loadings at the MWWTP. See Table 7 below.</li> </ul>	Submitted 7/1/2010 with ongoing monitoring of potential sources
Implement Cyanide Control Program	<ul style="list-style-type: none"> <li>There are presently no known cyanide contributors among EBMUD’s permitted customers.</li> </ul>	Not applicable
Implement Additional Measures	<ul style="list-style-type: none"> <li>RMP ambient water quality data show that the cyanide concentration trigger was not exceeded, so no further actions are required at this time.</li> </ul>	Ongoing
Report Status of Cyanide Control Program	<ul style="list-style-type: none"> <li>Continues to report to the Regional Board documentation of its implementation of the Cyanide Control Program.</li> </ul>	Annually with P2 Report

The following businesses have been identified as potential contributors of cyanide. EBMUD has issued permits to each of the below dischargers with a cyanide limit and pretreatment requirements. Permits, including ZD permits, contain required BMPs. ZD permit holders are required to submit a Discharge Prevention Compliance Report annually, certifying that there have been no discharges of regulated process wastewater to the sanitary sewer. In addition, ZD permit holders are inspected once during the five-year permit cycle to ensure no discharges are occurring.

**Table 7 - Inventory of Potential Cyanide Contributors**

<b>Discharger</b>	<b>Service Address</b>	<b>Regulatory Category</b>	<b>Summary of Cyanide Management</b>
Able Metal Plating, Inc.	932 86 <sup>th</sup> Ave, Oakland	Metal Plating	Cyanide waste off-hauled (ZD)
Bayer Corporation	4th & Parker St, Berkeley	Pharmaceutical	Potential cyanide use, waste off-hauled
Berkeley Forge and Tool, Inc.	1331 Eastshore Hwy, Berkeley	Metal Finishing	Cyanide waste off-hauled (ZD)
Coulter Forge Technology	1494 67 <sup>th</sup> St, Emeryville	Metal Finishing	Cyanide waste off-hauled (ZD)
Electro-Coatings of California	893 Carleton St, Berkeley	Metal Finishing	Cyanide waste off-hauled (ZD)



Discharger	Service Address	Regulatory Category	Summary of Cyanide Management
Excellent Metal Processing, Inc.	9905 San Leandro St, Oakland	Metal Finishing	Cyanide waste off-hauled (ZD)
Gold Seal Plating	3125 E 7 <sup>th</sup> St, Oakland	Electroplating	Cyanide waste off-hauled (ZD)
Lawrence Berkeley National Laboratory, bldg. 77	1 Cyclotron Road, Berkeley	Metal Finishing	Cyanide waste off-hauled (ZD)
Mercurius Company	3224 Brookdale Ave, Oakland	Metal Finishing	Cyanide waste off-hauled (ZD)
Metro Lighting	2240 San Pablo Ave, Berkeley	Metal Finishing	Cyanide waste off-hauled (ZD)
Panache Lighting, Inc	2743 9th St, Berkeley	Metal Finishing	Cyanide waste off-hauled (ZD)
Penumbra	One Penumbra Place, Alameda	Metal Finishing	Cyanide waste off-hauled (ZD)
Performance Structures	499 Embarcadero, Oakland, CA 94606	Metal Finishing	Cyanide waste off-hauled (ZD)

ZD = Zero Discharger

EBMUD maintains a Significant Cyanide Discharge Response Plan that consists of the following:

- Defines a significant cyanide discharge as influent concentration of 6.2 micrograms per liter (µg/L), based on the highest concentration at the MWWTP from 2010-2017. EBMUD has established electronic outlier notifications for all analyses and associated parameter discharge limits/triggers. If a cyanide result is greater than or equal to the defined triggers, all appropriate Wastewater staff, including the Supervisor of Source Control, will be alerted through EBMUD’s email system.
- An investigation team will be formed to identify the cyanide source. The investigation may include interceptor sampling, point source sampling, and a phone survey of potential contributors.
- If the cyanide source is identified, enforcement action may be taken against the facility.

When needed, an incident summary report outlining the actions taken will be included in the EBMUD’s subsequent Annual P2 Report.

## 5. OUTREACH TO EMPLOYEES

### 5.1 *Earth Day*

A variety of annual in-person Earth Day Events for EBMUD personnel were held in 2024. Activities included Earth Day bike rides and repair clinic, film viewings to reduce plastic pollution, a guest lecture on Oakland geology and staff e-waste recycling events.

### 5.2 *Green Business Certification*

Seven EBMUD facilities, including the EBMUD main administration building in downtown Oakland, are Green Business Certified. EBMUD's janitorial staff have received training on Green Business certification criteria for green cleaning products and on their health and safety advantages.

### 5.3 *Training*

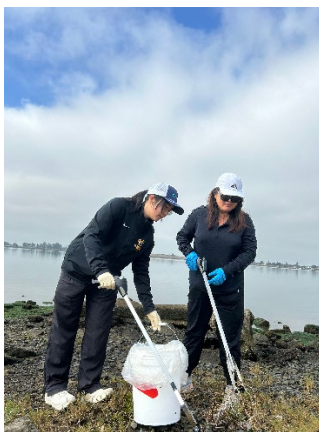
In 2024, employees continued to attend virtual conferences, in-person conferences and webinars provided by the California Water Environment Association (CWEA), and the California Association of Sanitation Agencies (CASA).

### 5.4 *Tours of the Wastewater Treatment Plant*

In 2024, 66 employees attended in-person tours of the Wastewater Treatment Plant led by Wastewater staff. On these tours, Wastewater staff informs attendees of issues facing the plant and how they can play a role in preventing pollution. Additional staff members attended virtual tours.

### 5.5 *Coastal Cleanup*

EBMUD held its eighth annual Coastal Cleanup Event on September 21, 2024. Over 100 EBMUD employees and family members removed litter and recyclables from Martin Luther King Jr. Regional Shoreline Park.



### 5.6 *E-Waste*

EBMUD has an ongoing collection program for employee e-waste and spent battery disposal as part of its established Universal Waste Program.

### 5.7 *Splashes Articles*

EBMUD issues a bi-weekly Splashes electronic newsletter for EBMUD employees and retirees that covers topics related to EBMUD news, accomplishments, employee wellness, and sustainability. In 2024, Splashes featured articles on how employees can explore the outdoors and change behaviors to prevent pollution.

## 6. CONTINUATION OF PUBLIC OUTREACH PROGRAM

EBMUD provides ongoing outreach to residents through its website and hotline number. The hotline number is referenced on the website and included in all outreach materials. It serves as a means for contacting EBMUD staff directly to ask general questions or request informational material such as brochures, grease scrapers, and “how-to” guides to help with their P2 needs. EBMUD also communicates P2 information through its Pipeline publication bill insert and pollution prevention messaging is posted on several social media platforms.

### 6.1 *EBMUD Education Outreach and Pollution Prevention Programming*

EBMUD launched new education programs in 2024 to provide pollution prevention and environmental education throughout our drinking water and wastewater service areas. Field trips at our watersheds, water treatment, school assembly presentations, as well as lesson plans and materials for classroom teachers support science, technology, engineering, arts and math (STEAM) curricula. In 2024, 2,902 people participated in these activities.

The EBMUD Administration Building lobby has a new educational exhibit highlighting the flow of water from the mountains to the tap. The display informs visitors of all ages about the many people and processes that make EBMUD’s work possible and how everyone can prevent pollution.



### 6.2 *Wastewater Treatment Plant Tours*

EBMUD continued the successful Wastewater Treatment Plant tour program for local schools and the public in 2024. The combined attendance for virtual and in-person programs was 1,356. The virtual tour conveys key messages about wastewater treatment, pollution prevention, and renewable resources. A total of 428 K-12 students, 596 college students/people with special technical interests, and 332 members of the general public attended either in person or virtual tours in 2024.



EBMUD maintains a self-guided virtual tour website, “[From your tap to the San Francisco Bay.](#)” The website features a variety of engaging videos and interactive maps to help audiences of all levels learn about how EBMUD’s wastewater treatment protects public health and the San Francisco Bay. In 2024, the site had 2,573 visitors.

### **6.3 Tours and Pollution Prevention Email Blast**

EBMUD developed residential pollution prevention messages that were distributed to more than 30,000 customers in June 2024. The provided links directed customers to Wastewater Treatment Plant Tour event information and provided links to additional pollution prevention resources.

### **6.4 Clean Bay Website**

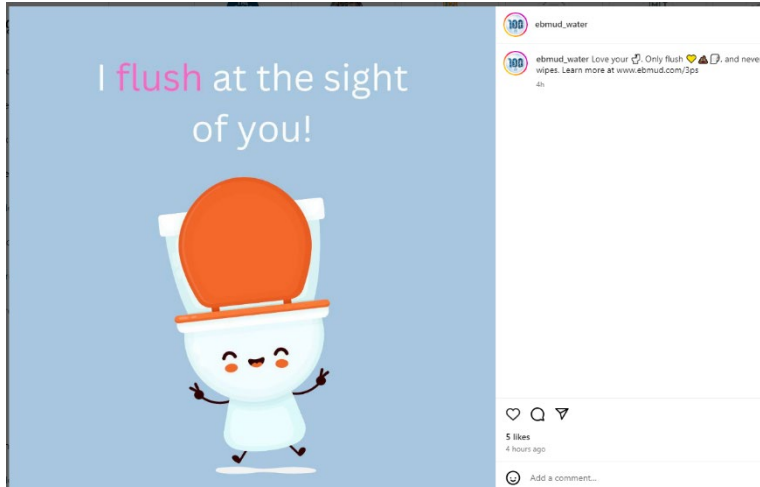
EBMUD continued to provide information on residential pollution prevention on our Clean Bay website ([www.ebmud.com/cleanbay](http://www.ebmud.com/cleanbay)). The site discusses what can be flushed (the “3 Ps” – poop, pee and toilet paper), where to take expired medications, how to dispose of FOG properly, and other tips on how to best prevent pollution.



### **6.5 Social Media and Broadcasting Outreach**

EBMUD posted pollution prevention messaging such as “Wipes Clog Pipes,” FOG disposal, “What not to Flush,” and Wastewater Treatment Plant Virtual Tour announcements on several social media platforms, including Instagram, NextDoor, and Facebook.





**6.6 FOG Holiday Campaign**

EBMUD continued to raise awareness about the importance of keeping FOG from damaging pipes in homes and city sewer systems. During the holiday season, EBMUD posted messaging on the proper disposal of FOG.

**6.7 Environmental Services Hotline**

The EBMUD Environmental Services Hotline offers residents a chance to ask wastewater experts questions directly. By calling 510-287-1651 or emailing [Cleanbay@ebmud.com](mailto:Cleanbay@ebmud.com), residents can get quick answers to questions about proper waste disposal, what not to flush, and general guidance on pollution prevention.

**6.8 Water Conservation Outreach**

EBMUD’s Water Conservation Division issues a bimonthly personalized “Home Water Report” to residential customers that shows their household water consumption compared to households of similar size and demographics. In 2024, over 250,000 customers received this report which included pollution prevention messaging.

**6.9 Collaboration with NGOs and Government Agencies**

EBMUD continued its partnerships with Non-Governmental Organizations (NGOs) and government agencies, including the following activities:

**Table 8 - EBMUD Partnership Activities**

Agency	Activity
Baykeeper	<ul style="list-style-type: none"> <li>Continued partnership with Baykeeper to address residential FOG, including FOG outreach to grocery stores.</li> <li>Sponsored Baykeeper’s <a href="#">Healthy Bay Challenge</a>.</li> </ul>
BACWA and BAPPG	<ul style="list-style-type: none"> <li>EBMUD is a principal member of BACWA and BAPPG.</li> </ul>
CWEA	<ul style="list-style-type: none"> <li>Participated in the CWEA Pollution Prevention, Pretreatment and Stormwater (P3S) committee.</li> </ul>



Agency	Activity
Stege Sanitary District	<ul style="list-style-type: none"> <li>Partnered with Stege Sanitary District to distribute EBMUD’s “Think Before You Flush” brochures in their New Homeowner packets.</li> </ul>

**6.10 Brochures and Literature**

Pollution prevention literature in the form of brochures, posters, flyers and pamphlets produced for and distributed to commercial and residential audiences are listed in Tables 9 and 10. Literature geared toward a commercial audience is distributed during facility inspections or made available online for businesses. Literature geared toward a residential audience is distributed at public outreach events or mailed upon request.

**Table 9 - Brochures and Materials Produced and/or Distributed by EBMUD to a Commercial or Non-Residential Audience**

Material	Audience	Message	Comments
FOG BMP Poster	Food Service Establishments (FSEs)	“FOG Friendly Tips” for FSEs provide information about FOG and ways to prevent FOG issues.	Distributed to FSEs in EBMUD service area.
FOG Brochure	FSEs	“Controlling FOG in Food Handling Facilities” brochure: Frequently asked questions on FOG and FOG disposal.	Distributed to FSEs in EBMUD service area.
FOG Flyer	FSEs	“Best Management Practices for Food-Related Fats, Oils, and Grease” flyer Business specific practices to keep FOG out of the sewer.	Distributed to FSEs in EBMUD service area.
FOG Holiday Flyer	Grocery Stores and Residents	How to dispose of turkey fryer waste FOG.	Posted at 7 grocery and hardware stores.
P2 Practices for Automotive Facilities (BMP brochure)	Businesses	P2 for vehicle service facilities.	Available on the EBMUD website.
EBMUD “Pollution Prevention Self-Audit Checklist”	Businesses	Good housekeeping practices and Business-specific waste reduction practices.	Covers 13 business categories modeled after Department of Toxic Substances Control Hazardous Waste Management checklist.
Vehicle Wash Signs	Vehicle Wash Facilities	“Discharge of Brake and Engine Cleaners to the Sewer is Prohibited”	Available on the EBMUD website.



<b>Material</b>	<b>Audience</b>	<b>Message</b>	<b>Comments</b>
Maintaining Copper-Free Pools, Spas and Fountains	Public and private pool owners and pool maintenance companies	General information on the harmful effects to the ecosystem of copper accumulation in the Bay from discharges. Best Management Practices for reducing copper use and proper disposal of pool water.	Available on the EBMUD website.





**Table 10 - Brochures and Materials Produced and/or Distributed by EBMUD to a Residential Audience**

<b>Material</b>	<b>Audience</b>	<b>Message</b>	<b>Comments</b>
Grow It! Guides	Residents	Provides information on pesticide alternatives, drought-tolerant and native plants, and proper disposal information for household toxics.	EBMUD provided native and drought-tolerant plant lists for this BAPPG project. EBMUD also tailored several pages specifically to the East Bay area.
“Think Before You Flush” Brochure	Residents	Emphasizes the message that a toilet is not a trash can. Provides multi-pollutant information and proper disposal options for household and personal hygiene products that should never be flushed.	Distributed during community events and residential hotspot areas where FOG and “flushable” wipes/trash related blockages/overflows occur.
FOG Scrapers	Residents	“Use This Scraper To Prevent Sewage Backups”	These are distributed to residential customers upon request or in areas where there are FOG “hotspots” and/or areas of concern.
FOG Turkey Fryer Stickers	Residents	“Recycle Cooking Oil”	Stickers placed on turkey fryers sold at major and local independent markets.
FOG Residential Grease Sign	Residents	“Recycle Cooking Oil”	Placed at some major and local independent markets near fryers, oil, or turkey displays during the holidays.
Clean It! Guides	General Public	Household Waste Control, less toxic cleaning product use	Guides are mailed to customers upon request.
FOG Brochure and Door hanger	Residents	How to properly dispose of cooking FOG	Includes information on large quantity disposal (e.g., from turkey fryers) and use of kitchen scrap recycling programs. Door hanger has translated information in Spanish and Chinese.



## **7. CRITERIA FOR MEASURING PROGRAM EFFECTIVENESS**

### ***7.1 Influent, Effluent, and Biosolids Monitoring Data***

EBMUD monitors influent data to understand trends in pollutants of concern and to compare pollutant levels with NPDES effluent limits. EBMUD uses these data to identify residential, commercial, and industrial sources to focus its pollution prevention efforts. EBMUD also monitors effluent and biosolids data to ensure that pollutants of concern remain below regulatory limits.

### ***7.2 Metrics Measuring Residential and Commercial Outreach Effectiveness***

EBMUD collects data throughout the year to measure the effectiveness of its residential and commercial outreach programs. The criteria used include measures of pollutants diverted from wastewater disposal, tools provided to residential users to support pollutant diversion, response to notifications of issues by collection system agencies, and actions taken to curb pollutants from commercial users as presented in Table 11.

## **8. DOCUMENTATION OF EFFORTS AND PROGRESS**

This report in total details all the Pollution Prevention Program activities during the reporting year. Additionally, EBMUD's Pretreatment Program annual report discusses EBMUD's regulation of permitted industrial users and other permitted wastewater dischargers within the wastewater service area.

## **9. EVALUATION OF POLLUTANT MINIMIZATION PROGRAM AND TASK EFFECTIVENESS**

The effectiveness of the EBMUD P2 program can be evaluated in the following ways:

### ***9.1 NPDES Permit Compliance – Over 24 Years***

There were no effluent violations recorded at the MWWTP for any parameters regulated by the permit in 2024. In December 2024, EBMUD completed its 304th consecutive month, or over 24 years, of compliance with all NPDES permit effluent limits.



**9.2 Effectiveness of P2 Program Tasks**

By considering the criteria stated in Section 7.2, the EBMUD P2 program was effective. EBMUD has responded to all notifications from collection system agencies of pollutant issues, has distributed pollutant mitigation materials and information to residents, and has collected a substantial amount of diverted pollutants. Table 11 describes the effectiveness of mitigation efforts for each identified pollutant of concern.

**Table 11 - Measuring Effectiveness in Mitigating Pollutants of Concern**

Pollutant of Concern	Effectiveness Measure
FOG	<p>COMMERCIAL</p> <ul style="list-style-type: none"> <li>• Continued hotspot investigation procedures for grease-related sanitary sewer overflows (SSOs) and blockages reported by collection system agencies. EBMUD responded to five hotspots identified by collection system agencies. Note that as of July 1, 2019, the City of Oakland is no longer part of the EBMUD FOG program.</li> <li>• Conducted 36 field inspections at FSEs with gravity grease interceptors to document compliance monitoring and ensure sufficient cleaning and maintenance of grease interceptors.</li> <li>• There were no FOG-related SSOs from the EBMUD system.</li> </ul> <p>RESIDENTIAL</p> <ul style="list-style-type: none"> <li>• Continued the Residential Used Cooking Oil Collection Program for residents in EBMUD’s service area. During 2024, a total of 2,932 gallons of used cooking oil and grease were collected from EBMUD’s MWWTP and the El Cerrito Recycling Center’s oil drop-off locations. Both facilities recycle the collected cooking oil into a biofuel.</li> <li>• Conducted annual holiday outreach campaign in collaboration with San Francisco Baykeeper. Distributed outreach material to 7 local independent retailers of turkey fryers and oil jugs.</li> <li>• Performed outreach utilizing the “Think Before You Flush” brochure to address “flushable” wipes and consumer products, which often come in tandem with FOG and cause chronic problems, including blockages, SSOs, and expensive repair and maintenance issues in the sanitary sewer systems. In 2024, 168 personalized FOG and “wipes/trash” related letters and “Think Before You Flush” brochures (in addition to residential FOG brochures) were mailed to residents in identified hotspot areas.</li> <li>• Distributed 3,400 grease scrapers in 2024.</li> </ul>
Mercury	<ul style="list-style-type: none"> <li>• Continued to reach out by mail and phone to dentists to obtain compliance reports as required by the 2017 EPA Dental Effluent Guidelines.</li> <li>• Dental offices had until July 14, 2020, to submit their compliance reports confirming use of amalgam separators. EBMUD continues to track and require compliance report submittals for new dental practices that have opened since July 14, 2020.</li> </ul>



<b>Pollutant of Concern</b>	<b>Effectiveness Measure</b>
Copper	<ul style="list-style-type: none"> <li>Influent and effluent monitoring shows that copper has been decreasing over the past 30 years due to permit requirements, sampling, and monitoring of contributing sources.</li> </ul>
Cyanide	<ul style="list-style-type: none"> <li>Influent and effluent monitoring shows that cyanide has been decreasing over the past 30 years due to permit requirements, sampling, and monitoring of contributing sources.</li> </ul>
PCBs	<ul style="list-style-type: none"> <li>Implemented sampling and analysis for PCBs in permit requirements at dewatering sites that have PCB-concerns.</li> <li>Conducted influent and effluent monitoring to examine PCBs levels per Order No. R2-2022-0038 (Mercury and PCBs Watershed Permit).</li> </ul>
Other Metals (Cadmium, Chromium, Lead, Nickel, Zinc)	<ul style="list-style-type: none"> <li>Influent and effluent monitoring shows that metals have been decreasing over the past 30 years due to permit requirements, sampling, and monitoring of contributing sources.</li> </ul>
Pharmaceuticals	<ul style="list-style-type: none"> <li>Collected 2,088 pounds of unwanted/expired pharmaceuticals through 11 permanent collection sites throughout the wastewater service area.</li> <li>The Pharmaceutical Take-back Program has collected 46,232 pounds of expired/unwanted pharmaceuticals since the program's inception in 2009.</li> </ul>

## 10. FUTURE EFFORTS, TASKS, AND TIME SCHEDULE

EBMUD plans to continue its current, successful programs and public outreach initiatives such as the FOG program, pollutant of concern monitoring and permitting, NGO and agency partnerships, event tabling, social media campaigns, in person and virtual tours, and video content. EBMUD plans to expand and improve its Pollution Prevention program in the future as presented in Table 12.

**Table 12 – Future Tasks and Time Schedule**

<b>Task</b>	<b>Target Audience</b>	<b>Time Schedule</b>
Continue in-person WWTP tour program, focusing especially on tours for schools in underserved communities.	Students and Schools	Spring-Fall 2025
Develop Wastewater History Education Displays in EBMUD admin lobby	Students and Community	Fall 2025
Continue to promote interactive web-based virtual tour of the MWWTP that was developed in 2022.	Community, Students and Schools	Ongoing



<b>Task</b>	<b>Target Audience</b>	<b>Time Schedule</b>
Continue implementing 5-Year Pollution Prevention Strategic Plan including the following near-term activities: -P2 Materials audit -Participation in the development of a District Education Strategic Plan -Development of targeted messaging strategy	Internal and all External Audiences	Spring 2025
Expand residential P2 outreach using digital materials (e.g., targeted Customer Relationship Management software communications, targeted social media marketing) and by partnering with regional agencies through BAPPG.	Residents	Summer 2025
Continue BACWA and committee efforts to improve and update baywise.org and increase linkages from ebmud.com/Cleanbay to baywise.org.	Residents and Commercial/Industrial Customers	Fall 2025



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