



2014 Pretreatment and Pollution Prevention Report



**East Bay Municipal Utility District
Wastewater Department**

**EAST BAY MUNICIPAL UTILITY DISTRICT
2014 PRETREATMENT AND POLLUTION PREVENTION REPORT**

This Report Covers Period: January 2014 to December 2014

Previous Report Period: January 2013 to December 2013

NPDES Permit Holder: East Bay Municipal Utility District

<u>Wastewater Treatment Plant</u>	<u>NPDES Permit Number</u>
Main Wastewater Treatment Plant	CA 0037702
Wet Weather Facilities	CA 0038440

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BENNETT K. HORENSTEIN
DIRECTOR OF WASTEWATER

2/25/15
DATE

CALIFORNIA PRETREATMENT PROGRAM

PCS DATA Entry Form for Annual Report Reviews

Control Authority Name: East Bay Municipal Utility District

NPDES NO. CA0037702 [EPA Use Only – Trans Code _____]

Date of Annual Report Review: _____

SUMMARY

<u>Description</u>	<u>(PCS Code)</u>	<u>No.</u>
1. Beginning of Reporting Period	(PSSD)	01/01/14
2. End of Reporting Period	(PSED)	12/31/14
3. SIUs in SNC w/Pretreatment Compliance Schedule	(SSNC)	1
4. Notice of Violations and Administrative Orders Issued Against SIUs	(FENF)	NOV- 1 CDO- 0 ACL-0
5. Civil and Criminal Judicial Actions Against SIUs	(JUDI)	0
6. SIUs w/Significant Noncompliance Published	(NCP)	1
7. SIUs from which Penalties have been collected	(IUPN)	SIU-Categorical-0 SIU Non-Categorical-0

Data Entry Form Completed By: Nadic Borivoje Date: 2/25/2015

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DEFINITIONS AND ABBREVIATIONS

Definitions

Baseline Monitoring Report (BMR): The report required by the Control Authority from industrial users subject to Categorical Pretreatment Standards. The BMR due dates and contents are cited in 40 CFR403.6 and 403.12.

Best Management Practices (BMPs): Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in EBMUD Wastewater Control Ordinance, Title II, Section 2. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

Biosolids: The solid organic matter made from the anaerobic digestion of sewage sludge.

Business Classification Code (BCC): A classification of dischargers based on the 1987 Standard Industrial Classification Manual, Office of Management and Budget of the United States of America.

Bypass: The intentional diversion of waste streams from any portion of a treatment facility.

Categorical Industry: An industry that must comply with National Categorical Pretreatment Standards as published by EPA.

Categorical Industrial User (CIU): A discharger subject to a categorical pretreatment standard.

Categorical Pretreatment Standards: Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Clean Water Act, which applies to Industrial Users. Includes prohibitive discharge limits established pursuant to 40 Code of Federal Regulations, 403.5. [Ref. 40 Code of Federal Regulations, 403.3(j)].

Cease and Desist Order (CDO): An order issued by the Director of Wastewater directing a discharger to achieve compliance with permit requirements and/or EBMUD Wastewater Control Ordinance.

Chemical Oxygen Demand (COD) - filtered: The amount of Chemical Oxygen Demand passing through a glass filter as measured in conformance with the District's approved method. Chemical oxygen demand is the measure of the oxygen equivalent of the organic matter of a sample that is susceptible to oxidation by a strong chemical oxidant.

Closed (CL) Facility: A facility that no longer operates within the EBMUD SD-1 service area.

Compliance Schedule: Action(s) required of an industrial discharger to comply with pretreatment regulations. A compliance schedule may be included as a condition of the industrial discharger's wastewater discharge permit, or by an Administrative or Judicial Order.

Compliance Status: Determined through review of monitoring data and other information to assess an industrial discharger's compliance with schedules, reporting requirements, and applicable pretreatment standards. An industrial discharger's compliance status is reported quarterly as consistent compliance, inconsistent compliance, significant non-compliance, or unknown.

Consistent Compliance (C): The compliance status assigned to an industrial discharger having no violation during the last reporting quarter and no unresolved significant non-compliance issues from the previous reporting quarter.

Delist: The removal of an industrial user from EBMUD's Significant Industrial Users list.

Director: Director of the Wastewater Department of the EBMUD or his/her designated representative.

Discharge Minimization Permit: Mandatory permit that includes monitoring and/or reporting requirements.

East Bay Municipal Utility District (EBMUD): A municipal utility district formed under Division 6 of the Public Utilities Code of the State of California, also known as the Municipal Utility District Act (MUD Act), which provides water and wastewater service to East Bay communities. [Ref. MUD Act, Division 6, Chapter 1, Article 1, Section 11503]

EBMUD Wastewater Control Ordinance: The Ordinance enacted by the EBMUD Board of Directors establishing regulations for: 1) the interception, treatment, and disposal of wastewater and industrial wastes, 2) control of wastewater, including discharger classification and issuance of permits, 3) charges, and 4) penalties for violations of the Ordinance, revision effective August 22, 2013.

EBMUD Special District No. 1 (SD-1): The special district for sewage disposal created under Division 6 of the Public Utilities Code of the State of California, also known as the Municipal Utility District Act (MUD Act), to provide treatment of wastewater from East Bay communities. [Ref. MUD Act, Division 6, Chapter 8, Article 1, Section 13451].

Estimation Permit: Optional permit issued to dischargers who request an estimation of wastewater flow or whose discharge is less than the normal range of wastewater strength for the BCC to which it is assigned.

Federal Categorical: See Categorical Industry.

Food Service Establishment (FSE): Any facility preparing and/or serving food for commercial use or sale. This includes restaurants, cafes, lunch counters, cafeterias, hotels, hospitals, convalescent homes, factory or school kitchens, catering kitchens, bakeries, grocery stores with food preparation and packaging, and meat cutting and preparation (excluding grocery stores with only food warming operations), meat packing facilities and other FSEs not listed above where cooking fats, oils and grease may be introduced into the community sewer system.

General Pretreatment Regulations: Any regulations promulgated by the EPA in accordance with Sections 307(b) and (c) and 402(b)(8) of the Act (33 U.S.C. 1347) for the implementation, administration and enforcement of pretreatment standards.

Groundwater Permit: Discharge minimization permit issued to dischargers of groundwater that serves as a waiver to the prohibition of groundwater discharges found in EBMUD Wastewater Control Ordinance, Title I, Section 5.

Inconsistent Compliance (IC): The compliance status assigned to an industrial discharger having one or more violations during a reporting quarter, which did not result in significant non-compliance, and no long-term pattern of violations.

Indirect Discharge: The introduction of pollutants into a publicly owned treatment works from any non-domestic source regulated under section 307(b), (c) or (d) of the Clean Water Act. [Ref. 40 Code of Federal Regulations, 403.3(g)].

Industrial User (IU): A source of indirect discharge. [Ref. 40 Code of Federal Regulations, 403.3(h)].

Interceptor: An intercepting sewer found and determined by the Board of Directors of the District to be such and owned and operated by the District.

Interference: A discharge, which, alone or in conjunction with a discharge or discharges from other sources, both:

1. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
2. Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA)), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act. [Ref. 40 Code of Federal Regulations, 403.3(h)]

Mandatory Permit: A permit that must be obtained by dischargers who are in the categories cited in the EBMUD Wastewater Control Ordinance, Title IV, Section 1.a.

National Pollutant Discharge Elimination System (NPDES): The national program established under the Clean Water Act to regulate discharges to the navigable waters of the United States. [Ref. Clean Water Act, Title IV, Section 402].

New Permit: A Minimization, Estimation or Pollution Prevention Permit that was not in effect during the previous reporting year.

New Source:

(1) Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards which will be applicable to such source if such standards are thereafter promulgated, provided that:

- (i) The building, structure, facility or installation is constructed at a site at which no other source is located; or
- (ii) The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
- (iii) The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.

(2) Construction on a site at which an existing source is located results in a modification rather than a New Source if the construction does not create a new building, structure, facility or installation meeting the criteria of paragraphs (1)(ii) or (1)(iii) of this section, but otherwise alters, replaces, or adds to existing process or production equipment.

(3) Construction of a new source as defined under this paragraph has commenced if the owner or operator has:

- (i) Begun, or caused to begin as part of a continuous onsite construction program:
 - a. Any placement, assembly, or installation of facilities or equipment; or
 - b. Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
- (ii) Entered into a binding contractual obligation for the purchase of facilities or equipment, which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

Non-Categorical Industry: An industry that is exempt from the Categorical Pretreatment Standards.

Non-Significant Categorical Industrial User A categorical industrial user that meets the following criteria:

Never discharges more than 100 gallons per day of total categorical wastewater and

- a. Has consistently complied with all applicable categorical pretreatment standards and requirements
- b. Annually submits the certification statement required in 40 CFR 403.12(q)
- c. Never discharges any untreated concentrated wastewater.

NPDES Permit: The regulatory agency document issued either by a federal or state agency which is designed to control all discharges of pollutants into navigable waters from all point sources of pollution, including industries and publicly owned treatment works.

Optional Permit: A permit that may be issued to dischargers who apply for such permit as cited in the EBMUD Wastewater Control Ordinance, Title IV, Section 1.b.

Pass-Through: Discharge which exits a publicly owned treatment works (POTW) into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation). [Ref. 40 Code of Federal Regulations, 403.3(n)]

Pollution Prevention (P2): An activity that eliminates or reduces the amount of any pollutant from entering the waste stream or the environment.

Pollution Prevention (P2) Permit: Mandatory permits for certain BCCs that contain best management practices to reduce or eliminate pollutants discharged to the sanitary sewer.

Publicly Owned Treatment Works (POTW): A treatment works as defined by Section 212 of the Clean Water Act, which is owned by the District. This definition includes any District-owned devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes District-owned sewers, pipes and other conveyances that convey wastewater to that portion of the POTW which is designed to provide treatment (including recycling and reclamation) of municipal sewage and industrial waste.

Pretreatment: The reduction of the amount of pollutants, the elimination of pollutants or the alteration of the nature of pollutant properties in wastewater through physical, chemical or biological processes or process changes prior to or in lieu of discharging these pollutants into a POTW. [Ref. 40 Code of Federal Regulations, 403.3(q)]

Reclassified (RC): An IU regulated under a Minimization (federal categorical or local), Estimation or Pollution Prevention Permit that becomes regulated under a different one of these permits.

Recycling: Reuse of materials that would otherwise be considered waste.

Recycled Water: Wastewater that has been treated to reduce contaminants to low enough levels to enable the water to be used again safely for certain beneficial uses or controlled uses that would not otherwise occur.

Reissued (RI): Existing P2 Permits that are renewed.

Resource Recovery Permit: A mandatory permit that regulates the trucked materials arriving at the SD-1 Wastewater Treatment Plant for treatment.

RWQCB: The San Francisco Bay Regional Water Quality Control Board.

Significant Industrial User (SIU):

1. A user subject to Categorical Pretreatment Standards; or
2. A user that:
 - (i) Discharges an average of twenty-five thousand (25,000) gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater);
 - (ii) Contributes a process wastestream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
 - (iii) Is designated as such by the District on the basis that it has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
3. Upon a finding that a user meeting the criteria in Subsection (2.) above has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the District may at any time, on its own initiative or in response to a petition received from a user, determine that such user should not be considered a significant industrial user.

Significant Noncompliance: A significant industrial user (or any IU which violates paragraphs 3, 4, or 8 below) is in significant noncompliance with applicable pretreatment requirements if any violation meets one or more of the following criteria:

1. Chronic violations of wastewater discharge limits, defined as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l).
2. Technical Review Criteria (TRC) violations, defined as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a six-month period are equal or exceed the product of the numeric pretreatment standard or requirement including instantaneous limits, as defined by 40 CFR 403.3(l) multiplied by the applicable TRC.

TRC = 1.4 for BOD, TSS, fats, oil and grease.

TRC = 1.2 for all other pollutants (except pH).
3. Any other violation of a pretreatment standard or requirement as defined by 40 CFR 403.3(l) (daily maximum or longer-term average, instantaneous limit, or narrative standard) that the District

determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public).

4. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority to halt or prevent such a discharge.
5. Failure to meet, within 90 days after the due date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.
6. Failure to provide, within 45 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules.
7. Failure to accurately report noncompliance.
8. Any other violation or group of violations which the District determines, will adversely affect the operation or implementation of the local pretreatment program.

Slug Discharge or Loading: Any discharge at a flow rate or concentration, which could cause a violation of the prohibited discharge standards the EBMUD Wastewater Control Ordinance, Section 2.2. A slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge which has a reasonable potential to cause interference or pass through, or in any other way violate the District's regulations, local limits or permit conditions.

Source Control: Any activity that prevents the generation of hazardous waste through a change in raw materials or product reformulation (material substitution), or operational or process improvements (process modification).

Special Discharge Permit: Mandatory permit for unique or intermittent discharges that do not require a Discharge Minimization Permit. May include reporting and monitoring requirements.

Terminated (T): A Minimization, Estimation or Pollution Prevention Permit that ceases to be in effect due to reasons such as business closure, business name change or regulated process change. In exceptional cases, the Director may terminate a permit for violation of the permit terms and conditions or the EBMUD Wastewater Control Ordinance provisions. A discharger who has a permit terminated by the Director is required to apply for a new permit within 30 days of notice of termination.

Total Identifiable Chlorinated Hydrocarbons (TICH): The sum of the concentrations of all quantifiable values equal to or greater than the detection limit for all chlorinated hydrocarbons identified by EPA Method 624.

Total Suspended Solids (TSS): The concentration of nonfilterable residue dried at 103° to 105°C on a filter in conformance with the District's approved method.

Upset: An exceptional incident in which there is unintentional and temporary non-compliance with an IU's discharge limitations because of factors beyond the reasonable control of the IU.

Violation Follow-Up Inspection: An inspection specifically conducted to continue investigation of a past violation and assess the industry's compliance status.

Wastewater Control Ordinance: See EBMUD Wastewater Control Ordinance.

Wastewater Discharge Permit: This permit type establishes general and site-specific compliance and reporting requirements, applicable discharge limitations self-monitoring requirements and billing conditions for unique wastewater strengths and flow as applicable.

Waste Minimization: See Pollution Prevention.

Wastewater Treatment Plant (WWTP): the District's Main Wastewater Treatment Plant located at 2020 Wake Avenue, Oakland, California.

Wet Weather Facility: A remote wastewater facility designed to provide treatment of additional wet weather flows. EBMUD's Wet Weather Facilities were built to provide additional wet weather flow capacity and reduce overflows of untreated wastewater during peak storm events.

Abbreviations

BCC:	Business Classification Code
BMPs:	Best Management Practices
BMR:	Baseline Monitoring Report
C:	Consistent Compliance
CDO:	Cease and Desist Order
CL:	Closed
CODF:	Chemical Oxygen Demand (filtered)
EBMUD:	East Bay Municipal Utility District
EPA:	United States Environmental Protection Agency
FY:	Fiscal Year
IC:	Inconsistent Compliance
IU:	Industrial User
MGD:	Million gallons per day
NOV:	Notice of Violation (Violation Notice)
NPDES:	National Pollutant Discharge Elimination System
POTW:	Publicly Owned Treatment Works
RC:	Reclassified
RCRA:	Resource Conservation and Recovery Act
RI:	Reissued

RMP:	Regional Monitoring Program
RWQCB:	The San Francisco Bay Regional Water Quality Control Board
SD-1:	EBMUD Special District No. 1
SIU:	Significant Industrial User
SNC:	Significant Non-compliance
SWDA:	Solid Waste Disposal Act
T:	Terminated
TTO:	Total Toxic Organics
TRC:	Technical Review Criteria
TSS:	Total Suspended Solids
WWF:	Wet Weather Facility
WWTP:	Wastewater Treatment Plant

1. INTRODUCTION

This 2014 report includes the Pretreatment Annual Report and the Pollution Prevention Annual Report. The Pollution Prevention (P2) Report is fully contained in Chapter 5.

1.1 *EBMUD Background Information*

The East Bay Municipal Utility District (EBMUD or District) 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. The MUD Act was amended in 1941 to enable formation of special districts. In 1944, voters in six East Bay cities elected to form EBMUD's Special District No. 1 (SD-1) to provide treatment of wastewater discharged to the San Francisco Bay. In 1971, the Stege Sanitary District was annexed to SD-1.

1.2 *Wastewater Service Area and Facilities*

EBMUD formed the Wastewater Department following approval of SD-1. The Wastewater Department is responsible for treatment and disposal of domestic, commercial and industrial wastewater from the cities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont and the Stege Sanitary District, which includes the City of El Cerrito, the Richmond Annex and unincorporated Kensington. The individual communities maintain their own collection systems (sewers and pumping stations) that discharge to one of five District-operated interceptors. The EBMUD Wastewater Department is responsible for the administration and operation of the Main Wastewater Treatment Plant (MWWTP), the interceptors, the District's deep-water outfall, and three wet weather facilities (WWF). The Department also operates the District's joint water and wastewater laboratory, and three water recycling facilities. Detailed information about the District facilities is provided below.

- The District's wastewater service area is 88 square miles, including 1,700 miles of community owned and maintained sanitary sewers, 15 District pumping stations, and 29 miles of District gravity sewer interceptors ranging from 12 inches to 9 feet in diameter and 8 miles of sewer force mains.
- The District's Wastewater Department serves a population of approximately 650,000, which includes approximately 175,000 accounts, of which over 18,000 are commercial, industrial, and institutional users.
- The District's wastewater facilities are as follows:
 - a) The MWWTP that provides secondary treatment for a design capacity of 168 million gallons per day (MGD). Primary treatment is provided for up to 320 MGD. The maximum wet weather capacity including storage is 415 MGD. The 2014 average influent daily flow was 52 MGD.
 - b) The Oakport, Point Isabel, and San Antonio Creek WWFs provide additional wet weather capacity of 158 MGD, 100 MGD and 51 MGD, respectively. The flow to all the WWFs undergoes screening, chlorination, and dechlorination; and Oakport and Point Isabel WWFs also provide sedimentation. The sedimentation basins at these two facilities can provide storage so the flow can be discharged back to the interceptor system for treatment at the MWWTP once peak flows have subsided.
- The District's water recycling facilities are as follows:
 - a) The North Richmond Water Reclamation Plant is designed to produce a peak of 5.4 MGD of recycled water from West County Wastewater District's Water Pollution Control Plant (WPCP) for use in cooling towers at the Chevron U.S.A Inc. oil refinery in Richmond, California. In 2014, Chevron's cooling towers used an annual average of 3.6 MGD of recycled water.

- b) The Richmond Advanced Recycled Expansion (RARE) Water Project treats secondary effluent from West County's WPCP to a high level of purity for use in the boilers at the Chevron Richmond refinery.
This facility currently provides up to 3.34 MGD of recycled water to the refinery. The District is currently undertaking a feasibility study evaluating the potential to expand recycled water at North Richmond Water Reclamation Plant and RARE.
- c) The East Bayshore Water Recycling Plant is designed to treat 2.5 MGD of the MWWTP's secondary effluent. The recycled water is currently used for landscape irrigation, toilet/urinal flushing in EBMUD's office building, a commercial cooling tower at Pixar Studios, and construction dust control. Current customer use is about 0.15 MGD.

1.3 Pretreatment and Pollution Prevention Program

The EBMUD Wastewater Department is organized into four Divisions: Wastewater Treatment, Wastewater Engineering, Laboratory Services, and Environmental Services. The Environmental Services Division includes EBMUD's pretreatment and pollution prevention (P2) program. The District's pretreatment and P2 program monitors and controls the quality and quantity of wastewater discharged to the District's wastewater treatment facilities. This report summarizes the pretreatment and P2 program activities implemented by the Environmental Services Division in 2014.

During 2014, the District continued implementing changes to the industrial permit program that were initiated in 2011 to create efficiencies while still meeting regulatory requirements. At the end of 2014, the District's industrial permit program included 8 significant industrial users (SIU) categorical, 13 SIUs non-categorical, 14 non-SIUs, and 21 non-SIU zero discharge—categorical permits in. The District also issued groundwater, special discharge, and estimation permits. More details on the permitted accounts and monitoring are provided in Chapter 4. The District's P2 permits were in effect for approximately 1,135 commercial businesses such as vehicle washing facilities, photo processing businesses, and hospitals. More details on P2 permits and activities are summarized in Chapter 5.

The Environmental Services Division performed inspections with sampling to assess compliance by permitted industrial users. District staff also conducted P2 and Business Classification Code (BCC) inspections and participated in public outreach activities. More information on industrial users and public outreach activities can be found in Chapters 4 and 5.

The Environmental Services Division maintains an inventory of industrial and commercial facilities in the SD-1 service area which is continually updated based on process surveys, field inspections, city business licenses, phone book lists, other agency lists, and industrial association lists. New water customers in the SD-1 service area are classified by BCC at the time service is established through the EBMUD New Business Office. Inspections are performed to verify that the BCC assigned to a business is consistent with the quantity and quality of the wastewater discharge and to determine if the facility should be regulated under the pretreatment or P2 program.

1.4 Pretreatment Program Evaluation

On April 22 and 23, 2013, United States Environmental Protection Agency (EPA) representatives conducted a Pretreatment Compliance Audit (PCA) of the District's pretreatment program. On July 8, 2013, EPA provided a PCA findings report to the District. On September 5, 2013, the District responded

to the findings report, stating that all required corrections and recommended actions had been completed or were scheduled to be implemented as described.

On August 22, 2013, the District's amended Wastewater Control Ordinance (Ordinance) was adopted by the Board of Directors to include regulatory requirements and recommendations based on the San Francisco Bay Regional Water Quality Control Board's (RWQCB) June 2011 sewer use Ordinance review findings. The 2013 PCA requirements will be reviewed and captured, as needed, during the next Ordinance update. In 2014, there have not been adopted changes to the Ordinance pertaining to the pretreatment program.

2. PLANT INFORMATION

2.1 *Upset, Interference and Pass-Through*

In 2014, there were no discharges from industrial users that were identified as causing the MWWTP upsets, interference or pass-through resulting in any violations of the District's NPDES permit limitations.

2.2 *Compliance with NPDES Permit Limitations*

No violations of any effluent limitations for the MWWTP were recorded in 2014, and the MWWTP performed as expected. One unauthorized discharge of treated, chlorinated effluent from the MWWTP occurred during an intense rainstorm in December 2014, and is further described below:

- On December 11, 2014, around 10:00am, an unauthorized discharge of an estimated 40,000 gallons of chlorinated, treated effluent occurred at the northwest edge of the main WWTP. The discharge occurred during heavy rains and it is believed that some of the effluent mixed with rain water may have reached a storm drain to San Francisco Bay. The chlorine residual of the treated effluent released was 1.8-2.6 milligram per liter (mg/L) as indicated by a nearby online analyzer in the effluent channel. The discharge occurred when effluent pumping was maximized during a storm and the increased pumping rate caused the effluent pump surge chamber to overflow. Operators were watching the surge chamber level on the control system screen at the time but an incorrect control system tag for the top of the surge chamber made it appear that the surge was contained, when in fact it was overflowing. The inaccurate control system tag has been corrected in the system.

2.3 *Biosolids Storage, Land Application and Disposal Practice*

The District produces Class B biosolids with an average of 23% total solids.

Biosolids are collected in an enclosed air-scrubbed hopper located next to the Dewatering Building at the District's main wastewater treatment plant. The hopper consists of three bins, each with a capacity of 200,000 lbs or 150 cubic yards.

In 2014, 100% of the 73,922 wet tons of biosolids produced were beneficially reused with 48% used as a soil amendment at land-application sites and 52% used as alternative daily cover at landfills.

2.4 *Influent, Effluent and Biosolids Monitoring Results*

Tables 2-A, 2-B and 2-C summarize the analytical results for 2014 influent and effluent metals, volatile organic compounds and semi-volatile organic compounds, respectively. Reductions in heavy metals loadings and selected organics concentrations to the MWWTP are summarized in Figures 2-A, 2-B and 2-C. Figure 2-D illustrates influent and effluent metals monitoring results for the past five years. Additional information on heavy metals loading and organics concentrations can be found in Chapter 5.

Generally, metals results trended downward in 2014 compared to previous years. Mercury influent monthly averages for 2014 were all below 0.16 ug/L, which is consistently below the previous years' averages. Mercury 2014 effluent results were comparable to those of the previous 5 years. Trends for 2014 organics

results were generally comparable to those from the last few years. The biosolids monitoring results met all the 40 CFR Part 503 standards for the use and disposal of Class B biosolids.

Table 2-D presents the analytical results of 5-day composite biosolids samples collected during 2014.

2.5 *Plant Operating Data*

Table 2-E summarizes the wastewater treatment plant operating data for 2014.

TABLE 2-A
2014 METALS INFLUENT AND EFFLUENT MONITORING

Arsenic
Influent Effluent

Month	SM3114B	Units	SM3114B	Units
January	2	ug/L	1.1	ug/L
February	2	ug/L	1.4	ug/L
March	2.7	ug/L	1.5	ug/L
April	3.4	ug/L	2.7	ug/L
May	3.9	ug/L	2.2	ug/L
June	2.9	ug/L	1.9	ug/L
July	6.5	ug/L	3.1	ug/L
August	2.6	ug/L	1.9	ug/L
September	3.7	ug/L	2.3	ug/L
October	3.2	ug/L	2.4	ug/L
November	3.5	ug/L	2.4	ug/L
December	5.7	ug/L	3.4	ug/L

Cadmium
Influent Effluent

Month	EPA 200.8	Units	EPA 200.8	Units
January	0.3	ug/L	0.01	ug/L
February	0.29	ug/L	0.04	ug/L
March	0.37	ug/L	0.04	ug/L
April	0.36	ug/L	0.05	ug/L
May	0.35	ug/L	0.04	ug/L
June	0.38	ug/L	0.05	ug/L
July	0.45	ug/L	0.15	ug/L
August	0.39	ug/L	0.05	ug/L
September	0.38	ug/L	0.03	ug/L
October	0.38	ug/L	0.04	ug/L
November	0.38	ug/L	0.06	ug/L
December	0.3	ug/L	0.05	ug/L

Chromium
Influent Effluent

Month	SM3113B	Units	SM3113B	Units
January	5.92	ug/L	0.8	ug/L
February	5.28	ug/L	1.4	ug/L
March	5.88	ug/L	0.8	ug/L
April	14.83	ug/L	0.72	ug/L
May	5.12	ug/L	0.81	ug/L
June	6.08	ug/L	0.8	ug/L
July	6.56	ug/L	0.69	ug/L
August	5.78	ug/L	0.86	ug/L
September	6.05	ug/L	0.77	ug/L
October	5.32	ug/L	0.52	ug/L
November	4.18	ug/L	0.74	ug/L
December	5.86	ug/L	1	ug/L

Copper
Influent Effluent

Month	EPA 200.8	Units	EPA 200.8	Units
January	70.2	ug/L	5.5	ug/L
February	55.25	ug/L	8.7	ug/L
March	69.5	ug/L	5.4	ug/L
April	67.5	ug/L	7.4	ug/L
May	76.4	ug/L	6.4	ug/L
June	76.75	ug/L	8.7	ug/L
July	97.8	ug/L	13	ug/L
August	87.5	ug/L	6.9	ug/L
September	90	ug/L	6.5	ug/L
October	77.4	ug/L	7.2	ug/L
November	75.5	ug/L	6.9	ug/L
December	59	ug/L	6.95	ug/L

Cyanide: total**Influent****Effluent**

Month	SM4500-CN C, E	Units	SM4500-CN C, E	Units
January	0.01	mg/L	0.0015	mg/L
February	0.0015	mg/L	0.0015	mg/L
March	0.0015	mg/L	0.0015	mg/L
April	0.0015	mg/L	0.0015	mg/L
May	0.0015	mg/L	0.0098	mg/L
June	0.0032	mg/L	0.0015	mg/L
July	0.0015	mg/L	0.009	mg/L
August	0.006	mg/L	0.0015	mg/L
September	0.0015	mg/L	0.0015	mg/L
October	0.006	mg/L	0.003	mg/L
November	0.003	mg/L	0.013	mg/L
December	0.0015	mg/L	0.0024	mg/L

Lead**Influent****Effluent**

Month	EPA 200.8	Units	EPA 200.8	Units
January	6.82	ug/L	0.37	ug/L
February	8.3	ug/L	0.55	ug/L
March	10.55	ug/L	0.51	ug/L
April	9.53	ug/L	0.69	ug/L
May	6.94	ug/L	0.54	ug/L
June	10.53	ug/L	0.69	ug/L
July	9.22	ug/L	1.2	ug/L
August	9.15	ug/L	0.69	ug/L
September	9.23	ug/L	3.3	ug/L
October	14.34	ug/L	0.62	ug/L
November	8.18	ug/L	0.75	ug/L
December	11.32	ug/L	1.2	ug/L

Mercury**Influent****Effluent**

Month	EPA 245.1	Units	EPA 1631	Units
January	0.083	ug/L	0.005	ug/L
February	0.071	ug/L	0.0055	ug/L
March	0.1138	ug/L	0.0044	ug/L
April	0.154	ug/L	0.0078	ug/L
May	0.0954	ug/L	0.0051	ug/L
June	0.0938	ug/L	0.0057	ug/L
July	0.0652	ug/L	0.0038	ug/L
August	0.1078	ug/L	0.0046	ug/L
September	0.1313	ug/L	0.0039	ug/L
October	0.84	ug/L	0.0043	ug/L
November	0.0925	ug/L	0.006	ug/L
December	0.1106	ug/L	0.0262	ug/L

Nickel**Influent****Effluent**

Month	EPA 200.8	Units	EPA 200.8	Units
January	7.16	ug/L	4.2	ug/L
February	8.15	ug/L	5	ug/L
March	7.7	ug/L	4.2	ug/L
April	21.83	ug/L	6.2	ug/L
May	9.58	ug/L	5.7	ug/L
June	9.78	ug/L	8.1	ug/L
July	10.82	ug/L	7.4	ug/L
August	9.73	ug/L	8.5	ug/L
September	10.45	ug/L	7.3	ug/L
October	8.1	ug/L	6	ug/L
November	7.18	ug/L	4	ug/L
December	10.26	ug/L	7.1	ug/L

Selenium
Influent Effluent

Month	SM3114B	Units	SM3114B	Units
January	1	ug/L	0.35	ug/L
February	1	ug/L	0.33	ug/L
March	1.1	ug/L	0.55	ug/L
April	1	ug/L	0.58	ug/L
May	1.1	ug/L	0.2	ug/L
June	1	ug/L	0.2	ug/L
July	1.7	ug/L	0.43	ug/L
August	0.99	ug/L	0.2	ug/L
September	1	ug/L	0.2	ug/L
October	1.1	ug/L	0.2	ug/L
November	1.4	ug/L	0.8	ug/L
December	1.1	ug/L	0.69	ug/L

Silver
Influent Effluent

Month	EPA 200.8	Units	EPA 200.8	Units
January	0.66	ug/L	0.06	ug/L
February	0.56	ug/L	0.02	ug/L
March	0.75	ug/L	0.02	ug/L
April	0.61	ug/L	0.04	ug/L
May	0.87	ug/L	0.04	ug/L
June	0.62	ug/L	0.04	ug/L
July	1.39	ug/L	0.1	ug/L
August	1.12	ug/L	0.1	ug/L
September	1.37	ug/L	0.04	ug/L
October	1.4	ug/L	0.1	ug/L
November	1.11	ug/L	0.04	ug/L
December	0.51	ug/L	0.04	ug/L

Zinc
Influent Effluent

Month	EPA 200.8	Units	EPA 200.8	Units
January	158	ug/L	28	ug/L
February	140	ug/L	57	ug/L
March	165	ug/L	29	ug/L
April	152.5	ug/L	36	ug/L
May	174	ug/L	47	ug/L
June	185	ug/L	46	ug/L
July	218	ug/L	84	ug/L
August	195	ug/L	58	ug/L
September	202.5	ug/L	52	ug/L
October	176	ug/L	47	ug/L
November	177.5	ug/L	21	ug/L
December	138	ug/L	34.5	ug/L

Results are averaged over each month.

NDs are averaged as half of the MDL.

TABLE 2-B
2014 624 INFLUENT AND EFFLUENT MONITORING

EPA 624	Average Influent	Average Effluent
	(ug/L)	(ug/L)
1,1,1-TRICHLOROETHANE	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND
1,1-DICHLOROETHANE	ND	ND
1,1-DICHLOROETHENE	ND	ND
1,2-DICHLOROBENZENE	ND	ND
1,2-DICHLOROETHANE	ND	ND
1,2-DICHLOROPROPANE	ND	ND
1,3-DICHLOROBENZENE	ND	ND
1,4-DICHLOROBENZENE	0.133	ND
2-CHLOROETHYL VINYL ETHER	ND	ND
ACROLEIN	ND	ND
ACRYLONITRILE	ND	ND
BENZENE	ND	ND
BROMODICHLOROMETHANE	0.22	0.28
BROMOFORM	ND	ND
BROMOMETHANE	ND	ND
CARBON TETRACHLORIDE	ND	ND
CHLOROBENZENE	0.105	ND
CHLOROETHANE	1.145	0.45
CHLOROFORM	9.75	7.6
CHLOROMETHANE	3.755	ND
CIS-1,3-DICHLOROPROPENE	ND	ND
DIBROMOCHLOROMETHANE	ND	ND
ETHYL BENZENE	0.41	ND
FLUOROTRICHLOROMETHANE	ND	ND
METHYLENE CHLORIDE	0.825	0.75
TETRACHLOROETHENE	0.75	0.32
TOLUENE	5	2
TRANS-1,2-DICHLOROETHENE	ND	ND
TRANS-1,3-DICHLOROPROPENE	ND	ND
TRICHLOROETHENE	0.325	ND
VINYL CHLORIDE	ND	ND

ND = Not Detected.

Results are averaged over the entire year. NDs are averaged as half of the MDL.

Table 2-C
2014 EPA 625 INFLUENT AND EFFLUENT MONITORING

EPA 625	Average Influent	Average Effluent
	(ug/L)	(ug/L)
1,2,4-TRICHLOROBENZENE	ND	ND
2,4,5-TRICHLOROPHENOL	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND
2,4-DICHLOROPHENOL	ND	ND
2,4-DIMETHYLPHENOL	ND	ND
2,4-DINITROPHENOL	ND	ND
2,4-DINITROTOLUENE	ND	ND
2,6-DINITROTOLUENE	ND	ND
2-CHLORONAPHTHALENE	ND	ND
2-CHLOROPHENOL	ND	ND
2-CRESOL	ND	ND
2-METHYLNAPHTHALENE	ND	ND
2-NITROANILINE	ND	ND
2-NITROPHENOL	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND
3-,4-METHYLPHENOL	62	1.2
3-NITROANILINE	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND
4-CHLOROANILINE	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND
4-NITROANILINE	ND	ND
4-NITROPHENOL	ND	ND
ACENAPHTHENE	ND	ND
ACENAPHTHYLENE	ND	ND
ANILINE	ND	ND
ANTHRACENE	ND	ND
AZOBENZENE	ND	ND
BENZIDINE	ND	ND
BENZO(A)ANTHRACENE	ND	0.5
BENZO(A)PYRENE	ND	ND
BENZO(B)FLUORANTHENE	ND	0.48
BENZO(GHI)PERYLENE	ND	ND
BENZO(K)FLUORANTHENE	ND	ND
BENZOIC ACID	350	6.9
BENZYL ALCOHOL	68	ND
BIS(2-CHLOROETHOXY)METHANE	ND	ND
BIS(2-CHLOROETHYL)ETHER	ND	ND

	Average Influent	Average Effluent
EPA 625	(ug/L)	(ug/L)
BIS(2-CHLOROISOPROPYL)ETHER	ND	ND
BIS(2-ETHYLHEXYL)PHTHALATE	11.25	4.6
BUTYLBENZYL PHTHALATE	4	3.8
CHRYSENE	ND	ND
DI-N-BUTYL PHTHALATE	1.3	ND
DI-N-OCTYL PHTHALATE	1.2	ND
DIBENZO(A,H)ANTHRACENE	ND	ND
DIBENZOFURAN	ND	ND
DIETHYL PHTHALATE	1.285	ND
DIMETHYL PHTHALATE	ND	ND
FLUORANTHENE	ND	ND
FLUORENE	ND	ND
HEXACHLOROBENZENE	ND	ND
HEXACHLOROBUTADIENE	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND
HEXACHLOROETHANE	ND	ND
INDENO(1,2,3-CD)PYRENE	ND	ND
ISOPHORONE	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND
NAPHTHALENE	ND	ND
NITROBENZENE	ND	ND
P-CHLORO-M-CRESOL	ND	ND
PENTACHLOROPHENOL	ND	ND
PHENANTHRENE	ND	ND
PHENOL	15	ND
PYRENE	ND	ND
PYRIDINE	ND	ND

ND = Not Detected.

Results are averaged over the entire year. NDs are averaged as half of the MDL.

TABLE 2-D
2014 BIOSOLIDS MONITORING RESULTS
5-DAY COMPOSITE SAMPLES (MG/KG)

METHOD PARAMETER	Centrifuge Wet Season 24-Feb to 28-Feb 23 %		Centrifuge Dry Season 07-Jul to 11-Jul 24 %	
PARAMETER	RESULT	QUAL.	RESULT	QUAL.
EPA 6010				
BARIUM	52.4		62.5	
BERYLLIUM	0.065		0.034	
CADMIUM	0.444		0.406	
COBALT	0.779		0.758	
CHROMIUM	12.1		10.6	
COPPER	81.3		85	
MOLYBDENUM	2		2	
NICKEL	7.29		5.85	
LEAD	9.69		9.42	
ANTIMONY	1.36	U	1.25	U
THALLIUM	1.19		0.855	U
VANADIUM	5.4		4.93	
ZINC	164		167	
EPA 7060				
ARSENIC	1.36		1.44	
EPA 7471A				
MERCURY	0.18	N	0.19	N
EPA 7740				
SELENIUM	0.5	U	0.405	
EPA 7761				
SILVER	0.78		0.73	
EPA 8260B				
ACETONE	0.26	*	2.1	N,*
ACROLEIN	0.17	U,N	0.17	U,N
ACRYLONITRILE	0.22	U	0.22	U,N
ALLYL CHLORIDE	0.11	U,N	0.11	U
TERT-AMYL METHYL ETHER	0.12	U	0.12	U
BENZENE	0.14	U	0.14	U
BIS(2-CHLOROISOPROPYL)ETHER	0.12	U	0.12	U,*
BROMOBENZENE	0.19	U	0.19	U
BROMOCHLOROMETHANE	0.14	U	0.14	U
BROMODICHLOROMETHANE	0.14	U	0.14	U
BROMOFORM	0.098	U	0.098	U

METHOD PARAMETER	Centrifuge Wet Season 24-Feb to 28-Feb 23 %		Centrifuge Dry Season 07-Jul to 11-Jul 24 %	
PARAMETER	RESULT	QUAL.	RESULT	QUAL.
BROMOMETHANE	0.32	U,N	0.32	U,N
1,3-BUTADIENE	0.086	U	0.086	U
TERT-BUTYL ALCOHOL	0.7	U,N	0.7	U,N,*
N-BUTYLBENZENE	0.14	U	0.14	U
SEC-BUTYLBENZENE	0.14	U	0.14	U
TERT-BUTYLBENZENE	0.17	U	0.17	U
CARBON DISULFIDE	0.11	U,N	0.11	U
CARBON TETRACHLORIDE	0.12	U	0.12	U
CHLOROACETONITRILE	0.5	U	0.5	U,N,*
CHLOROBENZENE	0.13	U	0.13	U
1-CHLOROBUTANE	0.13	U	0.13	U
CHLOROETHANE	0.088	U,N	0.088	U,N,*
2-CHLOROETHYL VINYL ETHER	0.14	U	0.14	U
CHLOROFORM	0.15	U	0.15	U
CHLOROMETHANE	0.14	U	0.14	U
O-CHLOROTOLUENE	0.14	U	0.14	U
P-CHLOROTOLUENE	0.14	U	0.14	U
DIBROMOCHLOROMETHANE	0.098	U	0.098	U
DIBROMOCHLOROPROPANE	0.11	U	0.11	U
DIBROMOMETHANE	0.17	U	0.17	U
1,2-DICHLOROBENZENE	0.13	U	0.13	U
1,3-DICHLOROBENZENE	0.15	U	0.15	U
1,4-DICHLOROBENZENE	0.15	U	0.15	U
TRANS-1,4-DICHLORO-2-BUTENE	0.19	U	0.19	U
DICHLORODIFLUOROMETHANE	0.074	U,N	0.074	U
1,1-DICHLOROETHANE	0.16	U	0.16	U
1,2-DICHLOROETHANE	0.14	U	0.14	U
1,1-DICHLOROETHENE	0.13	U	0.13	U
CIS-1,2-DICHLOROETHENE	0.16	U	0.16	U
TRANS-1,2-DICHLOROETHENE	0.16	U	0.16	U
1,2-DICHLOROPROPANE	0.11	U	0.11	U
1,3-DICHLOROPROPANE	0.1	U	0.1	U
SEC-DICHLOROPROPANE	0.13	U	0.13	U
1,1-DICHLORO-2-PROPANONE	0.13	U	0.13	U,N
1,1-DICHLOROPROPENE	0.13	U	0.13	U
CIS-1,3-DICHLOROPROPENE	0.11	U	0.11	U
TRANS-1,3-DICHLOROPROPENE	0.1	U	0.1	U

METHOD PARAMETER	Centrifuge Wet Season 24-Feb to 28-Feb 23 %		Centrifuge Dry Season 07-Jul to 11-Jul 24 %	
PARAMETER	RESULT	QUAL.	RESULT	QUAL.
DIISOPROPYL ETHER	0.13	U	0.13	U
ETHYL ACETATE	0.19	U	0.19	U,N
ETHYL BENZENE	0.12	U	0.12	U
ETHYL-T-BUTYL ETHER	0.17	U	0.17	U
ETHYLENE DIBROMIDE	0.12	U	0.12	U
ETHYL ETHER	0.13	U	0.13	U
ETHYLMETHACRYLATE	0.15	U	0.15	U
FLUOROTRICHLOROMETHANE	0.13	U	0.13	U,N
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.16	U	0.16	U
HEXACHLOROBUTADIENE	0.17	U	0.17	U
HEXACHLOROETHANE	0.16	U,N	0.16	U
2-HEXANONE	0.13	U	0.13	U,N,*
IODOMETHANE	0.3	U,N	0.3	U
ISOPROPYLBENZENE	0.14	U	0.14	U
P-ISOPROPYLTOLUENE	0.18		0.14	U
METHYLACRYLATE	0.2	U	0.2	U
METHYLACRYLONITRILE	0.17	U	0.17	U,N
METHYL-T-BUTYL ETHER	0.28	U	0.28	U
2-BUTANONE	0.16	U	0.78	N,*
METHYLENE CHLORIDE	0.13	U	0.13	U
4-METHYL-2-PENTANONE	0.12	U	0.12	U,N
METHYLMETHACRYLATE	0.17	U	0.17	U,N
NAPHTHALENE	0.17	U	0.17	U
NITROBENZENE	0.16	U	0.16	U,N
2-NITROPROPANE	0.13	U	0.13	U,N,*
PENTACHLOROETHANE	0.4	U,N	0.4	U
N-PROPYLBENZENE	0.15	U	0.15	U
STYRENE	0.15	U	0.15	U
1,1,1,2-TETRACHLOROETHANE	0.15	U	0.15	U
1,1,2,2-TETRACHLOROETHANE	0.15	U	0.15	U
TETRACHLOROETHENE	0.12	U	0.12	U
TETRAHYDROFURAN	0.13	U	0.13	U,N
TOLUENE	0.21		0.16	U
1,2,3-TRICHLOROBENZENE	0.15	U	0.15	U
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	U
1,1,1-TRICHLOROETHANE	0.13	U	0.13	U
1,1,2-TRICHLOROETHANE	0.12	U	0.12	U

METHOD PARAMETER	Centrifuge Wet Season 24-Feb to 28-Feb 23 %		Centrifuge Dry Season 07-Jul to 11-Jul 24 %	
PARAMETER	RESULT	QUAL.	RESULT	QUAL.
TRICHLOROETHENE	0.16	U	0.16	U
1,2,3-TRICHLOROPROPANE	0.17	U	0.17	U
1,2,4-TRIMETHYLBENZENE	0.17	U	0.17	U
1,3,5-TRIMETHYLBENZENE	0.15	U	0.15	U
VINYL ACETATE	0.14	U,N	0.14	U
VINYL CHLORIDE	0.086	U,N	0.086	U
O-XYLENE	0.15	U	0.15	U
M+P XYLENES	0.3	U	0.3	U
EPA 8270C				
ACENAPHTHENE	0.054	U,N	0.054	U
ACENAPHTHYLENE	0.096	U	0.096	U
ANILINE	0.11	U	0.55	
ANTHRACENE	0.15	U	0.15	U
AZOBENZENE	0.16	U	0.16	U
BENZIDINE	2	U	2	U
BENZO(A)ANTHRACENE	0.16	U	0.16	U
BENZO(B)FLUORANTHENE	0.1	U	0.1	U
BENZO(K)FLUORANTHENE	0.084	U	0.084	U
BENZO(GHI)PERYLENE	0.24	U	0.24	U
BENZO(A)PYRENE	0.13	U	0.13	U
BENZOIC ACID	2	U	2	U
BENZYL ALCOHOL	0.17	U	0.17	U
BUTYLBENZYL PHTHALATE	0.16	U	0.16	U
BIS(2-CHLOROETHOXY)METHANE	0.11	U	0.11	U
BIS(2-CHLOROETHYL)ETHER	0.068	U	0.068	U
BIS(2-CHLOROISOPROPYL)ETHER	0.12	U	0.12	U,*
BIS(2-ETHYLHEXYL)PHTHALATE	2.8		15	
4-BROMOPHENYL PHENYL ETHER	0.36	U	0.36	U
4-CHLOROANILINE	0.11	U	0.11	U
P-CHLORO-M-CRESOL	0.11	U	0.11	U
2-CHLORONAPHTHALENE	0.078	U	0.078	U
2-CHLOROPHENOL	0.058	U,N	0.058	U
4-CHLOROPHENYL PHENYL ETHER	0.1	U	0.1	U
CHRYSENE	0.12	U	0.12	U
DIBENZO(A,H)ANTHRACENE	0.13	U	0.13	U
DIBENZOFURAN	0.09	U	0.09	U
DI-N-BUTYL PHTHALATE	0.32	U	0.32	U

METHOD PARAMETER	Centrifuge Wet Season 24-Feb to 28-Feb 23 %		Centrifuge Dry Season 07-Jul to 11-Jul 24 %	
PARAMETER	RESULT	QUAL.	RESULT	QUAL.
1,2-DICHLOROBENZENE	0.13	U	0.13	U
1,3-DICHLOROBENZENE	0.15	U	0.15	U
1,4-DICHLOROBENZENE	0.15	U	0.15	U
3,3'-DICHLOROBENZIDINE	0.16	U	0.16	U
2,4-DICHLOROPHENOL	0.09	U	0.09	U
DIETHYL PHTHALATE	0.2	U	0.2	U
2,4-DIMETHYLPHENOL	0.11	U	0.11	U
DIMETHYL PHTHALATE	0.11	U	0.11	U
4,6-DINITRO-O-CRESOL	2	U	2	U
2,4-DINITROPHENOL	2	U	2	U
2,4-DINITROTOLUENE	0.15	U,N	0.15	U
2,6-DINITROTOLUENE	0.14	U	0.14	U
DI-N-OCTYL PHTHALATE	0.11	U	0.11	U
FLUORANTHENE	0.4	U	0.4	U
FLUORENE	0.078	U	0.078	U
HEXACHLOROBENZENE	0.18	U	0.18	U
HEXACHLOROBUTADIENE	0.17	U	0.17	U
HEXACHLOROCYCLOPENTADIENE	2	U	2	U
HEXACHLOROETHANE	0.16	U,N	0.16	U
INDENO(1,2,3-CD)PYRENE	0.14	U	0.14	U
ISOPHORONE	0.11	U	0.11	U
2-METHYLNAPHTHALENE	0.13	U	0.13	U
2-CRESOL	0.11	U	0.11	U
3-,4-METHYLPHENOL	0.4		0.85	
NAPHTHALENE	0.17	U	0.17	U
2-NITROANILINE	0.14	U	0.14	U
3-NITROANILINE	0.12	U	0.12	U
4-NITROANILINE	0.22	U	0.22	U
NITROBENZENE	0.16	U	0.16	U,N
2-NITROPHENOL	0.052	U	0.052	U
4-NITROPHENOL	2	U	2	U
N-NITROSODIMETHYLAMINE	0.084	U	0.084	U
N-NITROSODIPHENYLAMINE	0.58	U	0.58	U
N-NITROSODI-N-PROPYLAMINE	0.084	U,N	0.084	U
PENTACHLOROPHENOL	2	U,N	2	U,N
PHENANTHRENE	0.12	U	0.12	U
PHENOL	0.42	N	2.5	

METHOD PARAMETER	Centrifuge Wet Season 24-Feb to 28-Feb 23 %		Centrifuge Dry Season 07-Jul to 11-Jul 24 %	
PARAMETER	RESULT	QUAL.	RESULT	QUAL.
PYRENE	0.3	U,N	0.3	U
PYRIDINE	2	U	2	U
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	U
2,4,5-TRICHLOROPHENOL	0.16	U	0.16	U
2,4,6-TRICHLOROPHENOL	2	U	2	U
EPA 9010				
CYANIDE: TOTAL	0.2	ND	0.2	U
EPA 9034				
SULFIDE: TOTAL	1300		230	

Qualifier Legend

RL1- Reporting limit raised due to sample matrix effects.

RL3- Reporting limit raised due to high concentrations of non-target analytes.

ND = Not Detected

U = Analyte not detected.

* = Duplicate values outside of control limits.

**TABLE 2-E
WASTEWATER TREATMENT PLANT OPERATING DATA – 2014**

		Units	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total	Avg	Min.	Max.
GENERAL PLANT DATA																		
FLOW DATA																		
	Daily Average	MG	48	66	60	64	49	48	46	45	47	47	49	96		55	45	96
	Daily Minimum	MG	41	47	45	50	45	45	44	41	42	42	44	54		45	41	54
	Daliy Maximum	MG	52	155	104	148	53	55	52	49	53	51	72	256		92	49	256
	Monthly Total	MG	1,486	1,840	1,864	1,914	1,524	1,428	1,430	1,402	1,395	1,449	1,461	2,982	20,175	1,681	1,395	2,982
INFLUENT QUALITY																		
	CBOD (avg.)	mg/l	298	261	281	282	282	312	340	343	366	358	358	227		309	227	366
	TSS (avg.)	mg/l	336	345	391	416	449	560	451	483	483	362	386	335		416	335	560
	pH (avg.)	pH	6.7	7.1	7.1	7.2	7.0	7.0	6.9	6.6	6.6	6.7	6.8	6.9		6.9	6.6	7.2
EFFLUENT QUALITY																		
	CBOD (avg.)	mg/l	10	11	9	8	15	10	8	8	8	9	10	12		10	8	15
	TSS (avg.)	mg/l	15	16	16	12	26	24	21	13	14	12	14	15		17	12	26
	pH (avg.)	pH	6.8	6.8	6.8	6.8	6.7	6.7	6.7	6.6	6.6	6.7	6.8	6.8		6.7	6.6	6.8
OVERALL REMOVAL EFFICIENCY																		
	CBOD	%	96	95	97	97	94	97	97	98	98	98	97	94		97	94	98
	TSS	%	96	95	96	97	94	94	94	97	97	96	96	94		96	94	97
POWER GENERATION																		
	Electricity Produced (net)	MWh	5,144	4,455	5,119	4,597	4,619	4,191	4,500	4,516	4,415	4,333	4,422	4,510	54,819	4,568	4,191	5,144
	Power Exported	MWh	1,883	1,358	1,483	1,148	1,427	967	1,182	1,295	1,377	1,522	1,244	644	15,529	1,294	644	1,883
	Power Used on Site	MWh	3,261	3,098	3,636	3,449	3,192	3,224	3,319	3,221	3,037	2,811	3,177	3,866	39,291	3,274	2,811	3,866
	PG&E Power Purchased	MWh	38	345	115	247	399	469	149	216	102	435	65	660	3,240	270	38	660
	Total Power Used at WWTP	MWh	3,299	3,442	3,751	3,696	3,591	3,693	3,468	3,437	3,139	3,246	3,243	4,525	42,531	3,544	3,139	4,525
	PG&E % of Total Power Used	%	1%	10%	3%	7%	11%	13%	4%	6%	3%	13%	2%	15%		7%	1%	15%
	Production in Excess of Plant Needs	%	56%	29%	36%	24%	29%	13%	30%	31%	41%	33%	36%	0%		30%	0%	56%
BIOSOLIDS																		
	LANDFILL (wet tons)	tons	5,376	5,949	6,482	5,125	1,650	1,291	1,423	1,286	1,246	1,382	1,243	6,351	38,804	3,234	1,243	6,482
	LAND APPLICATION (wet tons)	tons	0	0	0	1,344	4,692	4,454	4,610	4,923	5,204	5,270	4,521	101	35,119	2,927	0	5,270
	SEED SLUDGE EXPORTED (wet tons)	tons	113	0	0	0	0	0	0	0	0	0	0	0	113	9	0	113

FIGURE 2-A

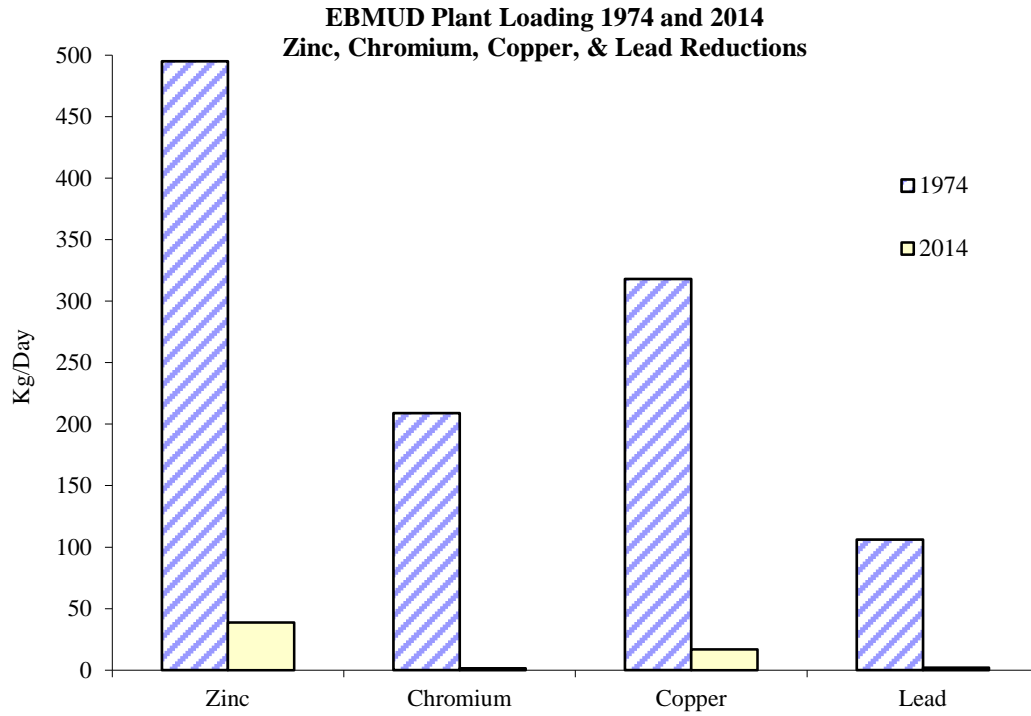
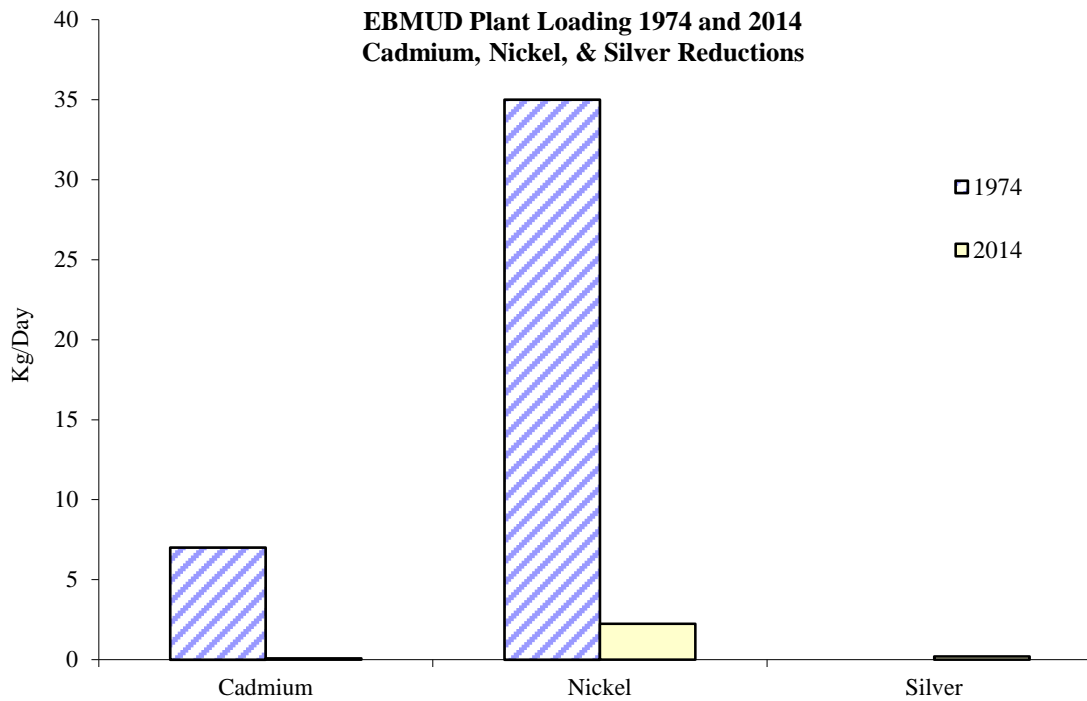


FIGURE 2-B



1974 Silver loading not available.

FIGURE 2-C

**EBMUD Influent Concentrations 1988 and 2014
Selected Organics Reduction**

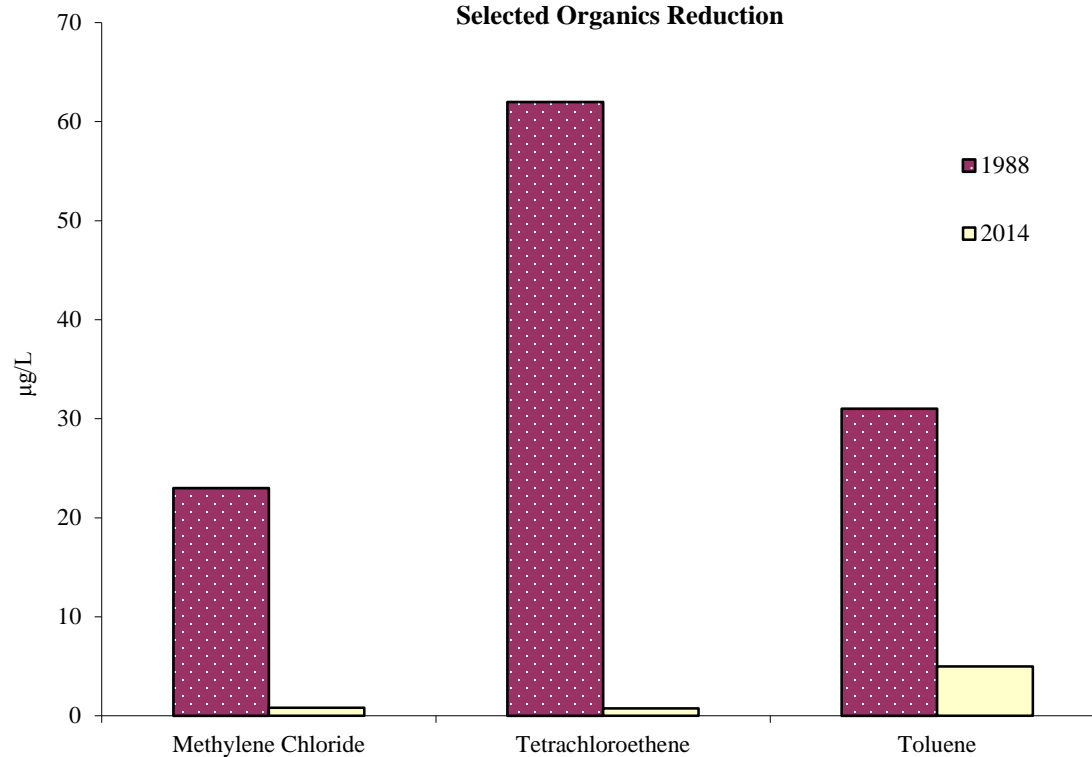


Figure 2-D
5-Year Graph of Metals Influent and Effluent

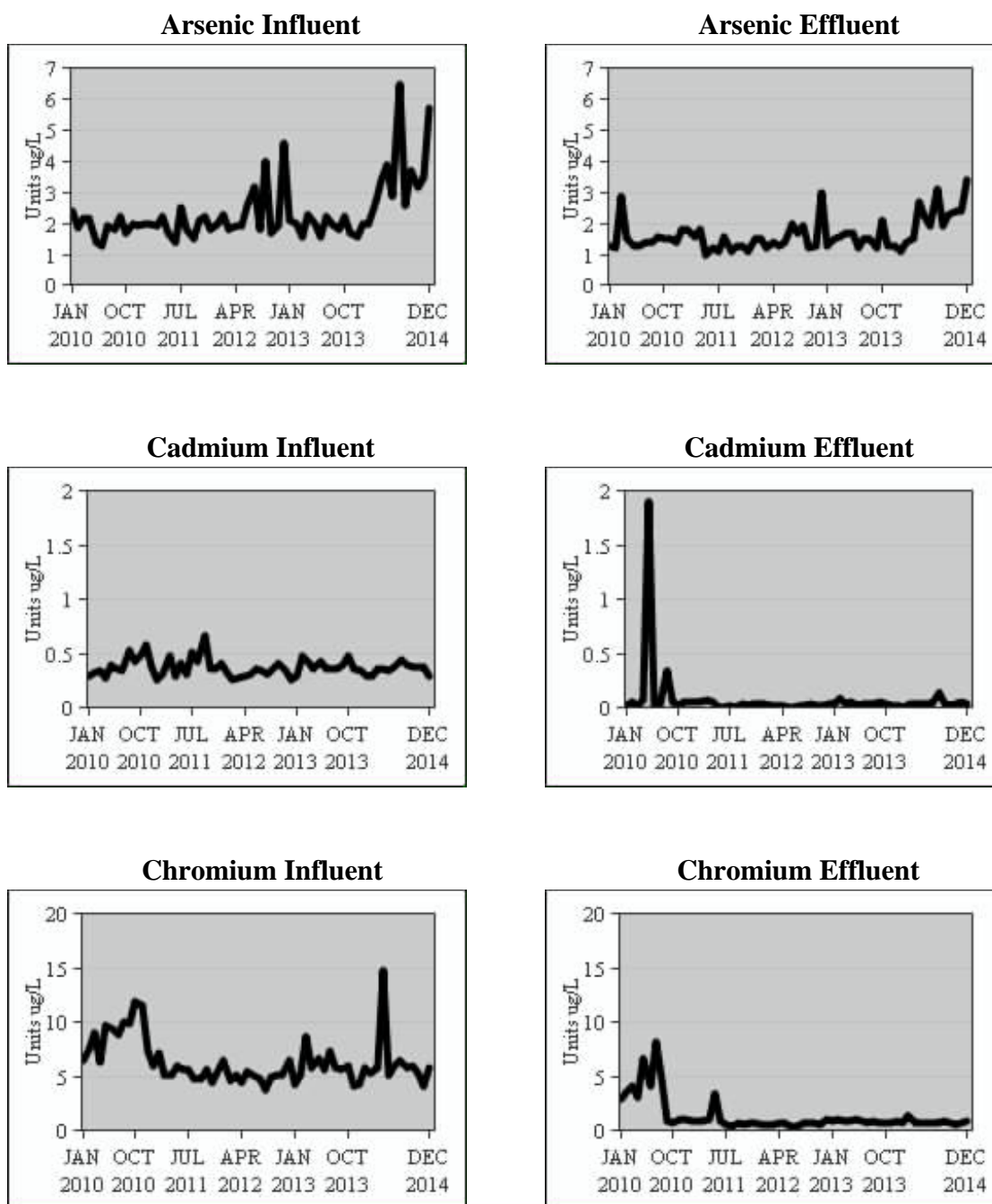
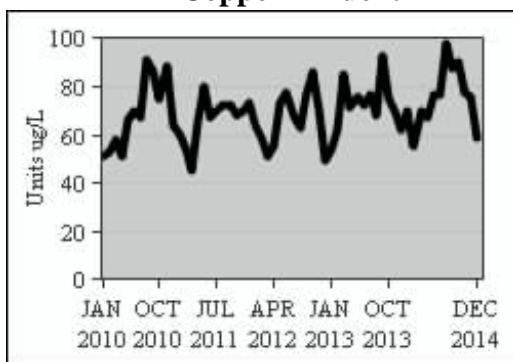
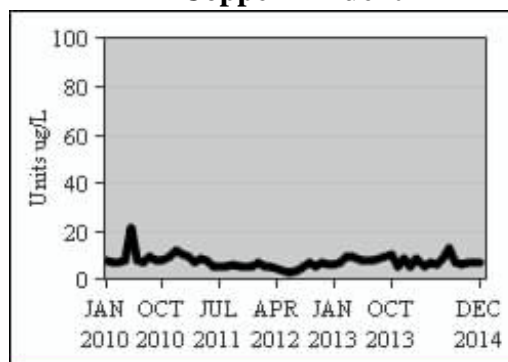


Figure 2-D
5-Year Graph of Metals Influent and Effluent

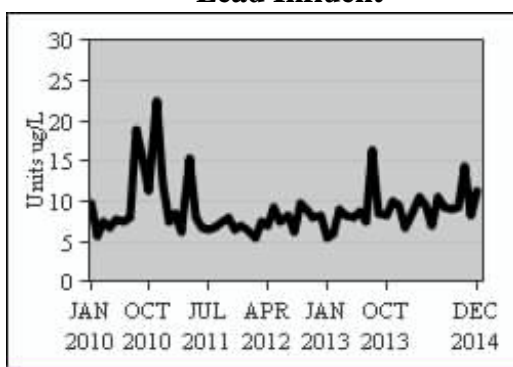
Copper Influent



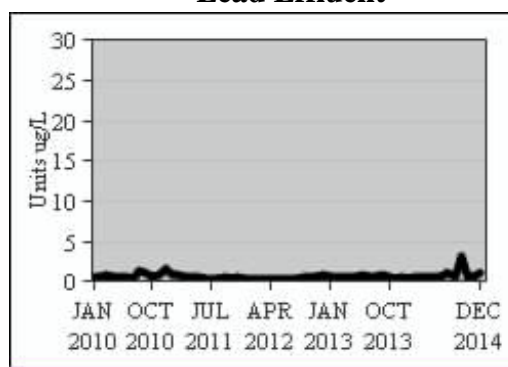
Copper Effluent



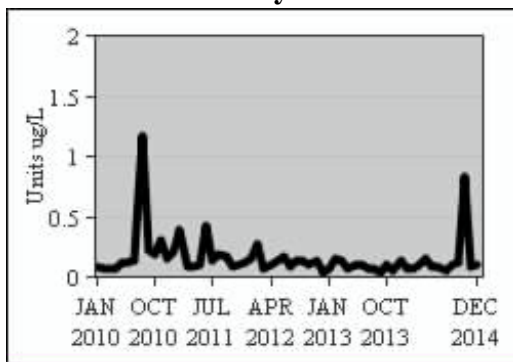
Lead Influent



Lead Effluent



Mercury Influent



Mercury Effluent

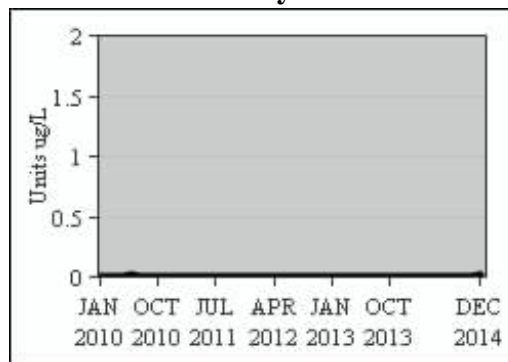
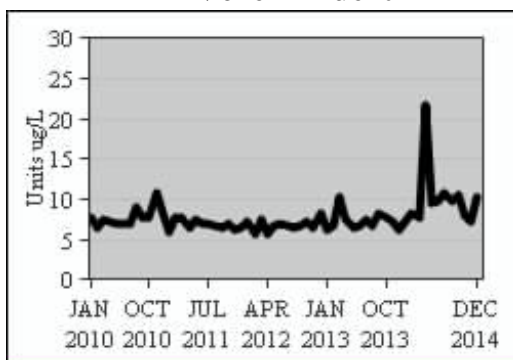
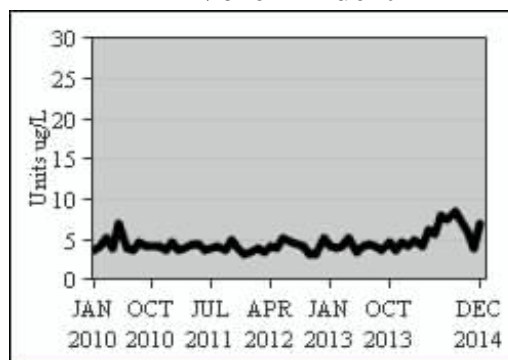


Figure 2-D
5-Year Graph of Metals Influent and Effluent

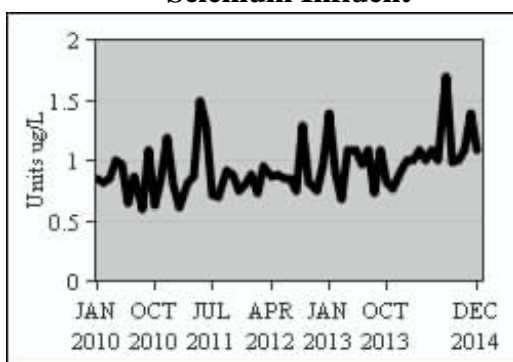
Nickel Influent



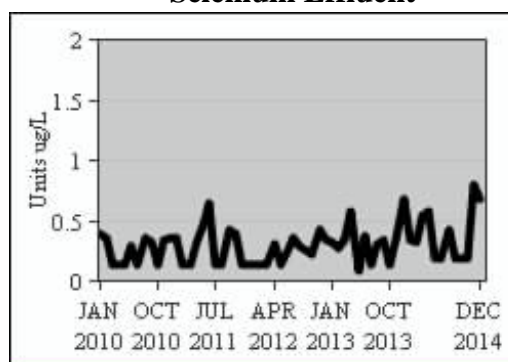
Nickel Effluent



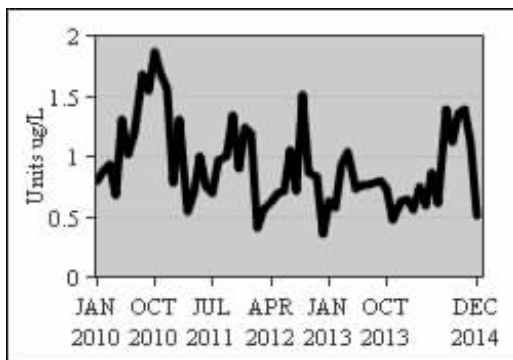
Selenium Influent



Selenium Effluent



Silver Influent



Silver Effluent

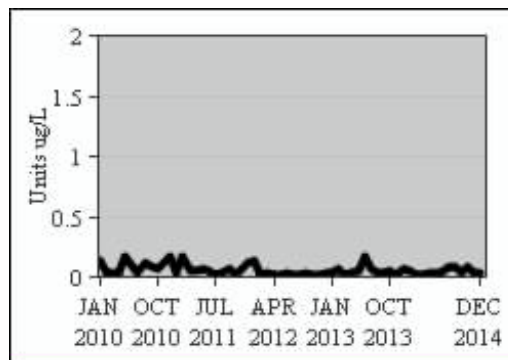
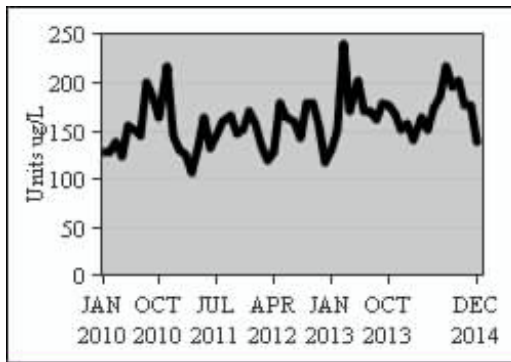
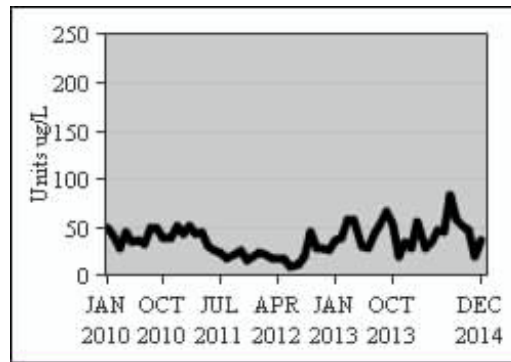


Figure 2-D
5-Year Graph of Metals Influent and Effluent

Zinc Influent



Zinc Effluent



3. PRETREATMENT PROGRAM - GENERAL INFORMATION

Through its Pretreatment Program, EBMUD regulates process wastewater discharges from identified industrial users (IUs) that handle pollutants of concern. Pollutant control mechanisms include the issuance of wastewater discharge permits with general provisions and site-specific requirements. The different permit types are detailed below under section 3.3.

3.1 Pretreatment Program Changes and Highlights

During 2014, the District completed the in-depth review of its Wastewater Control Ordinance and all elements of its pretreatment permit program, confirming that the EPA's Pretreatment Streamlining Rule has been implemented appropriately and effectively. The District is reviewing new permit nomenclature for clarification and pretreatment program streamlining.

In 2014, the District's pretreatment permit program included 21 Non-Significant Categorical Industrial Users (NSCIUs). 18 of the NSCIUs do not discharge regulated process wastewater to the sanitary sewer. Detailed information about these NSCIUs is provided in Chapter 4.

In 2014, one categorical facility, Libby Laboratories Inc., was reclassified from a zero discharger to an NSCIU. Historically, Libby Laboratories was classified as a zero discharger because this facility had reported that they do not discharge any regulated process wastewater to the community sewer. However, Libby was reclassified as an NSCIU since its discharge contained regulated process wastewater. Although Libby Laboratories has never used any of the regulated parameters in their processes, their process wastewater is subject to regulation under the pharmaceutical manufacturing guidelines. Furthermore, they are not considered a zero discharger because they discharge < 100 gallons per day of process wastewater.

In 2014, staff noted that The Boardworks was inadvertently reported as an SIU in the annual report. Staff is correcting the oversight in this annual report. The Boardworks is classified as an NSCIU since they discharge ≤ 100 gallons per day.

In 2014, a total of 2 non-categorical SIU facilities, Brittell Environmental Corporation (Brittell) and CEMEX Construction Materials Pacific (CEMEX) were delisted as SIUs because of consistent compliance with their respective permit terms. CEMEX's permit with zero discharge of process wastewater to the community sewer remains active. Brittell no longer requires regulatory oversight for discharges to the sanitary sewer, as the facility's current core business is handling photoprocessing solid waste.

In 2014, a total of 7 new Special Discharge Permits were issued, mainly for construction dewatering. A total of 3 new groundwater remediation permits were also issued. A total of 6 Special Discharge Permits were not renewed due to completion of the regulated discharge to the sanitary sewer.

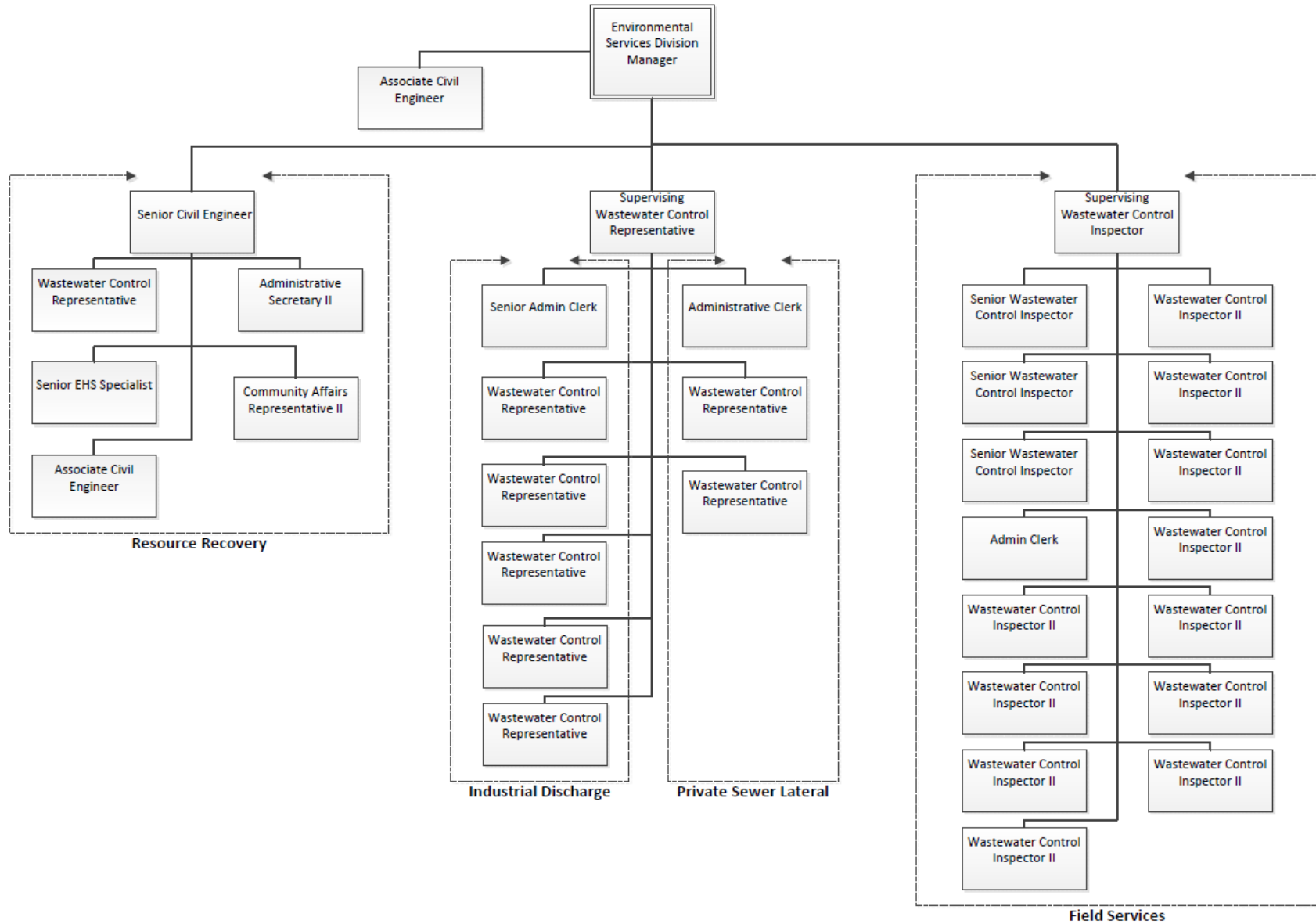
3.2 Pretreatment Program Staffing and Budget

The District's Pretreatment Program is implemented by the Environmental Services Division (ESD), under the direction of the Environmental Services Manager. The Division consists of the following four work groups:

- Resource Recovery: uses excess wastewater treatment capacity to provide an environmentally-friendly and economical disposal alternative for customers, and to increase the MWWTP's production of biogas that is used for power generation.
- Private Sewer Lateral: works to reduce wet weather flows, which can overwhelm wastewater treatment facilities and lead to the release of partially treated wastewater into the Bay, by preventing the infiltration of rainwater into private sewer laterals (PSLs).
- Field Services: supports the Industrial Discharge, Resource Recovery, and PSL Programs by performing site inspections and sampling.

Staffing for these four work groups is shown on the chart below.

ESD Organizational Chart



The District's pretreatment budget is funded through permit holder fees and charges, including an annual permit fee, monitoring/testing fees, and violation follow-up fees/penalties. P2 activities are funded through two discrete fee assessments on customers within the District's wastewater service area: 1) San Francisco Bay Commercial P2 Fee, charged to all industrial and commercial accounts, \$5.48/month in 2014 and 2) San Francisco Bay Residential P2 Fee, charged to all residential customers, \$0.20/month in 2014. The fees support P2 program development and outreach. The District's P2 program is detailed in Chapter 5. The District's PSL and R2 programs are funded through PSL and R2 fees, respectively.

The 2014, ESD budget and special fees are summarized in Table 3-A and 3-B. The wastewater rates, fees, and charges are available on the EBMUD website at:

<http://www.ebmud.com/water-and-wastewater/wastewater-rates-charges-and-fees>

TABLE 3-A
ESD Expenditures – Calendar Year 2014

EXPENDITURES	DOLLARS (\$)
Personnel	\$4,791,340
Equipment, Operations & Maintenance, Training & Travel	\$252,625
Professional Services	\$114,006
Laboratory Analyses	\$155,037
Total	\$5,313,008

TABLE 3-B
Wastewater System Special Fees
Effective July 1, 2014

Industrial Permit Application Fees	
Discharge Minimization Permit	\$2,450 Annual ¹
Discharge Estimation Permit	\$920 Annual ²
Special Discharge Permit	\$995 Annual
Wastewater Disposal Treatment Charges	
Treatment	Depends on Strength (CODF & TSS) and Volume
Monitoring Fees	
Labor and Equipment	\$1,070.00
Resource Recovery Non-Hazardous Materials Program Fees	
Permit Application Fee	\$300.00 (Annual)
Treatment	Depends on strength of waste
Other Fees	
SF Bay Commercial Pollution Prevention Fee ³	\$5.48/month
SF Bay Residential Pollution Prevention Fee ⁴	\$0.20/month per dwelling unit

¹ Annual increase for existing customer permits will be limited to 10%

² Annual increase for existing customer permits will be limited to 10%.

³ SF Bay Commercial Pollution Prevention Fee applies to non-residential customers.

⁴ SF Bay Residential Pollution Prevention Fee applies to all residential accounts. Fee will be charged per dwelling unit up to 5 dwelling units.

TABLE 3-B
Wastewater System Special Fees
Effective July 1, 2014

Violation Follow-Up Fees	
Stage One	\$670.00 + laboratory charges for tests performed
Stage Two	\$1,410.00 + laboratory charges for tests performed
Stage Three	\$2,950.00 + laboratory charges for tests performed

3.3 Permit Types

EBMUD currently issues the following permits.

Wastewater Discharge Permits

This permit type establishes general and site-specific compliance and reporting requirements, applicable discharge limitations self-monitoring requirements and billing conditions for unique wastewater strengths and flow. The permit application requires in-depth information on the facility's operations, including a description of all processes and handling of generated waste, schematic flow diagrams, facility layouts, and a comprehensive water balance. The application becomes part of the permit once issued. All dischargers in the following categories must obtain a wastewater discharge permit:

1. Significant Industrial Users, as defined in Title I, Section 3 of the District's Wastewater Control Ordinance.
2. Dischargers identified by the Director, so that wastewater disposal charges based on flow and waste strength may be established, including:
 - i. Dischargers whose average wastewater strength cannot be established on a BCC basis, because of seasonal or other variations in operations.
 - ii. Dischargers whose wastewater strength exceeds the normal range of wastewater strength for the business classification code to which the discharger is assigned.
 - iii. Dischargers using an unmetered source of water.
3. Other dischargers determined by the Director to require individual or general permits as necessary to carry out the purposes of the District's Wastewater Control Ordinance.

Non-Significant Categorical Industrial User Permit

This permit category is allowed under the Pretreatment Streamlining Rule. NSCIU permits are issued to:

- Categorical facilities that do not discharge regulated process wastewater. The District previously issued these facilities a zero discharge permit. Permit holders include:
 - a. Facilities with categorical processes that report zero discharge of regulated process wastewater to the community sewer.
 - b. Pharmaceutical facilities with categorical processes that discharge process wastewater, but are able to certify and confirm through analysis of the discharge that the regulated pollutants are not used or generated at the facility.
- Categorical facilities that discharge ≤ 100 gpd of regulated process wastewater. These facilities previously held a wastewater discharge permit (described above).

In 2014, the District updated its annual zero discharge permit certification form to accommodate all NSCIUs. The form, now titled *Discharge Prevention Compliance Report, Annual Certification for Non-Significant Categorical Industrial Users*, includes the required EPA certification statement. In addition to the annual certification, the District is requiring an annual water balance review to support a facility's NSCIU status.

The District inspects each NSCIU facility once every five years. The inspection includes a review of onsite documents/waste manifests that support the facility's NSCIU status, confirming that generated wastes are appropriately handled. The District's NSCIU Permit Program is funded through the District's San Francisco Bay Commercial Pollution Prevention Fee (P2 Fee), assessed on all industrial and commercial accounts.

Pollution Prevention (P2) Permit

A P2 permit establishes best management practices (BMPs) for identified commercial categories that generate pollutants of concern. BMPs may include discharge prohibitions and/or process wastewater treatment specific to each category. Facilities may be inspected to ensure compliance with their permit requirements. The P2 permit program is funded through the P2 Fee. The District issues P2 permits to the following categories: boatyards, dental practices, dry cleaning, furniture stripping, hospitals, photo processing, printing, radiator repair, vehicle repair, and vehicle washing.

Special Discharge Permit

A special discharge permit regulates nonpermanent wastewater discharges that require limited control measures. Examples of sources include: construction dewatering projects, episodic cleaning activities, groundwater monitoring well testing, or other limited-term activities that generate wastewater with pollutants of concern. The permit term is site specific. Wastewater treatment costs are the same as the rates established for the respective waste streams under the District's Resource Recovery Program (described in the following section).

Discharge Estimation Permit

An estimation permit is issued to facilities that request a District estimation of wastewater flow because more than 20% of their metered consumption is not discharged to the community sewer. The District may issue an estimation permit with a <20% diversion of metered flow if the facility demonstrates the diversion is significant. The permit establishes wastewater flow and billing conditions, allowing a credit for the water diversion.

3.4 Resource Recovery Program

EBMUD's Resource Recovery Program manages the disposal of permitted trucked materials to the District's MWWTP. Since its inception, the program has established 493 customer accounts; currently 271 accounts are active, holding 423 active waste disposal agreements. Typical materials hauled to the MWWTP include septage; food industry waste, including winery and brewery, dairy, and high total dissolved solids waste, animal process waste, food grade fats, oils, and greases; municipal/water and wastewater sludges; groundwater and storm water.

The program uses available excess capacity at the MWWTP, allowing for a larger customer base over which to distribute operating costs. It provides for a cost-effective, economically-sound disposal alternative for customers, and increases the MWWTP's production of methane gas that is used for power generation. Many of the materials delivered to the program have been diverted from landfill disposal, and therefore the capture and destruction of methane represents destruction of a significant greenhouse gas source. This service

represents a preferred environmental alternative where the level of treatment is enhanced over other viable options.

Materials must meet a rigorous review process prior to acceptance to ensure compliance with multiple criteria including: workplace health and safety issues, plant process impact, NPDES permit, air permits, and biosolids regulations. The materials acceptance and control process includes material profiling, site inspections, sampling and analysis, comparison with waste acceptance criteria, permitting, first load confirmation sampling, and an on-going audit program. The audit program consists of site inspections and sampling, and periodic unannounced field and lab sampling for constituents of concern, e.g., organics and metals.

Table 3-C summarizes a description of trucked materials and volumes.

TABLE 3-C
Resource Recovery – Trucked Materials, Volumes and Descriptions

Category	Material Type	Gallons/2014	Description
Septage	Septage	17,124,361	Domestic sewage from septic tanks & portable toilets.
Sludge	Potable water treatment sludge	9,131,515	Sludge from drinking water treatment facilities including well head treatment: sludge from the various processes used to remove such impurities as sediment, bacteria, algae and other microorganisms.
	Wine lagoon sludge		Sludge from winery lagoon cleaning, containing organic residues from wine making and contaminants consistent with the main WWTP influent waste stream.
	Municipal wastewater sludge		Sludge from municipal anaerobic digester cleaning, primary or secondary sludge tank cleaning or diversion, consistent with the main WWTP's sludges.
	Potable water reservoir bottoms		Solids from drinking water reservoirs, contains contaminants consistent with the main WWTP's influent waste stream.
Fat, oil & grease (FOG)	FOG	12,258,265	Restaurant and food handling facilities grease trap & interceptor waste.
Industrial	Non-contact process water	123,213,165	Non-contact process cooling water from equipment testing, cleaning, or cooling towers. Waste contains contaminants consistent with the main WWTP's influent waste stream.
	Rinse water		Wash water from interior or exterior of tanks used in the storage and treatment of potable water, or from boiler and/or cooling tower maintenance, or from tank cleaning for product, process or waste storage tanks. Waste contains contaminants consistent with the main WWTP's influent waste stream.
	Water/wastewater treatment waste		Waste product from water or wastewater treatment, such as polymer or sodium hypochlorite. Waste from pretreated car wash water and water treatment residuals. Waste contains chemicals used in the wastewater treatment plant process.
	Waste from sewer line cleaning		Waste from sanitary sewer line cleaning. Waste contains contaminants consistent with the main WWTP's influent waste stream.
	Winery processing (low strength) waste		Low strength winery processing waste water. Waste contains contaminants consistent with the main WWTP's influent waste stream.

Category	Material Type	Gallons/2014	Description
	Bridge construction waste		Seawater, drilling slurry, and non-hazardous concrete wash water. Contains bay mud, seawater, and contaminants consistent with the main WWTP's influent waste stream.
	Biotech processing waste		Pasteurized fermentation waste and non-hazardous alcohol wastewaters (flashpoint > 140 deg F) from pharmaceutical biotech companies. This waste may be categorically regulated and must meet those requirements prior to being accepted for discharge.
	Pre-treated car wash waste		Wastewater from the pre-treatment of car-wash water.
	Final rinse water from biodiesel processing		Wastewater from the production of biodiesel fuels that is captured in the final step multi-rinse process.
	Groundwater/ Stormwater		Groundwater and stormwater from construction sites, stormwater collection systems, installation of monitoring wells, or existing monitoring wells. Waste contains contaminants consistent with the main WWTP's influent waste stream.
Food and animal processing	Waste glycerin	87,774,579	The byproducts from biodiesel production, often refined for animal feed; very high strength material.
	Food and beverage processing waste		High strength waste from the manufacturing of food and beverages. Includes pre-sorted ground food waste, waste or expired product, wash down water by-products, food-compatible cleaning products, and off-spec wastes, and dairy process by-products.
	Winery processing (high strength) waste		High strength winery processing waste water, for example lees. Waste contains contaminants consistent with the main WWTP's influent waste stream.
	Rendering waste		Animal (beef, chicken, fish and pork) residuals, which have been heat or chemically treated in accordance with California Department Food and Agriculture requirements.
	Poultry processing waste		High strength waste consisting of chicken and turkey blood. Turkey and chicken lungs waste contains some pathogens in quantities similar to the main WWTP's influent waste stream.
	Beef, sheep, and swine processing waste		High strength waste consisting of beef, sheep, and swine blood. Waste contains some pathogens similar to the main WWTP's influent stream.
	Alkaline Hydrolysis		High strength waste consisting of dissolved organic matter from expired animals.

3.5 Inspection and Sampling Procedures

3.5.1 Business Classification Code Inspection

The District classifies customers using BCCs for specific business activities and established specific strength (CODF and TSS) values for each BCC. The purpose of a BCC inspection is to verify that a facility is classified correctly. The inspection may include the following:

1. Observe facility processes that generate wastewater.
2. Review water uses and discharges and when there are multiple accounts, verify if their use is consistent with their SD code, agency rate qualifier.

3. Observe other operating conditions. Observations may be forwarded to other agencies.
4. Collect samples if process wastewater discharges have the potential of violating the EBMUD Wastewater Control Ordinance limits and/or if wastewater strength information is needed. Potential sampling location(s) is documented for future sampling.
5. Document significant observations made during the inspection on a BCC Field Inspection sheet. The sheet may include sketches, diagrams of plant layout, blueprints and flow charts of processes.
6. Report whether assigned BCC and SD codes are correct or if a change is required.

3.5.2 Initial Industrial User Inspection

The initial IU inspection includes a comprehensive review of the types of processes, wastes generated and method(s) of waste disposal. The primary concerns are water use, process wastewater discharge, identification of a representative sample location(s), and potential of hazardous materials entering the sanitary sewer. Pollution prevention opportunities may be discussed in addition to identifying environmental cross-media issues.

The inspections may include the following:

Pre-Inspection

1. Collect historical information including water consumption history.

Inspection

1. Interview facility contact.
2. Inspect the facility thoroughly with emphasis on:
 - processes contributing to the waste stream
 - materials entering the waste stream
 - process flow
 - pretreatment processes
 - sampling location(s)
 - waste and product storage areas
 - Material Safety Data Sheets for hazardous chemicals used in process
 - Existing pre-treatment systems and the potential to bypass.

Post-Inspection

1. Complete a Special District 1 Wastewater System Inspection Report (SD-124 form) with accompanying sketches of the plant, process flow diagrams and facility schematics, as appropriate.
2. Review inspection results with a Wastewater Control Representative to determine if sampling or a Wastewater Discharge Permit is required.

3.5.3 Inspections - Significant Industrial User and Non-Significant Industrial User

The monitoring frequency for a facility is determined by the minimum required monitoring frequencies through the federal standards for categorical industrial users. Additional factors for categorical and non-categorical facilities include compliance history of the discharger, relative consistency of pollutant concentrations in the discharge, discharge volume, and the nature of the pollutants discharged. Table 3-D describes the industrial user types and the respective minimum federal monitoring frequencies.

TABLE 3-D
EBMUD Minimum Monitoring Frequency

Discharger Category	Industrial User	EBMUD
SIUs: <ul style="list-style-type: none"> CIU >5,000 gpd Non-Categorical SIU CIU - Mid Tier ≤5,000 gpd 	Once every six months	Once per year
Non-SIUs	Once per year	Once every two years
Non-SIUs	Typically BMP requirements	Every two to five years, site specific
NSCIU ≤100 gpd	Not applicable	1 evaluation per year
Categorical Zero Dischargers	Not applicable	Once every 5 years

The monitoring frequency for SIUs is equal to or greater than the minimum required through the federal categorical regulations. The monitoring frequency for non-SIUs may be based on strength concerns for billing purposes and local limits. These permits may also be focused on the implementation of specific BMPs rather than monitoring the discharge.

The inspections and sampling events are generally unannounced, except where coordination is necessary to sample batch discharges or there are security or access issues. Inspectors are responsible for scheduling inspections of their assigned accounts during the year. Accounts are rotated so that all inspectors become familiar with all facilities under the pretreatment program. The inspection may include the following:

Pre-Inspection

1. Collect information from the inspection program, permit, permit review notes, previous inspection reports, and the assigned Wastewater Control Representative.
2. Review inspection program for site specific information. The inspection program may contain:
 - safety precautions
 - special instructions
 - sample types and analyses required
3. Gather equipment according to the requirements of the sampling program established for the facility. The sampling program will specify the equipment and any unique materials needed.

Inspection

1. Take grab samples and install sampler upon arrival.
2. Read water service meters and sub-meters.
3. Interview the facility contact to determine the level of production, types of products and wastes currently being generated, the status of any pretreatment system, and to answer specific questions listed in the inspection program.
4. Conduct a walk-through of the facility with the facility contact. Verify information obtained in the interview.
5. Observe facility operations.
 - Compare observations with information in the permit and from the contact interview.
 - Verify plant layout and update as necessary.
 - Observe wastewater flow and make visual assessment of discharge quality.
 - Evaluate the potential for accidental spills to wastewater stream. Every two years, conduct Slug Control Plan Evaluation to determine if the facility needs a Slug Control Plan.
 - Document secondary water uses such as boilers, air scrubbers, cooling water and clean up.
 - Review private meter calibration records.

- Locate areas where rainwater or groundwater might collect and flow into the sanitary sewer.
 - Observe other operating conditions. Observations may be forwarded to other agencies.
6. Pretreatment System. Determine if:
 - system is functioning
 - necessary chemicals are in inventory
 - routine preventive maintenance procedures are being performed and by whom
 - a contingency plan is in place in case of a treatment system failure
 - operating records are up to date
 7. Review self-monitoring procedures including sampling frequency, sampling methods, sampling location, and chain-of-custody annually with responsible personnel.

Post-Inspection

1. Complete a sample description form and deliver samples to the laboratory for analysis with the chain-of-custody record.
2. Complete an inspection report detailing the inspection results.
3. Inform the assigned Wastewater Control Representative of any unusual conditions or observations, including the need for a Slug Control Plan.

3.5.4 Inspection - Zero Discharge

The Zero Discharge Categorical facilities are inspected to verify that there is no discharge of regulated process wastewater to the sanitary sewer. The methods of recycling and/or off-hauling of process wastewater are reviewed during the inspection. Sampling is performed only when discharge violations are suspected or as follow-up to a permit violation. Non-Significant Categorical Industrial Users discharging no more than 100 gallons per day of regulated wastewater and Zero Dischargers are monitored at the same frequency. These IUs are required to submit an annual discharge prevention compliance report for EBMUD's annual evaluation of their discharge status. In addition, EBMUD conducts facility inspections at each NSCIU and ZD at least once every five years. To qualify for this reduced monitoring frequency, the discharger must have complied with all applicable categorical pretreatment standards and requirements, submitted the certification statement required in 40 CFR 403.12 (q), and must not have discharged any federally regulated process wastewater. Sampling is performed only when discharge violations are suspected or as follow-up to a permit violation.

Zero-discharge inspections may include the following:

Pre-Inspection

1. Collect information from the Inspection Program, Permit, previous inspection reports and the assigned Wastewater Control Representative.
2. Review water consumption history from Customer Information System to determine water usage and compare with their stated water uses such as sanitary, non-contact cooling water, and boiler blow-down wastewater.

Inspection

1. Interview the facility contact to determine if there is discharge of regulated process wastewater or wastewater of local toxic concern to the sanitary sewer.
2. Ask about the level of production, types of products and wastes being generated, status of pretreatment system and the method of wastewater disposal.
3. Conduct a walk-through of the facility with the facility contact.
4. Observe other operating conditions. Observations may be forwarded to other agencies.
5. Determine if appropriate safeguards are in place to ensure process wastewater is not discharged to the sanitary sewer. Safeguard examples include permanent sealing of the sanitary sewer and floor drains, installation of berms, and capping or removal of process wastewater discharge pipes.

6. Inspect facility for presence of containers, hoses, or other conveyances which may be used for the temporary discharge of process wastewater to the sanitary sewer.
7. Determine if there have been any changes to the premises or operations which may result in discharge of process wastewater.

Post Inspection

1. Complete the Inspection Report detailing the inspection results.
2. Inform the assigned Wastewater Control Representative of any unusual conditions or observations.

3.5.5 Inspection - Pollution Prevention

Commercial facilities issued P2 permits were previously inspected once every five years. Inspection frequency for each P2 category is being reviewed to focus efforts on types of sites with the most potential for discharge violations, and inspection frequency will vary among P2 permit groups as well as among sites within individual P2 groups. Some sites may be inspected annually while others may not need regularly scheduled inspections.

P2 inspections may include the following:

Pre- Inspection

1. Collect information from the Inspection Program, permit, previous inspection reports and the assigned Wastewater Control Representative.
2. Industry specific Inspection Programs are used to conduct inspections and to notify operators immediately of violations.

Inspection

1. Industry specific Inspection Programs contain:
 - compliance checklist for permit requirements
 - general information
 - comment section
2. Interview the facility contact to determine the level of production, types of products and wastes being generated, status of pretreatment system and to answer any specific questions appearing on the Inspection Program.
3. Conduct a walk-through of the facility with the facility contact. Verify information obtained in the interview. Note violations and comments in the inspection report.
4. Observe other operating conditions. Observations may be forwarded to other agencies.
5. Pretreatment System. Determine if:
 - system is functioning
 - necessary chemicals are in inventory
 - operating manuals are on-site and current
 - routine preventive maintenance procedures are being performed and by whom
 - operating records are current
6. Take measurements of grease interceptors at food handling facilities.
7. Present business-specific educational materials to facility contact, if appropriate. Materials may include BMPs, discharge prohibition posters or frequently asked question and answer information sheets.

Post Inspection

1. Complete an Inspection Report detailing the inspection results.
2. Inform the assigned Wastewater Control Representative of any unusual conditions or observations.
3. If requested, provide compliance information to the county Green Business Program.

3.5.6 Inspection - Special Discharge

A Special Discharge Permit term ranges from 90 days to five years, and the discharge volume varies depending on the type of discharge. Inspections are scheduled as needed and may include sampling. The sampling depends on the source and volume of discharge. Inspectors collect samples as indicated by the Inspection Program. Inspectors verify that the facility is utilizing its pretreatment unit and/or implementing its best management practices. Inspectors determine if the process diagram, the pretreatment system, and the discharge location correspond to information submitted as part of the Special Discharge Permit application.

Special Discharge inspections may include the following:

Pre-Inspection

1. Collect information from the inspection program, permit, and the assigned Wastewater Control Representative.
2. Review the inspection program for site-specific information. The inspection program may contain:
 - safety precautions
 - special instructions
 - sample types and analyses required
3. Contact the facility to determine time and day of discharge.

Inspection

1. Interview the facility contact to obtain answers to specific questions appearing on the inspection program.
2. Conduct a walk-through of the facility with the facility contact. Verify information obtained in the interview.

Post-Inspection

1. Deliver any samples to the District's laboratory for analysis accompanied by the chain-of-custody and EBMUD Laboratory Services Special Discharge Program Field Services Sampling Request Form.
2. Complete Special Discharge inspection report.
3. Inform the assigned Wastewater Control Representative of any conditions or observations that suggest non-compliance with the permit.

3.5.7 Violation Follow-Up Inspection

A Violation Follow-Up Inspection is performed after a discharge violation is found during an inspection, a self-monitoring event, or a District sampling event. The Violation Follow-Up Inspection focuses on specific areas associated with the cause of the violation. In addition, the Violation Follow-Up Inspection verifies the corrective actions reported by the facility, as well as adherence to any compliance time schedules or incremental remedial measures. The account is charged a Violation Follow-up Inspection Fee plus analytical charges.

3.5.8 Resource Recovery (R2) Program Random Field Audit Program

As part of EBMUD's R2 program, a field audit inspection program is in place to test consistency with permit conditions. The audit is conducted by wastewater staff and typically includes review of a truck driver's paper work (permit number, hauling company name, waste generator name, volume of tanker, and description of waste characterization), physical inspection of waste, and sampling. In addition, all drivers receive site orientations before discharging for the first time at each of the truck receiving stations at the plant. The site

orientations include orientation to plant hazards, rules of conduct, and specific discharge instructions for each disposal location.

3.6 Enforcement Procedures

3.6.1 Legal Authority

In November 1944, under the provisions of the amended MUD Act, EBMUD created SD-1 to collect and treat wastewater from cities within the SD-1 service area. The wastewater is collected through EBMUD's interceptor system and treated at the District's wastewater treatment plant. The treatment plant operates under NPDES No. CA0037702, effective May 1, 2010, through RWQCB Order No. R2-2010-0060.

The District implements and enforces its approved pretreatment program in accordance with 40 CFR 403, RWQCB Order No. R2-2010-0060, and EBMUD Wastewater Control Ordinance. The Ordinance establishes regulations for the control, interception, treatment, and disposal of wastewater. In addition, it provides for enforcement and penalties for violations of the established regulations. The Ordinance was amended effective August 22, 2013 to include enhancements to Title VI – Enforcement and Penalties, for more effective enforcement actions consistent with EPA regulations and California State law. Minor updates were made throughout the document to remove outdated language and ensure consistent use of defined terms. Title VIII – Regulation of Private Sewer Laterals, was removed and adopted as a stand-alone document titled, *Regional Private Sewer Lateral Ordinance*.

The Ordinance is available online at: <http://www.ebmud.com/sites/default/files/pdfs/wastewater-control-ordinance-8-22-2013.pdf>

3.6.2 Enforcement Response

The District's established Enforcement Response Plan (ERP) remains in effect. The ERP, which provides guidance for enforcement of Federal regulations and Ordinance provisions, was last amended in July 1996. The District is updating its ERP to include the August 2013 adopted enforcement enhancements to the Ordinance and to ensure that all elements of the document are in effect. Table 3-E summarizes the District's current enforcement response procedures.

TABLE 3-E
Enforcement Response Procedure Summary

Informal Action	
<ul style="list-style-type: none"> • Informal Notice • Informal Meeting • Notice of Violation/Follow-Up Fees: <ul style="list-style-type: none"> ○ Reporting/Non-Discharge Violation: Stage One, \$670 ○ Discharge Violation: Stage Two, \$1,410* ○ Discharge Violation under Director's Order: Stage Three, \$2,950* <p>*does not include testing fees</p>	
Formal Action	
Administrative	
Director's Orders <ul style="list-style-type: none"> • Schedule of Remedial or Preventive Measures • Cease and Desist Orders • Facility Damage Cost Recovery • Termination of Service 	Director's Enforcement Remedies and Penalties <ul style="list-style-type: none"> • Civil Liability Complaints • Civil Liability Penalties <ul style="list-style-type: none"> ○ Failure to Submit Report: \$1,000/day ○ Hazardous Waste Discharge/ Reporting Falsified Information: \$5,000/day ○ Discharge in Violation of Order/Prohibition: \$10/gallon
Formal Action	
Judicial	
Criminal Penalties <ul style="list-style-type: none"> • Intentional Discharge in Violation of Director's Order Resulting in Pollution: Misdemeanor, \$1,000/day • Reporting Falsified Information/Tampering with Monitoring Devices: \$25,000 Fine and/or 6 Months Imprisonment 	Civil Enforcement Remedies and Penalties <ul style="list-style-type: none"> • Civil Enforcement Penalties <ul style="list-style-type: none"> ○ Failure to Comply with District Order: \$10,000/day ○ Intentional or Negligent Pollution under District Order: \$25,000/day • Injunction <ul style="list-style-type: none"> ○ Discharge in Violation of Ordinance Causes/ Threatens to Cause Pollution ○ Failure to Submit Required Report ○ Failure to Allow District Access to Facility

3.7 Local Limits

In 2012 the District conducted a review of its local limits as required by the pretreatment regulations. The detailed report was submitted to the California RWQCB, San Francisco Bay Region, on January 8, 2013.

Below are EBMUD's local discharge limits as found in the Ordinance, Title II, Section 3 a. through f:

- a. Wastewater Strength Limits. No person shall discharge wastewater from a side sewer into a community sewer if the strength of the wastewater exceeds the following:

Arsenic	2	mg/L
Cadmium	1	mg/L
Chlorinated Hydrocarbons (total identifiable)	0.5	mg/L
Chromium (total)	2	mg/L
Copper	5	mg/L
Cyanide	5	mg/L
Iron	100	mg/L
Lead	2	mg/L
Mercury	0.05	mg/L
Nickel	5	mg/L
Oil and Grease	100	mg/L
pH	not less than 5.5	S.U.
Phenolic compounds	100	mg/L
Silver	1	mg/L
Temperature	150 ⁽⁵⁾	° F
Zinc	5	mg/L

- b. Additional Wastewater Strength Limits. Wastewater strength limits for constituents not listed in Section 3a may be established in a wastewater discharge permit based on available treatment technology, existing wastewater conditions in the District's facilities, or other factors as determined by the Director. The Director may also establish wastewater strength limits in wastewater discharge permits at locations within a premise whenever non-process water may dilute the wastewater discharging from side sewers.
- c. Best Management Practices. The District may require BMPs as an alternative to numeric limits that are developed to protect the POTW, water quality, and sewage sludge.
- d. Quantity and Rate of Flow Limits. No person shall discharge wastewater into a community sewer in quantities or at rates of flow which may have an adverse or harmful effect on or overload District facilities or cause excessive or additional District treatment costs. The Director may establish mass discharge limits in Wastewater Discharge Permits to control the quantity and rate of flow of wastewater discharges.
- e. Radioactive Limits. No person shall discharge or cause to be discharged any radioactive wastewater into a community sewer except when the person is authorized to use radioactive material by the Nuclear Regulatory Commission or other governmental agency empowered to regulate the use of radioactive materials. In these cases, wastewater must be discharged in strict conformity with current Nuclear Regulatory Commission regulations and recommendations for safe disposal and in compliance with all rules and regulations of State and local regulatory agencies.
- f. Deny or Condition New or Increased Contributions. The Director may deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the District's wastewater treatment facility by Industrial Users where such contributions do not meet applicable Pretreatment Standards and Requirements or where such contributions would cause the District to violate its NPDES permit.

⁵ 150°F (65.5°C), or any thermal discharge, which as a result of temperature and/or volume causes the influent of the wastewater treatment plant to exceed 104°F (40°C).

4. PRETREATMENT PROGRAM - INDUSTRIAL USER INFORMATION

4.1 Federal Categories

A summary of the categorical industrial users (CIUs) regulated under the EBMUD pretreatment program and the corresponding federal categorical standards and local limits are presented in Table 4-A.

4.2 Baseline Monitoring Report Update

No new CIUs were added to the pretreatment program in 2014; therefore there is no Baseline Monitoring Report update.

4.3 Summary of Activity for Permitted Industrial Users

Approximately 56 permits were in effect on December 31, 2014, and include:

- 8 SIU Categorical
- 13 SIU Non-Categorical
- 14 Non-SIU
- 21 NSCIU

Table 4-B summarizes monitoring and violations for these permitted IUs.

Other permits effective on December 31, 2014, were:

- 12 Groundwater
- 31 Estimation
- 15 Special Discharge
- 1,135 P2 permits for commercial businesses.

In 2014, there were 271 R2 waste accounts holding 423 active waste disposal agreements. The R2 User Types and Waste Streams are presented in Table 3-C. More information about the types of permits issued by EBMUD may be found in Section 3.3.

4.4 Updated List and Compliance Activities for CIUs, SIUs, and Other Regulated Facilities

The following tables summarize the compliance activities for IUs:

- Monitoring and Violations Summary – Table 4-B
- Significant Industrial Users – Categorical: Table 4-C
- Significant Industrial Users – Non-Categorical: Table 4-D
- Non-Significant Industrial Users: Table 4-E
- Non-Significant Categorical Industrial Users: Table 4-F

4.5 July-December Semiannual Report

The Semiannual Pretreatment Report for the period of July 2014 through December 2014 is prepared in accordance with Order No. R2-2010-0060, NPDES Permit No. CA0037702 adopted on March 10, 2010, and in accordance with Pretreatment Amendment Order No. R2-2011-0009, adopted March 9, 2011. The report is presented in the following sections.

4.5.1 Significant Industrial User – Categorical

The following is a summary of facilities that are listed in this report along with the status of facilities listed in the previous semi-annual report:

<u>NAME</u>	<u>CATEGORY</u>	<u>CURRENT STATUS</u>		<u>PREVIOUS STATUS</u>	
		<u>Qtr 4</u>	<u>Qtr 3</u>	<u>Qtr 2</u>	<u>Qtr 1</u>
Metalco, Inc.	Electroplating	SNC	C	C	C

C = Consistent Compliance, SNC = Significant Noncompliance, IC = Inconsistent Compliance, CL = Closed
T = Terminated

EBMUD monitoring and enforcement actions for categorical industries are presented in List 1 shown below. This list provides a detailed description of compliance activities for each reported facility. The list is organized in order of categorical classification.

LIST 1 SIGNIFICANT INDUSTRIAL USERS - CATEGORICAL COMPLIANCE STATUS REPORT: July 1, 2014 THROUGH December 31, 2014

<u>Name/Address</u>	<u>Date of Violation</u>	<u>Sampled By</u>	<u>Flow** (gpd)</u>	<u>Parameter(s)/ Result(s)</u>	<u>Federal Limit (mg/L)</u>
Metalco, Inc. 1475 67th Street Emeryville CA, 94608	12/18/2014	SM	0	0.036 mg/L (4-day Federal average exceedence)	0.4 mg/L

Compliance History by Quarter¹: SNC C, C, C

Comments: Metalco, Inc.'s compliance status for the 4th quarter of 2014 was Significant Non-Compliance (SNC) due to a Technical Reporting Criteria (TRC) violation of the 4-day average for lead that occurred on December 18, 2014. A violation fee was paid for the initial October 2013 violation, therefore, no fee was assessed for the TRC. Metalco self-monitors twice a year and EBMUD samples every other year. Therefore, the 4-day average spanned over a one year period (and also included the District's follow up sample to the initial violation).

4.5.2 Significant Industrial User - Local

All non-categorical facilities were in compliance during 2014.

The following facilities had two or more quarters of consistent compliance summarized in the previous semi-annual pretreatment report and are no longer included the report.

NAME

SVC Manufacturing
Takara Sake

CEASE AND DESIST ORDERS

<u>CDO/ACL</u>	<u>Facility</u>	<u>Action Dates</u>	<u>Parameter</u>	<u>Status</u>
93-2	E-D Coat, Inc.	CDO 93-2 issued 08/10/93, amended 6/14/95	CN, Zn	T
09-01	E-D Coat, Inc.	ACL 09-01 issued 09/8/09 Director's Order No. 09-01 09/08/09		T

E-D Coat, Inc. (E-D Coat) is regulated under 40 CFR Part 413-Electroplating standards. The appeal process for the District's June 4, 2012 termination of the facility's wastewater discharge permit is ongoing. The facility has been required to cease all facility operations. The District continues to conduct ongoing monitoring of the facility's neighboring sanitary sewer lines to verify that there is no process wastewater discharge from E-D Coat.

4.6 Public Participation Summary

As required by 40 CFR 403.8(f)(2)(viii), EBMUD publishes annually in the Oakland Tribune a list of industrial users which at any time during the reporting year were in Significant Noncompliance with applicable pretreatment requirements. Exhibit 4-A includes a copy of the public notice to be submitted for publication in the Oakland Tribune.

EXHIBIT 4-A

Notice of Significant Wastewater Violation

Federal Pretreatment Regulations require wastewater service providers to inform the public of significant wastewater violations and what steps violators have taken to pretreat wastewater discharges to ensure future compliance.

The wastewater dischargers listed below are identified as critical industries as established by EBMUD Ordinance, Title IV, Section 1a.(2). EBMUD found these dischargers to be in Significant Noncompliance (SNC) during calendar year 2014.

Metalco, Inc.
1475 67th Street
Emeryville CA, 94608

VIOLATION:	On January 28, 2015, Metalco, Inc. was issued a Notice of Violation for Significant Non-Compliance (SNC) of the Technical Reporting Criteria (TRC) 4-day average for lead which occurred on December 18, 2014. The original violation of 16.6 mg/L occurred in October 2013. Metalco exceeded the 0.4 mg/L Federal 4-day average for lead.
ACTIONS TAKEN:	Metalco continues to examine all of their processes which involve lead; the cause of the violation remains undetermined.
PENALTIES:	No violation fee was assessed for the TRC violation. Metalco was assessed a stage-two violation fee of \$1,495 for the October 2013 violation.

TABLE 4-A
Wastewater Discharge Permits and Standards for Categorical Industrial Users

Electroplating Category > 10,000 GPD - 40 CFR 413.14				Limits (mg/L)			
Industry Name	Permit Exp. Date	BMR Due Date	BMR Accepted	Parameter	Federal		EBMUD Local Limit
					Daily Maximum	Average Consecutive 4-Day Maximum	
E-D Coat, Inc. ⁽¹⁾	Not Applicable ⁽²⁾	09/26/81	03/16/84	Arsenic	-	-	2
<p>⁽¹⁾ The combined wastestream formula will apply only in the event that stormwater; well/metered potable water; or non 40 CFR 413 process wastewater combines with the 40 CFR 413 process wastestream.</p> <p>⁽²⁾ E-D Coat, Inc.'s permit was terminated on 6/4/12 because of failure to comply with Director's Order 09-01 and to correct ongoing permit violations.</p>				Cadmium	1.2	0.7	1
				Chromium	7.0	4.0	2
				Copper	4.5	2.7	5
				Cyanide (Total)	1.9	1.0	5
				Iron	-	-	100
				Lead	0.6	0.4	2
				Mercury	-	-	0.05
				Nickel	4.1	2.6	5
				Oil & Grease	-	-	100
				pH	-	-	Not <5.5
				Phenols	-	-	100
				Silver	-	-	1
				Temperature	-	-	150°F
				TICH	-	-	0.5
				Total Metals	10.5	6.8	-
				TTO	2.13	-	-
				Zinc	4.2	2.6	5

TABLE 4-A
Wastewater Discharge Permits and Standards for Categorical Industrial Users

Electroplating Category < 10,000 GPD - 40 CFR 413.44				Limits (mg/L)			
Industry Name	Permit Exp. Date	BMR Due Date	BMR Accepted	Parameter	Federal		EBMUD Local Limit
					Daily Maximum	Average Consecutive 4-Day Maximum	
Metalco	10/25/19	09/26/81	03/08/84	Arsenic	-	-	2
				Cadmium	1.2	0.7	1
				Chromium	-	-	2
				Copper	-	-	5
				Cyanide (Amenable)	5.0	2.7	5
				Iron	-	-	100
				Lead	0.6	0.4	2
				Mercury	-	-	0.05
				Nickel	-	-	5
				Oil & Grease	-	-	100
				pH	-	-	Not <5.5
				Phenols	-	-	100
				Silver	-	-	1
				Temperature	-	-	150°F
				TICH	-	-	0.5
				Total Metals	-	-	-
				TTO	4.57	-	-
				Zinc	-	-	5

TABLE 4-A
Wastewater Discharge Permits and Standards for Categorical Industrial Users

Metal Finishing Category-40 CFR 433.17, New Source				Limits (mg/L)			
Industry Name	Permit Exp. Date	BMR Due Date	BMR Accepted	Parameter	Federal		EBMUD Local Limit
					Daily Maximum	Maximum Monthly Average	
Fryer Ind. dba Dougco	01/20/16	01/15/90	02/8/90	Cadmium	0.11	0.07	1
Lucasey Manufacturing	04/18/18	08/26/88	12/15/88	Chromium	2.77	1.71	2
Scientific Platers	11/10/15	12/03/97	12/23/97	Copper	3.38	2.07	5
				Cyanide (Amenable)	0.86	0.32	-
				Cyanide (Total)	1.20	0.65	5
				Iron	-	-	100
				Lead	0.69	0.43	2
				Mercury	-	-	0.05
				Nickel	3.98	2.38	5
				Oil & Grease	-	-	100
				pH	-	-	Not <5.5
				Phenols	-	-	100
				Silver	0.43	0.24	1
				Temperature	-	-	150°F
				TICH	-	-	0.5
				Total Metals	-	-	-
				TTO	2.13	-	-
				Zinc	2.61	1.48	5

TABLE 4-A
Wastewater Discharge Permits and Standards for Categorical Industrial Users

Centralized Waste Treatment-40 CFR 437.25, Existing Source				Limits (mg/L)			
Industry Name	Permit Exp. Date	BMR Due Date	BMR Accepted	Parameter	Federal		EBMUD Local Limit
					Daily Maximum	Maximum Monthly Average	
NRC Environmental Services, Inc.	04/20/18	06/20/04	07/27/04	Chromium	0.947	0.487	2
				Cobalt	56.4	18.8	-
				Copper	0.405	0.301	5
				Lead	0.222	0.172	2
				Tin	0.249	0.146	-
				Zinc	6.95	4.46	5
				Bis(2-ethylhexyl) phthalate	0.267	0.158	-
				Carbazole	0.392	0.233	-
				n-Decane	5.79	3.31	-
				Fluoranthene	0.787	0.393	-
				n-Octadecane	1.22	0.925	-
				Oil and Grease - Hydrocarbon	-	-	100
				pH	-	-	not < 5.5
				Arsenic	-	-	2
				Cadmium			1
				Cyanide (T)	-	-	5
				Iron	-	-	100
				Mercury	-	-	0.05
				Nickel	-	-	5
				Phenols	-	-	100
				Silver			1
				Temperature	-	-	150°F

TABLE 4-A
Wastewater Discharge Permits and Standards for Categorical Industrial Users

Transportation Equipment Cleaning Category - 40 CFR 442.15				Limits (mg/L)		
Industry Name	Permit Exp. Date	BMR Due Date	BMR Accepted	Parameter	Federal Daily Maximum	EBMUD Local Limit
Harkrader Trucking (HTI)	1/24/17	02/10/01	**	Non-Polar material (SGT-HEM)		100
** HTI was not required to submit a BMR. All information required in a BMR was submitted by HTI in past periodic reports and permit applications. The information has been compiled.				Arsenic	-	2
				Cadmium	-	1
				Copper	0.84	5
				Chromium	-	2
				Iron	-	100
				Lead	-	2
				Mercury	0.0031	0.05
				Nickel	-	5
				Oil & Grease	-	100
				pH	-	Not <5.5
				Phenols		100
				Silver	-	1
				Temperature	-	150°F
				TICH	-	0.5
				Zinc	-	5

TABLE 4-A
Wastewater Discharge Permits and Standards for Categorical Industrial Users

Metal Molding and Casting Point Source Category Subpart C-Ferrous Casting Subcategory - 40 CFR 464.34, New Source				Limits (mg/L)			
Industry Name	Permit Exp. Date	BMR Due Date	BMR Accepted	Parameter	Federal		EBMUD Local Limit
					Daily Maximum	Maximum Monthly Average	
Pacific Steel Casting	11/07/18	12/31/13	12/13/13	Arsenic	-	-	2
				Cadmium	-	-	1
				Chromium	-	-	2
				Copper	0.0138	0.0076	5
				Cyanide (Amenable)	-	-	-
				Cyanide (Total)	-	-	5
				Iron	-	-	100
				Lead	0.376	0.0185	2
				Mercury	-	-	0.05
				Nickel	-	-	5
				Oil & Grease	1.43	0.476	100
				pH	7-10	7-10-	Not <5.5
				Phenols	-	-	100
				Silver	-	-	1
				Temperature	-	-	150°F
				TICH	-	-	0.5
				Total Metals	-	-	-
				TTO	0.257	0.00838	-
				Zinc	0.699	0.266	5

Table 4B
2014 Monitoring and Violations Summary

2014 PERMIT SUMMARY				SAMPLING EVENTS			VIOLATIONS			COMPLIANCE STATUS 12/31/2014			
In Effect 12/31/2014	New	Closed/ Terminated/ Re-Classified	EBMUD Inspections	EBMUD	IU	Total	No. of Violations- (1)	No. of Novs (2)	Fees	C (3)	IC (4)	SNC (5)	U (5)

SIU PERMITS

Categorical

40 CFR 413 ELECTROPLATING	2	0	0	0	9*	1	10	1	1**	\$0	0	0	1	0
40 CFR 433 METAL FINISHING	4	0	1	4	2	1	3	0	0	\$0	4	0	0	0
40 CFR 437 CENTRALIZED WASTE TREATMENT	1	0	0	2	2	0	2	0	0	\$0	1	0	0	0
40 CFR 439 PHARMACEUTICALS	1	0	1	1	0	0	0	0	0	\$0	0	0	0	0
40 CFR 442 TRANSPORTATION EQUIPMENT CLEANING	1	0	0	4	8	0	8	0	0	\$0	1	0	0	0
40 CFR 464 METAL MOLDING AND CASTING	1	0	0	0	0	0	0	0	0	\$0	1	0	0	0
Sub-total for SIU-Categorical	8	0	2	11	21	2	23	1	1	\$0	7	0	1	0

Non Categorical

BCC 2080 BEVERAGE MANUFACTURE	3	0	0	1	1	2	3	0	0	\$0	3	0	0	0
BCC 2600 PULP AND PAPER PRODUCTS MFG	1	0	0	2	2	0	2	0	0	\$0	1	0	0	0
BCC 2830 DRUGS MANUFACTURING	1	0	0	2	0	0	0	0	0	\$0	1	0	0	0
BCC 4000 RAILROAD TRANSPORTATION	1	0	0	0	3	1	4	0	0	\$0	1	0	0	0
BCC 4100 LOCAL AND SUBURBAN TRANSIT	3	0	0	3	3	8	11	0	0	\$0	3	0	0	0
BCC 4500 AIR TRANSPORTATION	1	0	0	2	4	8	12	0	0	\$0	1	0	0	0

Table 4B
2014 Monitoring and Violations Summary

	2014 PERMIT SUMMARY				SAMPLING EVENTS			VIOLATIONS			COMPLIANCE STATUS 12/31/2014			
	In Effect 12/31/2014	New	Closed/ Terminated/ Re-Classified		EBMUD Inspections	EBMUD	IU	Total	No. of Violations- (1)	No. of Novs (2)	Fees	C (3)	IC (4)	SNC (5)
BCC 4950 SANITARY COLLECTION AND DISPOSAL	0	0	1	0	0	0	0	0	0	\$0	0	0	0	0
BCC 7218 INDUSTRIAL LAUNDRIES	1	0	0	5	8	8	16	0	0	\$0	1	0	0	0
BCC 7300 LABORATORIES	1	0	0	1	8	4	12	0	0	\$0	1	0	0	0
BCC 8200 SCHOOLS	1	0	0	5	6	0	6	0	0	\$0	1	0	0	0
Sub-Total for SIU-Local	13	0	1	21	35	31	66	0	0	\$0	13	0	0	0
Sub-Total SIU Permits	21	0	3	32	56	32	85	1	1	\$0	20	0	1	0
Non SIU Permits														
BCC 2040 GRAIN MILLS	1	0	0	0	0	0	0	0	0	\$0	1	0	0	0
BCC 2050 BAKERIES	2	0	0	2	0	0	0	0	0	\$0	2	0	0	0
BCC 2080 BEVERAGE MANUFACTURE	0	0	1	1	0	0	0	0	0	\$0	0	0	0	0
BCC 2891 ADHESIVES AND GELATIN MFG.	2	0	0	1	0	1	1	0	0	\$0	2	0	0	0
BCC 3200 EARTHENWARE MANUFACTURING	2	0	0	2	0	0	0	0	0	\$0	2	0	0	0
BCC 3300 PRIMARY METALS MANUFACTURING	1	0	0	0	0	0	0	0	0	\$0	1	0	0	0
BCC 4000 RAILROAD TRANSPORTATION	1	0	0	0	0	2	2	0	0	\$0	1	0	0	0
BCC 4400 WATER TRANSPORTATION	1	0	0	0	0	0	0	0	0	\$0	1	0	0	0
BCC 4950 SANITARY COLLECTION AND DISPOSAL	2	0	0	0	0	0	0	0	0	\$0	2	0	0	0
BCC 5093 RECYCLING CENTER	2	1	1	0	0	0	0	0	0	\$0	1	0	0	0
Sub-Total for Non-SIU-Local	14	1	2	6	0	3	3	0	0	\$0	13	0	0	0

Table 4B
2014 Monitoring and Violations Summary

	2014 PERMIT SUMMARY				SAMPLING EVENTS			VIOLATIONS			COMPLIANCE STATUS 12/31/2014			
	In Effect 12/31/2014	New	Closed/ Terminated/ Re-Classified	EBMUD Inspections	EBMUD	IU	Total	No. of Violations- (1)	No. of Novs (2)	Fees	C (3)	IC (4)	SNC (5)	U (5)
Non-Significant Categorical IU Permits	21	3	5	3	1	1	2	0	0	\$0	21	0	0	0
Grand Totals	56	4	10	41	57	36	90	1	1	\$0	54	0	1	0

* Investigation at ED Coat, Inc. is ongoing. This value represents a total number of investigation samples collected by EBMUD through the course of 2014.

** On January 28, 2015, Metalco, Inc. was issued a Notice of Violation for Significant Non-Compliance (SNC) of the Technical Reporting Criteria (TRC) 4-day average for lead which occurred on December 18, 2014.

(1),(2) - All violations are included in NOVs (3) C - Consistent Compliance (4) IC - Inconsistent Compliance (5) SNC - Significant Non-Compliance (6) U - Unknown NA - Not Applicable

NEW - A Minimization, Estimation or Pollution Prevention permit which was NOT IN effect during the previous reporting year.

CLOSED - A facility which no longer operates in the EBMUD SD-1 service area.

TERMINATED - A permit which ceases to be in effect due to reasons such as business closure, business name change or regulated process change. In exceptional cases, the Director may terminate a permit for violation of the permit terms and conditions or the EBMUD Ordinance No. 311A-03 provisions. A discharger who has a permit terminated by the Director is required to apply for a new permit within 30 days of notice of termination.

RECLASSIFIED - An IU regulated under a SIU, Estimation or Pollution Prevention permit which becomes regulated under a different one of these permits.

REISSUED - Existing Pollution Prevention permits which are renewed.

TABLE 4C
2014 Monitoring, Enforcement and Status: Significant Industrial Users – Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Violations.	No. of NOVs (3)	Viol. Fees		
40 CFR 413 - Electroplating										
E-D Coat, Inc. 715 4th Street Oakland, CA 94607 Permit No. 03300871 Expires:	4	T	0	2	0	0	0	0	CDO No. 93-2 issued 08/10/1993 amended 06/14/1995 ACL No. 09-01 issued 09/08/2009	E-D Coat, Inc. (E-D Coat) is regulated under 40 CFR Part 413-Electroplating standards. The appeal process for the District's June 4, 2012 termination of the facility's wastewater discharge permit is ongoing. The facility has been required to cease all facility operations. The District continues to conduct ongoing monitoring of the facility's neighboring sanitary sewer lines to verify that there is no process wastewater discharge from E-D Coat.
	3	T	0	3	0	0	0	0		
	2	T	0	2	0	0	0	0		
	1	T	0	2	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Metalco, Inc. 1475 67th Street Emeryville, CA 94608 Permit No. 07390021 Expires: 10/25/2019	4	SNC	0	0	1	1	0	0		Metalco, Inc. compliance status for the 4th quarter of 2014 was Significant Non-Compliance (SNC) due to a Technical Reporting Criteria (TRC) violation of the 4-day average for lead. A violation fee was assessed and paid for the initial October 2013 violation, therefore, no fee was assessed for the TRC. Metalco, Inc. conducts self-monitoring twice a year and EBMUD samples every other year, therefore, the 4-day average spanned over a one year period (and also included the Districts follow up sample to the initial violation).
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	1	1	0	\$0		
Totals for Electroplating:			0	9	1	1	0	\$0		

TABLE 4C
2014 Monitoring, Enforcement and Status: Significant Industrial Users – Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Violations.	No. of NOVs (3)	Viol. Fees		
40 CFR 433 - Metal Finishing										
Fryer Industries Inc./dba Dougco 1073 34th Street Oakland, CA 94608 Permit No. 26414503 Expires: 1/20/2016	4	C	1	1	0	0	0	0		DOUGCO/Fryer Industries, Inc. is an existing source metal finishing job shop facility and is subject to 40 CFR 433.17. This facility is considered a middle-tier CIU because the wastewater discharge does not exceed 5,000 gpd. The permit requires 1 self-monitoring event per permit year, 1 EBMUD sampling event and/or inspection every two years, and the submittal of an annual Total Toxic Organics (TTO) Compliance Report. EBMUD may increase monitoring in the future as necessary.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	1	0	0	0	\$0		
Lucasey Manufacturing 2744 E 11th Street Oakland, CA 94601 Permit No. 31518763 Expires: 4/18/2018	4	C	0	0	0	0	0	0		Lucasey is subject to 40 CFR 433.17, Metal Finishing categorical pretreatment standards. Lucasey is considered a middle-tier CIU because its categorical wastewater discharge does not exceed 5,000 gpd. The permit requires the submittal of an annual TTO Compliance Report and annual EBMUD inspections.
	3	C	0	0	0	0	0	0		
	2	C	2	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			2	0	0	0	0	\$0		
Scientific Platers, Inc. 9809 Kitty Lane Oakland, CA 94603 Permit No. 14322574 Expires: 11/10/2015	4	C	1	1	0	0	0	0		Scientific Platers is subject to 40 CRF 422.17 pretreatment standards. EBMUD classifies this account as a middle tier CIU because its categorical wastewater discharge doesn't exceed 5,000 gpd. The permit includes the submittal of an annual TTO Compliance Report, an annual self-monitoring/sampling event and EBMUD's sampling/inspection events once every two years.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	1	0	0	0		
Totals:			1	1	1	0	0	\$0		
Totals for Metal Finishing:			4	2	1	0	0	\$0		

TABLE 4C
2014 Monitoring, Enforcement and Status: Significant Industrial Users – Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Violations.	No. of NOVs (3)	Viol. Fees		
40 CFR 437 - Centralized Waste Treatment										
NRC Environmental Services, Inc. Wharf 2 Ferry Point Alameda, CA 94501 Permit No. 50371433 Expires: 4/20/2018	4	C	0	0	0	0	0	0		NRC Environmental Services, Inc. is subject to 40 CFR 437.25 categorical pretreatment standards. This permit requires semi-annual self-monitoring events, and 2 EBMUD inspections per year.
	3	C	1	1	0	0	0	0		
	2	C	1	1	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			2	2	0	0	0	\$0		
Totals for Centralized Waste Treatment:			2	2	0	0	0	\$0		
40 CFR 442 - Transportation Equipment Cleaning										
Harkrader Trucking, Inc. 9957 Medford Ave Oakland, CA 96051 Permit No. 50066572 Expires: 1/24/2017	4	C	1	2	0	0	0	0		Harkrader is regulated under 40 CFR 442.15 - Transportation Equipment Cleaning. This permit requires 4 EBMUD inspections per year.
	3	C	2	4	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	1	2	0	0	0	0		
Totals:			4	8	0	0	0	\$0		
Totals for Transportation Equipment Cleaning:			4	8	0	0	0	\$0		

TABLE 4C
2014 Monitoring, Enforcement and Status: Significant Industrial Users – Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBM UD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
40 CFR 464 - Metal Molding And Casting										
Pacific Steel Casting 1333 2nd Street Berkeley, CA 94710 Permit No. 10690011 Expires: 11/7/2018	4	C	0	0	0	0	0	0		Pacific Steel Casting (PSC) is an SIU subject to 40 CFR 464, Subpart C Ferrous Casting Subcategory Casting Quench pretreatment standards. The permit requires 2 self-monitoring events per permit year, 1 EBMUD sampling event and/or inspections every year, and the submittal of an annual Total Toxic Organics (TTO) Compliance Report. EBMUD may increase monitoring in the future as necessary.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Metal Molding And Casting:			0	0	0	0	0	\$0		
Totals:			8	21	2	1	0	\$0		

TABLE 4C
2014 Monitoring, Enforcement and Status: Significant Industrial Users – Categorical

- (1) Calendar Quarter (4th Qtr is Oct - Dec)
- (2) Compliance Status Key:
- | | | |
|-----|---|----------------------------|
| C | - | Consistent Compliance |
| IC | - | Inconsistent Compliance |
| SNC | - | Significant Non-Compliance |
| CL | - | Closed |
| T | - | Terminated |
| RC | - | Reclassified |
| RI | - | Reissued |
| U | - | Unknown |
- (3) All violations are included in NOVs

- New** - A Minimization, Estimation or Pollution Prevention permit which was not in effect during the previous reporting year.
- CL (Closed)** - A facility which no longer operates in teh EBMUD SD-1 service area.
- T (Terminated)** - A permit which ceases to be in effect due to reasons such as business closure, business name change or regulated process change. In exceptional cases, the Director may terminate a permit for violation of the permit terms and conditions or the EBMUD Ordinance No. 311A-03 provisions. A discharger who has a permit terminated by the Director is required to apply for a new permit within 30 days of notice of termination.
- RC (Reclassified)** - An IU regulated under a Minimization (federal categorical or local), Estimation or Pollution Prevention permit which becomes regulated under a different one of these permits.
- RI (Reissued)** - Existing Pollution Prevention permits which are renewed.

TABLE 4D
Monitoring, Enforcement and Status: Significant Industrial Users – Non-Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
BCC 2080 - Beverage Manufacture										
SVC Manufacturing 5625 International Blvd. Oakland, CA 94621 Permit No. 50367682 Expires: 11/6/2018	4	C	0	0	0	0	0	0		SVC Manufacturing is a beverage manufacturer and bottler. The permit includes best management practices in lieu of self-monitoring and 2 EBMUD inspection and sampling events a year (CODF and pH testing).
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Safeway Beverage Plant 1921 San Joaquin Street Richmond, CA 94804 Permit No. 05900451 Expires: 10/30/2016	4	C	0	0	1	0	0	0		Safeway Beverage Plant is a carbonated drink manufacturer and bottler located in Richmond, CA. A wastewater discharge permit is issued to Safeway Beverage because its wastewater strength is significantly different from its BCC strength. The BCC for Safeway Beverage is 2080 - Beverage Manufacturer. The Permit also monitors for pH and Oil & Grease (hydrocarbon). According to Safeway, its product has a pH of 4 or less. A new on-line pH system was added to the wastewater treatment process at this plant in 2014. The permit is currently in process of being revised to update these changes to the treatment system.
	3	C	1	1	0	0	0	0		
	2	C	0	0	1	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	1	2	0	0	\$0		

TABLE 4D
Monitoring, Enforcement and Status: Significant Industrial Users – Non-Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
Takara Sake 708 Addison Street Berkeley, CA 94710 Permit No. 10600278 Expires: 6/14/2019	4	C	0	0	0	0	0	0		Takara Sake has been operating under a compliance schedule since December 2013 taking specific actions to ensure pH discharge compliance. During 2014, EBMUD was unable to perform periodic sampling events due to safety issues at the facility. EBMUD and Takara staff collaborated on a solution to rectify on-site sampling safety issues. EBMUD will resume sampling in January 2015.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Beverage Manufacture:			1	1	2	0	0	\$0		
BCC 2600 - Pulp And Paper Products Mfg										
Longview Fibre Company 8511 Blaine Street Oakland, CA 94621 Permit No. 17300112 Expires: 8/20/2019	4	C	1	1	0	0	0	0		Longview Fibre has a mandatory permit for being a critical industry whose average wastewater strength cannot be established on a BCC basis [EBMUD Wastewater Control Ordinance, Title IV, Section 1a(5)] and other dischargers determined by the Manager to require special regulations or source control [EBMUD Wastewater Control Ordinance, Title IV, Section 1a.(5)]. The federal paper manufacturing regulations listed in 40 CFR 430 do not apply to this facility.
	3	C	0	0	0	0	0	0		
	2	C	1	1	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			2	2	0	0	0	\$0		
Totals for Pulp And Paper Products Mfg:			2	2	0	0	0	\$0		

TABLE 4D
Monitoring, Enforcement and Status: Significant Industrial Users – Non-Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
BCC 2830 - Drugs Manufacturing										
Bayer Corporation 4th & Parker Streets Berkeley, CA 94701 Permit No. 10600333 Expires: 6/28/2019	4	C	2	0	0	0	0	0		Bayer Corporation is permitted as a Local Limits SIU and maintained consistent compliance during 2014.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			2	0	0	0	0	\$0		
Totals for Drugs Manufacturing:			2	0	0	0	0	\$0		
BCC 4000 - Railroad Transportation										
Union Pacific Railroad Company 1851-B 5th Street Oakland, CA 80221 Permit No. 02300371 Expires: 8/23/2019	4	C	0	0	1	0	0	0		Union Pacific Railroad Company is permitted as a Local Limits SIU and maintained consistent compliance in 2014.
	3	C	0	1	0	0	0	0		
	2	C	0	1	0	0	0	0		
	1	C	0	1	0	0	0	0		
Totals:			0	3	1	0	0	\$0		
Totals for Railroad Transportation:			0	3	1	0	0	\$0		
BCC 4100 - Local And Suburban Transit										
AC Transit - Emeryville 1177 47th Street Emeryville, CA 94612 Permit No. 04391161 Expires: 10/30/2016	4	C	0	0	1	0	0	0		AC Transit - Emeryville permit regulates the discharge of wastewater generated during fleet maintenance activities.
	3	C	0	0	0	0	0	0		
	2	C	1	1	1	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	1	2	0	0	\$0		

TABLE 4D
Monitoring, Enforcement and Status: Significant Industrial Users – Non-Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
AC Transit - International 10626 International Blvd. Oakland, CA 94612 Permit No. 19526191 Expires: 10/30/2016	4	C	1	0	1	0	0	0		AC Transit - International permit regulates the discharge of wastewater generated during fleet maintenance activities.
	3	C	0	0	0	0	0	0		
	2	C	0	0	1	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	0	2	0	0	\$0		
AC Transit - Seminary 1100 Seminary Avenue Oakland, CA 94612 Permit No. 14300671 Expires: 10/30/2016	4	C	0	0	2	0	0	0		AC Transit - Seminary permit regulates the discharge of wastewater generated during fleet maintenance activities.
	3	C	1	2	0	0	0	0		
	2	C	0	0	2	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	2	4	0	0	\$0		
Totals for Local And Suburban Transit:			3	3	8	0	0	\$0		
BCC 4500 - Air Transportation										
Port Of Oakland - Oakland International Airport Doolittle & Airport Drive Oakland, CA 94607 Permit No. 17300332 Expires: 8/25/2016	4	C	1	2	2	0	0	0	ACL No. 2011-01 issued 09/14/20 11	Oakland International Airport (OIA) has a mandatory wastewater discharge permit because it discharges an un-metered source of water and it is designated as a SIU by EBMUD on the basis that it has a reasonable potential for adversely affecting the WWTPs operation, or the operation of nearby Pump Station G, or for violating EBMUDs Wastewater Control Ordinance. OIA discharges an average of over 250,000 gpd into the sanitary sewer.
	3	C	1	2	2	0	0	0		
	2	C	0	0	2	0	0	0		
	1	C	0	0	2	0	0	0		
Totals:			2	4	8	0	0	\$0		

TABLE 4D
Monitoring, Enforcement and Status: Significant Industrial Users – Non-Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
Totals for Air Transportation:			2	4	8	0	0	\$0		
BCC 7218 - Industrial Laundries										
Aramark Uniform Services 330 Chestnut Street Oakland, CA 94607 Permit No. 03300801 Expires: 11/9/2018	4	C	1	2	2	0	0	0		Aramark Uniform Services has a mandatory permit as a SIU that discharges 25,000 gpd or more of process wastewater. Aramark Uniform Services maintained consistent compliance during 2014.
	3	C	2	2	2	0	0	0		
	2	C	0	0	2	0	0	0		
	1	C	2	4	2	0	0	0		
Totals:			5	8	8	0	0	\$0		
Totals for Industrial Laundries:			5	8	8	0	0	\$0		
BCC 7300 - Laboratories										
Lawrence Berkeley National Laboratory 1 Cyclotron Road Berkeley, CA 94720-8282 Permit No. 06600791 Expires: 7/7/2017	4	C	0	0	0	0	0	0		This local permit regulates LBNL except for the groundwater discharge and the metal finishing operations in Building 77. This account maintained consistent compliance during 2014.
	3	C	1	4	2	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	4	2	0	0	0		
Totals:			1	8	4	0	0	\$0		
Totals for Laboratories:			1	8	4	0	0	\$0		
BCC 8200 - Schools										
Regents Of The University Of California, Berkeley Berkeley Campus Berkeley, CA 94720 Permit No. 06600592 Expires: 11/16/2018	4	C	1	2	0	0	0	0		Regents of the University of California, Berkeley permit regulates the discharge of wastewater generated from academic and research laboratory activities.
	3	C	2	0	0	0	0	0		
	2	C	1	2	0	0	0	0		
	1	C	1	2	0	0	0	0		
Totals:			5	6	0	0	0	\$0		

TABLE 4D
Monitoring, Enforcement and Status: Significant Industrial Users – Non-Categorical

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
Totals for Schools:			5	6	0	0	0	\$0		
Totals:		13	21	35	31	0	0	\$0		

(1) Calendar Quarter (4th Qtr is Oct - Dec)

(2) Compliance Status Key:

C	-	Consistent Compliance
IC	-	Inconsistent Compliance
SNC	-	Significant Non-Compliance
CL	-	Closed
T	-	Terminated
RC	-	Reclassified
RI	-	Reissued
U	-	Unknown

(3) All violations are included in NOV

New	-	A Minimization, Estimation or Pollution Prevention permit which was not in effect during the previous reporting year.
CL (Closed)	-	A facility which no longer operates in teh EBMUD SD-1 service area.
T (Terminated)	-	A permit which ceases to be in effect due to reasons such as business closure, business name change or regulated process change. In exceptional cases, the Director may terminate a permit for violation of the permit terms and conditions or the EBMUD Ordinance No. 311A-03 provisions. A discharger who has a permit terminated by the Director is required to apply for a new permit within 30 days of notice of termination.
RC (Reclassified)	-	An IU regulated under a Minimization (federal categorical or local), Estimation or Pollution Prevention permit which becomes regulated under a different one of these permits.
RI (Reissued)	-	Existing Pollution Prevention permits which are renewed.

TABLE 4E
Monitoring, Enforcement and Status: Non-Significant Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
2040 - Grain Mills										
California Cereal Products 1267 14th Street Oakland, CA 94607 Permit No. 03301042 Expires:	4	C	0	0	0	0	0	0		California Cereal has a process discharge of <25,000 GPD and has no reasonable potential for adversely affecting the wastewater treatment plant or violating pretreatment standards. The permit includes implementation of BMPs plus one inspection and three TSS and CODF samples every five years. The District may increase monitoring as necessary.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Grain Mills:			0	0	0	0	0	\$0		
2050 - Bakeries										
New Desserts Inc. 550 85th Avenue Oakland, CA 94621 Permit No. 50471294 Expires:	4	C	0	0	0	0	0	0		New Desserts, Inc. has a process discharge of <25,000 GPD and has no reasonable potential for adversely affecting the wastewater treatment plant or violating pretreatment standards. The permit includes implementation of BMPs and an annual inspection.
	3	C	1	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	0	0	0	0	\$0		
Svenhards Swedish Bakery 335 Adeline Street Oakland, CA 94607 Permit No. 02300241 Expires:	4	C	1	0	0	0	0	0		Svenhard’s Swedish Bakery permit regulates the discharge of wastewater generated from large-scale baking activities.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	0	0	0	0	\$0		
Totals for Bakeries:			2	0	0	0	0	\$0		

TABLE 4E
Monitoring, Enforcement and Status: Non-Significant Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
2080 - Beverage Manufacture										
Pyramid Breweries 901 Gilman Street Berkeley, CA 94710 Permit No. 50352621 Expires: Closed: 4/17/2014	4	CL	0	0	0	0	0	0		Pyramid Breweries, coded BCC 2080, was a beverage manufacturing facility that has a BMP permit with no expiration date. The permit was terminated in 2014 due to facility closure.
	3	CL	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	1	0	0	0	0	0		
Totals:			1	0	0	0	0	\$0		
Totals for Beverage Manufacture:			1	0	0	0	0	\$0		
2891 - Adhesives And Gelatin Mfg.										
Adhesive Products 520 Cleveland Avenue Albany, CA 94710 Permit No. 10600761 Expires:	4	C	0	0	1	0	0	0		Adhesive Products, Inc. has a process discharge of <25,000 GPD and has no reasonable potential for adversely affecting the wastewater treatment plant or violating pretreatment standards. The permit includes an annual sampling inspection and a self-monitoring annual event. The inspection for 2014 was conducted on January 27,2015. The delay was due to a scheduling conflict that has been resolved. Another inspection will be conducted in 2015 for the 2015 period.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	1	0	0	\$0		
Henkel 742 Grayson Street Berkeley, CA 94710 Permit No. 10600742 Expires:	4	C	1	0	0	0	0	0		Henkel permit regulates the discharge of wastewater generated from adhesive manufacturing activities.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	0	0	0	0	\$0		
Totals for Adhesives And Gelatin Mfg.:			1	0	1	0	0	\$0		

TABLE 4E
Monitoring, Enforcement and Status: Non-Significant Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
3200 - Earthenware Manufacturing										
CEMEX Construction Materials Pacific, LLC 333 23rd Avenue Oakland, CA 95762 Permit No. 13300311 Expires: 11/16/2018	4	C	2	0	0	0	0	0		CEMEX Construction Materials Pacific, LLC (CEMEX) is a ready-mix concrete batching facility. In 2014 CEMEX was delisted as a Significant Industrial User (SIU) because of consistent compliance with its permit terms. CEMEX was classified as an SIU in 2008 because of the discharge of cementitious material to the sanitary sewer creating an obstruction in the sewer line. Prior to that CEMEX held an optional estimation of wastewater flow permit due to the majority of its water consumption diverted to product. In 2008 CEMEX was issued a zero discharge permit, off hauling excess wastewater to the District's wastewater treatment plant through EBMUD's Resource Recovery Program. The zero-discharge permit remains in place.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			2	0	0	0	0	\$0		
Owens-Brockway Glass Containers, Inc 3600 Alameda Avenue Oakland, CA 94601-3329 Permit No. 14300262 Expires:	4	C	0	0	0	0	0	0		Owens-Brockway Glass Containers, Inc. permit regulates the discharge of wastewater generated from glass manufacturing activities.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Earthenware Manufacturing:			2	0	0	0	0	\$0		

TABLE 4E
Monitoring, Enforcement and Status: Non-Significant Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
3300 - Primary Metals Manufacturing										
Schnitzer Steel Products 1101 Embarcadero West Oakland, CA 94604 Permit No. 02300311 Expires: 12/19/2019	4	C	0	0	0	0	0	0		Schnitzer Steel Products is a scrap metal dealer located in Oakland. In December 2014, Schnitzer's estimation permit was changed to local limits Wastewater Discharge Permit. This action was necessitated by CA Regional Water Quality Control Board Cleanup and Abatement Order No. R2-2012- 0083.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Primary Metals Manufacturing:			0	0	0	0	0	\$0		
4000 - Railroad Transportation										
AMTRAK - National Railroad Passenger Corp 1303 - 3rd Street Oakland, CA 94607 Permit No. 50534001 Expires:	4	C	0	0	1	0	0	0		Amtrak permit includes implementation of BMPs in lieu of EBMUD yearly sampling and one inspection and sampling event every five years. The District may increase monitoring, if necessary.
	3	C	0	0	0	0	0	0		
	2	C	0	0	1	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	2	0	0	\$0		
Totals for Railroad Transportation:			0	0	2	0	0	\$0		
4400 - Water Transportation										
EBMUD San Pablo Water Treatment Plant-RCO 300 Berkeley Park Blvd Kensington, CA 94607 Permit No. 00690013 Expires:	4	C	0	0	0	0	0	0		The San Pablo Water Treatment Plant is a standby facility that is not considered a significant industrial user due to its process discharge of <25,000 GPD and the fact that it has no reasonable potential for adversely affecting the wastewater treatment plant or violating pretreatment standards. The permit is for intermittent tunnel flush water to the sanitary sewer, as the sulfide levels are too high for discharge to the creek.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Water Transportation:			0	0	0	0	0	\$0		

TABLE 4E
Monitoring, Enforcement and Status: Non-Significant Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT			Orders	Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees		
4950 - Sanitary Collection And Disposal										
EBMUD- East Bayshore Water Recycling Project 2020 Wake Avenue Oakland, CA 94623 Permit No. 50620251 Expires:	4	C	0	0	0	0	0	0		EBMUD-East Bayshore Water Recycling Project permit regulates the discharge of filter back-washwater generated from wastewater recycling processes at EBMUD's wastewater treatment plant.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Swissport Fueling, Inc. 1 Edward White Way Oakland, CA 94621 Permit No. 50652491 Expires: 12/7/2015	4	C	0	0	0	0	0	0		Swissport Fueling Inc.(previously Port of Oakland SFTF) has been a non-SIU since December 2010 and maintains consistent compliance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Sanitary Collection And Disposal:			0	0	0	0	0	\$0		
5093 - Recycling Center										
Lakeside Non-Ferrous Metals 412 Madison Street Oakland, CA 94607 Permit No. 22313221 Expires:	4	C	0	0	0	0	0	0		Lakeside Non-Ferrous Metals, a metal recycling facility, is regulated for the discharge of polluted stormwater that cannot be discharged to the storm drain system.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals:			0	0	0	0	0	\$0		
Totals for Recycling Center:			0	0	0	0	0	\$0		
Totals:		14	6	0	3	0	0	\$0		

TABLE 4E
Monitoring, Enforcement and Status: Non-Significant Industrial Users

(1) Calendar Quarter (4th Qtr is Oct - Dec)

- (2) Compliance Status Key:
- | | | |
|-----|---|----------------------------|
| C | - | Consistent Compliance |
| IC | - | Inconsistent Compliance |
| SNC | - | Significant Non-Compliance |
| CL | - | Closed |
| T | - | Terminated |
| RC | - | Reclassified |
| RI | - | Reissued |
| U | - | Unknown |

-3 All violations are included in NOVs

- | | | |
|-------------------|---|--|
| New | - | A Minimization, Estimation or Pollution Prevention permit, which was not in effect during the previous reporting year. |
| CL (Closed) | - | A facility which no longer operates in the EBMUD SD-1 service area. |
| T (Terminated) | - | A permit which ceases to be in effect due to reasons such as business closure, business name change or regulated process change. In exceptional cases, the Director may terminate a permit for violation of the permit terms and conditions or the EBMUD Ordinance No. 311A-03 provisions. A discharger who has a permit terminated by the Director is required to apply for a new permit within 30 days of notice of termination. |
| RC (Reclassified) | - | An IU regulated under a Minimization (federal categorical or local), Estimation or Pollution Prevention permit which becomes regulated under a different one of these permits. |
| RI (Reissued) | - | Existing Pollution Prevention permits which are renewed. |

TABLE 4F
Monitoring, Enforcement and Status: Non-Significant Categorical Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT				Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees	Orders	
40 CFR 413 - Electroplating										
Gold Seal Plating 3125 E 7th Street Oakland, CA 94601 Permit No. 31390241 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Gold Seal Plating certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Johnson Plating 2526 Telegraph Avenue Oakland, CA 94612 Permit No. 25390261 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Johnson Plating certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Melrose Metal Finishing, Inc. 10222 Pearmain Street Oakland, CA 94603 Permit No. 14390462 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Melrose Metal Finishing, Inc. certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Monsen Plating Silversmith 3370 Adeline Street Berkeley, CA 94703 Permit No. 02690041 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Monsen Plating Silversmith certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Electroplating:			0	0	0	0	0	\$0		

TABLE 4F
Monitoring, Enforcement and Status: Non-Significant Categorical Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT				Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees	Orders	
40 CFR 420 - Iron And Steel										
Pacific Galvanizing 715 46th Avenue Oakland, CA 94601 Permit No. 29525411 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Pacific Galvanizing certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Iron And Steel:			0	0	0	0	0	\$0		
40 CFR 421 - Non-Ferrous Metals I										
CASS, Inc. 2730 Peralta Street Oakland, CA 94607 Permit No. 24513862 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, CASS, Inc.certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Non-Ferrous Metals I:			0	0	0	0	0	\$0		
40 CFR 433 - Metal Finishing										
Able Metal Plating, Inc. 932 86th Avenue Oakland, CA 94621 Permit No. 13390735 Expires: 7/1/2015	4	C	0	0	0	0	0	0		In 2014, Able Metal Plating, Inc.certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		

TABLE 4F
Monitoring, Enforcement and Status: Non-Significant Categorical Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT				Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees	Orders	
Electro-Coatings Of California 893 Carleton Street Berkeley, CA 94710 Permit No. 10600343 Expires: 7/1/2015	4	C	0	0	0	0	0	0		In 2014, Electro-Coatings Of California certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Lawrence Berkeley National Laboratory, Bldg. 77 1 Cyclotron Road Berkeley, CA 94720 Permit No. 50238911 Expires: 4/7/2017	4	C	0	0	0	0	0	0		In 2014, Lawrence Berkeley National Laboratory, Bldg. 77certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	1	1	1	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	1	1	0	0	\$0		
Mercurius Company 3224 Brookdale Ave Oakland, CA 94602 Permit No. 42426923 Expires: 7/1/2015	4	C	0	0	0	0	0	0		In 2014, Mercurius Company certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Metro Lighting 2240 San Pablo Ave Berkeley, CA 94702 Permit No. 35611516 Expires: 7/1/2015	4	C	0	0	0	0	0	0		In 2014, Metro Lighting certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		

TABLE 4F
Monitoring, Enforcement and Status: Non-Significant Categorical Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT				Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees	Orders	
Rolls-Royce Engine Svcs 7200 Earhart Road Oakland, CA 94621-4504 Permit No. 50244512 Expires: 7/1/2015	4	C	1	0	0	0	0	0		In 2014, Rolls-Royce Engine Svcs certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			1	0	0	0	0	\$0		
The Boardworks 499 Embarcadero Oakland, CA 94606 Permit No. 50194641 Expires: 1/9/2016	4	C	0	0	0	0	0	0		The Boardworks is a printed circuit board manufacturer and is subject to 40 CFR 433.17 categorical pretreatment standards. EBMUD has opted to maintain this facility under the SIU listing due to the discharge of federally regulated wastewater. The permit requires 1 EBMUD inspection every 5 years with no sampling and the submittal of an annual TTO Compliance Report.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Metal Finishing:			2	1	1	0	0	\$0		
40 CFR 439 - Pharmaceuticals										
Libby Laboratories, Inc. 1700 Sixth Street Berkeley, CA 94710 Permit No. 08622681 Expires: 7/22/2019	4	C	0	0	0	0	0	0		Libby Laboratories, Inc. was reclassified from a zero discharger to an NSCIU. Libby certifies annually that the facility does not use or generate regulated parameters. Pretreatment standards require annual confirmation by way of chemical analysis with a non-detect value for each regulated parameter.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	1	0	0	0	0	0		
Totals:			1	0	0	0	0	\$0		
Totals for Pharmaceuticals:			1	0	0	0	0	\$0		

TABLE 4F
Monitoring, Enforcement and Status: Non-Significant Categorical Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT				Comments
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees	Orders	
40 CFR 446 - Paint Formulating										
Precision Technical Coatings 1220 4th Street Berkeley, CA 94710 Permit No. 10614512 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Precision Technical Coatings certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Totals for Paint Formulating:			0	0	0	0	0	\$0		
40 CFR 464 - Metal Molding And Casting										
A B And I 7825 San Leandro Street Oakland, CA 94621 Permit No. 17300701 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, A B And I certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Mussi Artworks Foundry, LLC 729 Heinz Ave #10 Berkeley, CA 94710 Permit No. 08624073 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Mussi Artworks Foundry, LLC certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		
Pressure Cast Products 4210 E 12th Street Oakland, CA 94601 Permit No. 34314282 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Pressure Cast Products certified that their classification remains valid. They submitted certification statements and supplemental water balance.
	3	C	0	0	0	0	0	0		
	2	C	0	0	0	0	0	0		
	1	C	0	0	0	0	0	0		
Totals:			0	0	0	0	0	\$0		

TABLE 4F
Monitoring, Enforcement and Status: Non-Significant Categorical Industrial Users

CATEGORY Facility	Qtr (1)	Compl. Status (2)	EBMUD Inspections	SAMPLES		ENFORCEMENT				Comments	
				EBMUD	IU	No. of Viols.	No. of NOVs (3)	Viol. Fees	Orders		
Sks Die Casting Machining 1849 Oak Street Alameda, CA 94501 Permit No. 50381881 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Sks Die Casting Machining certified that their classification remains valid. They submitted certification statements and supplemental water balance.	
	3	C	0	0	0	0	0	0			
	2	C	0	0	0	0	0	0			
	1	C	0	0	0	0	0	0			
Totals:			0	0	0	0	0	\$0			
Totals for Metal Molding And Casting:			0	0	0	0	0	\$0			
40 CFR 467 - Aluminum Forming											
Berkeley Forge & Tool Inc. 1331 Eastshore Hwy Berkeley, CA 94710-1320 Permit No. 10614524 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Berkeley Forge & Tool Inc.certified that their classification remains valid. They submitted certification statements and supplemental water balance.	
	3	C	0	0	0	0	0	0			
	2	C	0	0	0	0	0	0			
	1	C	0	0	0	0	0	0			
Totals:			0	0	0	0	0	\$0			
Coulter Forge Technology 1494 67th Street Emeryville, CA 94608 Permit No. 07314653 Expires: 12/31/2014	4	C	0	0	0	0	0	0		In 2014, Coulter Forge Technology certified that their classification remains valid. They submitted certification statements and supplemental water balance.	
	3	C	0	0	0	0	0	0			
	2	C	0	0	0	0	0	0			
	1	C	0	0	0	0	0	0			
Totals:			0	0	0	0	0	\$0			
Totals for Aluminum Forming:			0	0	0	0	0	\$0			
Totals:			21	3	1	1	0	0	\$0		

TABLE 4F
Monitoring, Enforcement and Status: Non-Significant Categorical Industrial Users

(1) Calendar Quarter (4th Qtr is Oct - Dec)

(2) Compliance Status Key:	C	-	Consistent Compliance
	IC	-	Inconsistent Compliance
	SNC	-	Significant Non-Compliance
	CL	-	Closed
	T	-	Terminated
	RC	-	Reclassified
	RI	-	Reissued
	U	-	Unknown

(3) All violations are included in NOVs

New	-	A Minimization, Estimation or Pollution Prevention permit which was not in effect during the previous reporting year.
CL (Closed)	-	A facility which no longer operates in the EBMUD SD-1 service area.
T (Terminated)	-	A permit which ceases to be in effect due to reasons such as business closure, business name change or regulated process change. In exceptional cases, the Director may terminate a permit for violation of the permit terms and conditions or the EBMUD Ordinance No. 311A-03 provisions. A discharger who has a permit terminated by the Director is required to apply for a new permit within 30 days of notice of termination.
RC (Reclassified)	-	An IU regulated under a Minimization (federal categorical or local), Estimation or Pollution Prevention permit which becomes regulated under a different one of these permits.
RI (Reissued)	-	Existing Pollution Prevention permits which are renewed.

5. POLLUTION PREVENTION PROGRAM

This chapter includes EBMUD's annual Pollution Prevention (P2) Report for the January 1, 2014 through December 31, 2014 reporting period. The report was prepared in accordance with the District's NPDES Permit No. CA0037702 adopted on March 10, 2010, under Order No. R2-2010-0060.

5.1 *Pollution Prevention Program Highlights for 2014*

EBMUD continued P2 activities for its commercial and residential customers. Highlights for 2014 are noted in the table below.

Highlights
<p>Copper</p> <ul style="list-style-type: none">• A section on copper-free guidelines for pools was developed for the Residential P2 page of the District's website at https://www.ebmud.com/water-and-wastewater/pollution-prevention/maintaining-copper-free-pools-spas-and-fountains and posted in January 2014.
<p>FOG</p> <ul style="list-style-type: none">• Continued to provide assistance to EBMUD's seven satellite collection system agencies in accordance with their fats, oil, and grease (FOG) program requirements and ensured consistency of program activities.• Conducted hotspot response to FOG-related SSOs and blockages reported by EBMUD's satellite agencies. There were 127 grease blockage reports submitted; of these, 30 were identified as caused or contributed to by food service establishments (FSEs). Hotspot investigations have resulted in issuing numerous GCD installation and maintenance requirement letters. GCD installations and improved grease interceptor pump out and maintenance at FSEs have occurred following inspections and investigations.• Continued gravity grease interceptor inspections; provided enforcement support to satellites, hotspot status reporting, database management, as well as residential and commercial outreach.• Completed the 2014 Regional FOG Program Annual Report for satellite use. This comprehensive report documents all of the efforts and progress, over the course of the year to address FOG-related issues service area-wide.• Continued availability of residential FOG drop-off at EBMUD's MWWTP, the El Cerrito Recycling Center and the Oakland Whole Foods grocery store.• Continued promotion of Richmond's West County Resource Recovery facility and Central Contra Costa Sanitary District's household hazardous waste facility as locations that accept residential FOG. All three facilities' collected cooking oil is recycled into a biofuel.• Presented information about FOG issues and distributed FOG outreach materials at local outreach events for restaurants and residents, including the annual Solano Stroll, Alameda Earth Day, the City of Oakland Earth Expo event, and Healthy Living Festival at the Oakland Zoo.• Developed a new outreach tool (spin wheel) for community events. This new spin wheel, which contains multi-pollutant information/questions, including FOG, attracts events' visitors, enhances their engagement and learning experience.• Developed a new "Think Before You Flush" brochure to address wipes/"disposable" consumer products, which often come in tandem with FOG and

Highlights

cause chronic problem, including blockages, SSO, expensive repair and maintenance issues in the sanitary sewer systems. See Exhibit 5-A.

Delivered over 600 personalized FOG and “wipes/trash” related personalized letters and “Think Before You Flush” brochures (in addition to residential FOG brochures) to residents in identified hotspot areas.

- Continued holiday FOG partnership with Baykeeper, distributing information for residents on the Baykeeper website as well as on EBMUD’s website.
- Continued holiday FOG outreach to 15 local independent retailers, including Whole Foods, Piedmont Grocery, Ace Hardware, Trader Joe’s, and other stores in EBMUD’s service area.
- Door hangers with scrapers and residential outreach brochures were distributed to 4,665 residents in areas associated with SSOs/blockages as well as for preventative education. This was a 37% increase over last year’s residential outreach efforts.
- Total number of customer inquiries for free FOG scrapers via the EBMUD on-line store and the EBMUD phone hotline was over 700, which is a slight decrease from 966 in 2013.
- Continued enhancement of FOG program database to increase program effectiveness.
- Continued use of a data-driven automatic notification system that alerts staff of overloaded gravity grease interceptors (GIs) which require immediate follow-up with FSEs. This system facilitates routine maintenance of GIs and on-going compliance of FSEs.
- Utilized the hotspot density analysis map created for the City of Oakland in on-going effort to streamline the decision-making process for residential FOG outreach.
- Continued maintenance and updates for various EBMUD web pages relating to residential FOG which included www.ebmud/cleanbay and the EBMUD-FOG residential disposal web page, <https://www.ebmud.com/environment/pollution-prevention/residential-cooking-oil-and-grease-drop-program> with an added link on resources page to www.baywise.org website for regional FOG disposal information.

Pharmaceutical

- Continued the *Keep the Bay off Drugs* customer outreach campaign through March 2014. See Exhibits 5-B and 5-C.
- In 2014, the District collected over 5,150 pounds of unwanted/expired pharmaceuticals through several one-day events and nine permanent collection sites.
- Continued support of Alameda County Safe Medicine Disposal Ordinance through membership in the Alameda County MEDS Coalition.

PCBs

- Continued to implement PCBs sampling and analyses requirements for dewatering sites and to conduct influent and effluent monitoring to track regulatory compliance.

New P2 Category

- The District continued to evaluate the feasibility of adding long-term care facilities as a potential P2 category, focusing on rags, trash, and wipes.

5.2 Description of SD-1 Treatment Facilities and Service Area

The EBMUD WWTP facilities and its service area are described in Section 1.2 of this Annual Report.

5.3 Current Pollutants of Concern

The table below presents the pollutants of concern for EBMUD and the basis for this determination. The following sections discuss EBMUD's efforts to address these pollutants, as well as other emerging contaminants (e.g., pharmaceuticals and pesticides).

Pollutants of Concern and Additional Target Constituents	Basis for Determination
Mercury	Permit No. CA0037702, Order No. R2-2007-0077 – TMDL
FOG	Potential to cause sanitary sewer overflows; provide support to regional satellite agencies
Copper	Permit No. CA0037702 - Copper Action Plan
Cyanide	Permit No. CA0037702 - Cyanide Action Plan
PCB	Order No. R2 2012-0096 - TMDL

5.4 Source Identification and Reduction Programs

This section details EBMUD's approach to identifying sources for pollutants of concern, in addition to developing effective control measures.

5.4.1 Mercury

Commonly identified sources of mercury include dental facilities, educational institutions, electrical/electronic sources, hospitals/medical facilities, veterinary clinics, biological and pharmaceutical laboratories, and residential dischargers. EBMUD has focused its source reduction efforts on dental, educational institutions, medical, and residential sources.

5.4.1.1 Mercury Source Reduction Tasks and Timelines

During 2014, EBMUD continued its focus on dental facilities and hospitals. The following are specific tasks implemented in 2014 and/or scheduled for 2015.

➤ Mercury Source Reduction in Dental Facilities

- Dental Facilities Pollution Prevention Permit
 1. Continued to regulate amalgam waste through the permit terms and conditions, including the annual report requirement documenting the handling of amalgam waste for the 12-month reporting period.
 2. Continued to identify new facilities and maintain the Dental Facilities Permit database.
 3. Continued to determine facilities' compliance with the existing permit requirements, including the installation and maintenance of an ISO 11143 Standard-certified amalgam separator and the handling of amalgam waste and spent fixer solution.
 4. Continued to provide support on dental amalgam issues to Bay Area Pollution Prevention Group (BAPPG) and agencies developing/implementing new programs.
 5. In 2015, plan to reissue permit with new requirements including a one-time cleaning/replacement of p-traps impacted with amalgam waste. A self-certification report will be required documenting the p-

traps cleaning and the appropriate handling of the generated waste. The permit will continue to require the installation of an amalgam separator (new facilities) and ongoing maintenance, in addition to the annual self-certification report, documenting/reporting the handling of amalgam waste and spent fixer.

➤ **Mercury Source Reduction in Educational Institutions**

The District's *Mercury Reduction Program for Educational Institutions* (Program) was developed through a joint District and University of California (UC) pilot project implemented at the UC Berkeley campus. The project, partially funded through an EPA P2 grant, was conducted from 2002 through 2005. The District documented the successful pilot project in a template, available at www.ebmud.com, for agencies that want to implement a similar program. The template includes established resources such as checklists to facilitate a mercury source inventory and a list of non-mercury alternatives.

The District implemented a service area-wide program from 2005 through May 2010, partnering with two colleges and six schools/school districts within SD-1 wastewater service area. Over 500 lbs of mercury waste, including laboratory thermometers, small measuring devices, and mercury-containing chemicals, was removed from the environment.

EPA recognized the District's Program through the agency's *National Partnership for Environmental Priorities' Mercury Challenge Program*: a regional award in June 2010, followed by a national leadership award in October 2011.

Currently the Program is inactive as Educational Institutions that required assistance with mercury disposal have already participated. The District will reactivate the Program if there is a need in the future. Program information and tools that were developed are available on the District's website.

➤ **Residential Mercury Thermometer Exchange Program**

No mercury thermometers were collected in 2014. The District will continue to accept mercury thermometers if requested, but is no longer conducting exchange events given the reduced need in the community.

➤ **Mercury Source Reduction at EBMUD**

EBMUD has an ongoing mercury-containing device recycling program for its facilities. In 2014, a total of 18,836 pounds of universal waste was recycled, including 3,045 pounds of fluorescent lamps. The following table details the waste type and quantities recycled:

	Fluorescent Lamps	HID Lamps	Pb Acid Batteries	Alkaline Batteries	E-Waste	Non-PCB Ballast	Lithium Ion Batteries	All Recycled Sources
Total lbs	3,045	463	7,671	2,963	4,157	385	152	18,836

5.4.1.2 Effectiveness Measures and Progress for Mercury Reduction Programs

Effectiveness Measure for Mercury Source Control & Reduction	Progress in Mercury Source Control & Reduction
<ul style="list-style-type: none"> • Percent of dentists who certify that they have installed an amalgam separator. • Percent of dentists who certify that they are handling their mercury waste appropriately. • Number of schools and colleges that participated in EBMUD's <i>Mercury Reduction Program</i>. • Number of pounds of mercury waste collected from local schools and colleges since the joint UC Berkeley pilot project. • Number of hospitals and other sources who have begun implementing BMPs to reduce mercury. • Number of mercury thermometers collected during residential exchange events. • Reduction in influent, effluent, biosolids mercury massing loading at main wastewater treatment plant. 	<ul style="list-style-type: none"> • Approximately 95% certification of amalgam separator installation. • Approximately 95% certification of appropriate handling of mercury waste. • Two colleges, one private/one public, and six local school districts participated. • Over 500 pounds of mercury waste collected from local schools and colleges since the pilot project with UC Berkeley. • All five of EBMUD's hospitals (total of seven hospital campuses) have conducted facility audits and are "virtually mercury free." • Accept mercury thermometers on an as-needed basis. Demand has decreased significantly over the past two years. • Significant reductions have been measured in the influent and biosolids (Figure 5-E and Tabke 2-D).

5.4.1.3 Additional Achievements in Mercury Reduction Programs

- Uploaded mercury program information on EBMUD's website
 - Program development templates and permit requirements for mercury source reduction in dental facilities
 - Template and related information for EBMUD's *Mercury Reduction Program for Educational Institutions*

5.4.2 Fats, Oil, and Grease (FOG)

The Regional FOG Control Program includes residential and commercial components to address FOG-related sanitary sewer overflows (SSOs) and blockages (hotspots) in the sanitary sewer collection systems. In response to FOG-related SSOs and blockages, the program implements field investigations. This may include FSE inspections, camera investigations, and/or gravity grease interceptor inspections in FOG related SSO and blockage areas.

Collection system agencies within EBMUD's wastewater service area report FOG-related SSOs and blockages to EBMUD. EBMUD staff determine whether the blockages are in a commercial drainage basin, and if so, EBMUD staff inspect the FSEs in the basin. Those FSEs that generate grease and are found to cause or contribute to a blockage or SSO are required to install grease control device (GCD). FSEs with existing grease interceptors, which

are designed to be pumped by a licensed grease hauler, are required to increase pumping frequencies of their grease interceptors as needed.

As part of the Regional FOG Control Program, EBMUD performs routine gravity grease interceptor inspections in non-hotspot areas; provides enforcement support for agencies; reports all work activities and progress in quarterly hotspot reports; provides routine database management with annual updates to remove old or outdated data and update database with new and current FSE information; and conducts commercial and residential FOG outreach. EBMUD identifies priority areas for targeted residential outreach, distributes outreach materials in identified areas, and reports investigation results to agencies.

Over the last ten years, EBMUD has conducted outreach to businesses, universities and residents, both throughout the year and during the holidays. EBMUD continues to implement multi-lingual targeted outreach in residential areas that have SSOs and blockages. In addition, EBMUD provides support to the BAPPG's FOG holiday outreach efforts and partners with Baykeeper to educate residents about preventing sewage backups caused by FOG.

5.4.2.1 FOG Source Reduction Tasks and Timeline

In 2014, EBMUD conducted the tasks summarized below.

➤ Commercial FOG Program

- Continued hotspot investigation procedures for grease-related SSOs and blockages reported by EBMUD's wastewater service area agencies. There were 127 grease blockage reports submitted, with 30 being identified as being caused by or contributed to by FSEs.
- Continued to implement a Grease Generating Capability Checklist to record findings during FSE inspections and support the decision-making process pertaining to GCD requirements.
- Continued to implement the agencies' requirements and provide enforcement support to agencies for the installation of GCDs and grease interceptor pumping at facilities shown to cause or contribute to FOG related SSOs or blockages.
- Continued field inspections at FSEs with gravity grease interceptors to document compliance and ensure sufficient cleaning and maintenance of grease interceptors.
- Continued to provide quarterly hotspot progress reports to individual collection system agencies.
- Continued to provide the Regional FOG Program Annual Report to collection system agencies in EBMUD service area to document all of the efforts and progress over the course of the year, service-area-wide.
- Continued to maintain a FOG control database, integrate FOG database with GIS capabilities, and add new functions to enhance the user experience. Completed the 2014 annual FOG database update.
- Continued collaboration with the environmental community to promote FOG outreach for FSEs. Presented information about FOG controls, sustainable food service establishment practices and distributed commercial FOG outreach materials at the "Greener Restaurants" seminar organized by the Food Service Technology Center and StopWaste.org.
- Participated in Bay Area-wide collaboration efforts on FOG issues. Examples of FOG-related outreach documents developed in collaboration with BAPPG and other stakeholders are available at www.bappg.org.
- Continued to update and maintain the EBMUD commercial FOG web page: www.ebmud.com/our-water/wastewater-treatment/fats-oils-and-grease

➤ Residential FOG Program

- Residential used cooking oil collection program (ongoing)
 - Continued availability of residential FOG drop-off at EBMUD's MWWTP. Continued promotion of Richmond's West County Resource Recovery facility and Central Contra Costa Sanitary District's household hazardous waste facility through outreach about their acceptance of residential FOG. All three facilities' recycle the collected cooking oil into a biofuel.
 - Continued support of two residential cooking oil drop-off sites within the EBMUD service area at a recycling center and a local biofuel facility in Berkeley.
 - EBMUD facilitated the placement of another bin outside our wastewater service area at the Whole Foods store in Lafayette.
 - Collected over 2,113 gallons of used cooking oil and grease from residents at EBMUD's MWWTP, El Cerrito Recycling Center and the Oakland Whole Foods residential cooking oil drop-off locations.
 - As in previous years, updated and expanded outreach for Residential FOG Collection Program:
 - With Baykeeper's help, continued holiday outreach to 15 local independent retailers of turkey fryers and oil jugs.
 - Distributed 706 FOG scrapers via the EBMUD on-line store and the EBMUD phone hotline, primarily in response to *Customer Pipeline* newsletter outreach.
 - Distributed a total of 4,665 door hangers in three languages (English, Chinese, and Spanish) to residents within EBMUD's wastewater service area. Each door hanger contained a FOG scraper with message to encourage scraping pots and pans before washing, and residential outreach brochure on how to prevent grease-related issues.
 - Continued to update and maintain the EBMUD residential FOG information on our residential web page: www.ebmud.com/cleanbay
- Developed a new "Think Before You Flush" brochure to address wipes/"disposable" consumer products, which often come in tandem with FOG and cause chronic problem, including blockages, SSO, expensive repair and maintenance issues, in the sanitary sewer systems. In 2014, delivered over 600 personalized FOG and "wipes/trash" related personalized letters and "Think Before You Flush" brochures (in addition to residential FOG brochures) to residents in identified hotspot areas.
- Updated and maintained the EBMUD-FOG residential disposal web page, http://www.ebmud.com/wastewater/residential_pollution_prevention/, with added link on resources page to www.baywise.org website for regional FOG disposal information.
- Continued distribution of residential FOG outreach materials at community events, including Solano Stroll, the City of Oakland Earth Expo, Alameda Earth Day events, and Healthy Living Festival at the Oakland Zoo.

5.4.2.2 Effectiveness Measures and Progress for FOG Programs

Residential/ Commercial	Effectiveness Measure for FOG Source Control & Reduction	Progress in FOG Source Control and Reduction
Both	<ul style="list-style-type: none"> • Collaborate with collection system agencies to abate grease-related SSOs and blockages in community sewers. • Obtain hotspot reports from collection system agencies. 	<ul style="list-style-type: none"> • On-going face-to-face meetings with collection system agency staff for program development. • Customized (per individual agency) approved GCDs. • Streamlined hotspot investigation process by implementing a grease generating capability trigger for GCD requirements. • Over 1,050 hotspot reports received to date, follow-up ongoing.

Residential/ Commercial	Effectiveness Measure for FOG Source Control & Reduction	Progress in FOG Source Control and Reduction
	<ul style="list-style-type: none"> Expand outreach efforts by including FOG-oriented outreach in newsletters and other outreach vehicles of a wide range of stakeholders. 	<ul style="list-style-type: none"> Outreach vehicles include: <ul style="list-style-type: none"> - Community/City newsletters/websites - EBMUD's <i>Customer Pipeline</i>, and website - Community events
Commercial	<ul style="list-style-type: none"> Inspect FSEs in hotspot areas as part of the hotspot response procedures. Inspect FSEs with gravity grease interceptors to ensure proper maintenance and to prevent FOG-related issues. Ensure FSEs install and properly maintain GCDs. 	<ul style="list-style-type: none"> Conducted approximately 186 FSE inspections in 2014 that included over 50 gravity grease interceptor (GI) inspections which resulted in improved GI pump out and maintenance at FSEs. Over 70 GCDs requirement letters were delivered in 2014 requiring FSEs to either install approved GCDs or maintain already existing grease traps. Communities also require GCDs for new or remodeled FSEs.
Residential	<ul style="list-style-type: none"> Number of local stores conducting FOG holiday outreach. Number of door hangers providing residential "hotspot" outreach to targeted areas. Number of FOG scrapers requested via EBMUD on-line store and phone hotline. Increase in FOG scrapers requests and FOG-related information inquiries as a result of specific outreach efforts. Number of newly established residential cooking oil drop-off sites. Number of gallons of residential cooking oil collected at residential collection bins. 	<ul style="list-style-type: none"> 15 local stores participated. This was an increase compared to 2013, in which 13 local stores participated. 4,665 door hangers with FOG scrapers and residential outreach brochures were distributed in hotspot areas as well as for preventative measures. This was a 40% increase compared to 2013 in which 3,407 door hangers were delivered. 706 FOG scrapers (compared to approximately 966 in 2013) were distributed for free via the EBMUD on-line store (free) and the EBMUD phone hotline. Hotline inquiries for FOG scrapers increased from 3 to 12 times the normal volume during the weeks when the City of Oakland's multi-family residential postcards, which had a reference to EBMUD's hotline, were delivered to over 60,000 garbage customers. A new residential cooking oil drop-off location was established in Lafayette. Over 2,113 gallons of residential cooking oil collected in residential collection bins was diverted from the collection system.

5.4.2.3 Additional Achievements in FOG Programs

- Provided support to the City of Oakland staff to develop a FOG outreach message for the City's FOG brochure (Exhibit 5-D), FOG magnet (Exhibit 5-E), and postcard for property managers of multi-family dwellings in Oakland (exhibit 5-F). During the weeks when the postcards were mailed out, EBMUD's hotline inquiries for FOG scrapers increased from 3 to 12 times the normal volume.
- Continued enhancement of FOG program database to increase program effectiveness. Developed and implemented an automatic notification system to flag gravity GIs that were found to be overloaded. An automatic notification facilitates prompt follow-up by staff with the FSEs in question.
- Provided data for hotspot density analysis GIS map to the City of Oakland staff for them to facilitate their sanitary sewer maintenance work and focus on areas of high accumulations of FOG in the sanitary sewer system.
- Developed a new outreach tool (spin wheel) for community events. This new spin wheel, which contains multi-pollutant information/questions, including FOG, attracts events' visitors, enhances their engagement and learning experience.
- Developed a new "Think Before You Flush" brochure to address wipes/"disposable" consumer products, which often come in tandem with FOG and cause chronic problem, including blockages, SSO, expensive repair and maintenance issues in the sanitary sewer systems. See Exhibit 5-A.
- Developed and distributed residential FOG and "disposable" wipes/trash articles for residents of large apartment complexes and long term care facilities. See Exhibit 5-G. Developed and distributed FOG articles to local media sources during the holiday months. See Exhibits 5-H, 5-I, and 5-J.

5.4.3 Copper

Copper is found in tap water from corrosion. In addition, known commercial and industrial sources of copper identified include vehicle repair shops, printing shops, radiator shops, electroplating/metal finishing facilities, transportation equipment cleaning and boatyards. EBMUD issues permits and conducts inspections, as needed, to ensure ongoing implementation of pretreatment requirements for facilities in the electroplating, metal finishing, and transportation equipment cleaning categories. EBMUD also issues P2 permits requiring implementation of permit-specific BMPs for facilities in the vehicle repair, printing, radiator, and boatyard business types.

Copper loading to the EBMUD MWWTP initially decreased with the issuance of the permit types listed above and has remained approximately the same in the years after, as shown in Figure 5-C. The total copper loading to EBMUD's WWTP was 16.678 kg/day in 2014. EBMUD has initiated a Copper Action Plan, described below, to address overall copper contributions and control.

Element	Description	Deadline	Status
(1) Review Potential Copper Contributors	The Discharger shall submit an inventory of potential copper sources to the wastewater treatment plant.	July 1, 2010	Submitted in the 2010 Annual Report.
(2) Implement Copper Control Program	The Discharger shall submit a plan for, and begin implementation of, a program to reduce copper discharges identified in Task (1) consisting, at a minimum, of the following elements:	February 28, 2011, with 2010 Annual P2 Report.	
	i. Provide education and outreach to the public (e.g. focus on proper pool and spa maintenance and plumbers' roles in reducing corrosion).		<ul style="list-style-type: none"> • Created a <i>Maintaining Copper-free Pools, Spas and Fountains</i> brochure (2012); identified over 1700 public and private

Element	Description	Deadline	Status
			<p>pool owners, including pool maintenance companies; mailed brochures to each.</p> <ul style="list-style-type: none"> • Supported BAPPG to develop a Fact Sheet for Maintenance Tips for 'Pools, Spas and Fountains'
	ii. If corrosion is determined to be a significant copper source, work cooperatively with local water purveyors to reduce and control water corrosivity as appropriate, and ensure that local plumbing contractors implement best management practices to reduce corrosion of pipes.		The aggressive nature of EBMUD's source water is a source of copper to wastewater influent. EBMUD already adjusts the pH of its water to reduce its aggressiveness. EBMUD Wastewater will continue to work collaboratively with our intra-agency colleagues to identify ways to reduce copper due to source water.
(2) Implement Copper Control Program	iii. Educate plumbers, designers, and maintenance contractors for pools and spas to encourage best management practices that minimize copper discharges.		Outreach conducted on an ongoing basis through BAPPG.
(3) Implement Additional Measures	If the Regional Water Board notifies the Discharger that the three-year rolling mean dissolved copper concentration of Central San Francisco Bay exceeds 2.2 ug/L, then the Discharger shall evaluate the effluent copper concentration trend. If the trend is increasing, within 90-days of the notification, the Discharger shall develop and begin implementation of additional measures to control copper discharges, and shall report annually on the progress and effectiveness of measures taken together with a schedule for measures to be taken in the next 12 months.	Report in Annual P2 Report starting with the report due after the notification.	SFEI analyzed available RMP data and determined that the copper triggers for additional measures were not exceeded, so no further actions are required at this time. Please see BACWA letter to RWQCB dated January 17, 2014.
(4) Studies to Reduce Copper Pollutant Impact Uncertainties	The Discharger shall conduct or cause to be conducted studies to investigate possible copper sediment toxicity and studies to investigate sublethal effects on salmonids. Specifically, the Discharger shall include the manner in	With Annual P2 Report due February 28, 2011.	EBMUD through BACWA is funding RMP to better understand the impacts of copper on salmonids. See letter from BACWA to RWQCB dated January 17,

Element	Description	Deadline	Status
	which the above will be accomplished and describe the studies to be performed with an implementation schedule. To satisfy this requirement, dischargers may collaborate and conduct these studies as a group.		2014, Exhibits 5-K and 5-L.
(5) Report Status of Copper Control Program	Submit a report to the Regional Water Board documenting implementation of the copper control program.	Annually with P2 report due February 28	Ongoing

Copper Action Plan Inventory of Potential Copper Contributors

#	Discharger	Service Address	Industry Category
1	E-D Coat, Inc.	715 4th Street, Oakland	Electroplating
2	Gold Seal Plating	3125 E 7th Street, Oakland	Electroplating
3	Johnson Plating	2526 Telegraph Avenue, Oakland	Electroplating
4	Monsen Plating Silversmith	3370 Adeline Street, Berkeley	Electroplating
5	Metalco, Inc	1475 67th Street, Emeryville	Electroplating
6	Melrose Metal Finishing, Inc.	10222 Pearmain Street, Oakland	Electroplating
7	Boardworks	499 Embarcadero, Oakland	Metal Finishing
8	Lawrence Berkeley National Laboratory Bld. 77	1 Cyclotron Road, Berkeley	Metal Finishing
9	Able Metal Plating, Inc.	932 86th Avenue, Oakland	Metal Finishing
10	Electro-Coatings Of California	893 Carleton Street, Berkeley	Metal Finishing
11	Mercurius Company	3224 Brookdale Ave, Oakland	Metal Finishing
12	Lucasey Manufacturing	2744 E 11th Street, Oakland	Metal Finishing
13	Fryer Industries, Inc./dba Dougco	1073 34th Street, Oakland	Metal Finishing
14	Scientific Platers, Inc.	9809 Kitty Lane, Oakland	Metal Finishing
15	Rolls-Royce Engine Svcs	7200 Earhart Road, Oakland	Metal Finishing
16	A B And I	7825 San Leandro Street, Oakland	Metal Molding and Casting
17	Mussi Artworks Foundry, LLC	729 Heinz Ave #10, Berkeley	Metal Molding and Casting
18	Pacific Steel Casting	1333 Second Street, Berkeley	Metal Molding and Casting
19	Pressure Cast Products	4210 E 12th Street, Oakland	Metal Molding and Casting
20	Sks Die Casting Machining	1849 Oak Street, Alameda	Metal Molding and Casting
21	AC Transit - Emeryville	1177 47th Street, Emeryville	Local and Suburban Transit
22	AC Transit - International	10626 International Blvd., Oakland	Local and Suburban Transit
23	AC Transit – Seminary	1100 Seminary Avenue, Oakland	Local and Suburban Transit
24	Union Pacific Railroad	1851-B 5th Street, Oakland	Railroad Transportation
25	Oakland International Airport	Doolittle & Airport Drive, Oakland	Air Transportation
26	Berkeley Forge & Tool Inc.	1331 Eastshore Hwy, Berkeley	Aluminum Forming
27	Coulter Forge Technology	1494 - 67th Street, Emeryville	Aluminum Forming
28	Custom Alloy Scrap Sales	2730 Peralta Street, Oakland	Non-Ferrous Metals
29	Precision Coatings Corp.	1220 4th Street, Berkeley	Paint Formulating
30	NRC Environmental Services, Inc.	Wharf 2 Ferry Point, Alameda	Centralized Waste Treatment
31	Harkrader Trucking, Inc.	9957 Medford Ave, Oakland	Transportation Equipment

#	Discharger	Service Address	Industry Category
			Cleaning
32	Aramark Uniform Services	330 Chestnut Street, Oakland	Industrial Laundry
33	Longview Fibre Paper and Packaging, Inc.	8511 Blaine Street, Oakland	Pulp and Paper Products/Printing

In addition to the individual industrial accounts listed, EBMUD permits and regulates a wide variety of commercial facilities. The business types that are potential contributors of copper are listed below. A current list of businesses is available upon request.

Business Type	Number of Facilities
Boatyards	6
Vehicle repair facilities	624
Vehicle washing facilities	78
Radiator facilities	5
Printing facilities	68

In the EBMUD wastewater service area there are numerous community, institutional and private pools as well as pool maintenance and design companies. EBMUD mailed outreach information on maintaining copper-free pools, spas and fountains in 2013. A distribution list can be obtained upon request.

5.4.3.1 Copper Source Reduction Tasks and Timeline

For known commercial and industrial sources of copper identified, EBMUD conducts the following source reduction activities:

- Maintain permits for existing facilities and issue new permits to new facilities.
- Conduct inspections.
- Conduct outreach using brochures developed by EBMUD, BAPPG, DTSC, Green Business Program and other agencies while conducting facility inspections.

In addition to these activities, the following business-specific activities were undertaken.

- **Copper Source Reduction in Boatyards**
 - Developed BMPs for boatyards (2011).
 - As a member of a Technical Advisory Committee that includes the Department of Boating & Waterways; California Coastal Commission; Department of Pesticide Regulations; San Francisco Department of Public Health; Institute for Research and Technical Assistance; industry representatives; and Baykeeper, EBMUD participated in development of the Boatyards Pollution Prevention Recommended Practices Toolkit for controlling pollutants in wastewater discharges for the State of California. The toolkit materials were finalized and released in 2013.
 - In 2013, EBMUD renewed pollution prevention BMP-based permits for all boatyards in its service area.
- **Copper Source Reduction in Plumbing**
 - Supported BAPPG efforts to conduct outreach to Bay Area plumbers' unions, contractors, building inspectors and colleges on proper copper pipe installation.

5.4.3.2 Effectiveness Measures and Progress for Copper Source Control and Reduction

Effectiveness Measure for Copper Source Control & Reduction	Progress in Copper Source Control & Reduction
<ul style="list-style-type: none"> Document of P2 efforts by industrial facilities that are actual or potential dischargers of copper. Issue and/or maintain P2 permits to dischargers with potential to discharge copper. 	<ul style="list-style-type: none"> Pretreatment permits include terms for P2 practices; 20 categorical IUs are zero dischargers P2 permit holders in compliance and implementing BMP requirements include: <ul style="list-style-type: none"> vehicle repair shops: seal floor drains printing shops: Eliminate or pretreat discharge of copper-containing solutions radiator repair shops: no process discharge boatyards: eliminate or pre-treat process discharge

5.4.4 Cyanide

The District has taken/is taking the following measures in response to the regional Cyanide Action Plan, required through Permit No.CA0037702. EBMUD does not have any cyanide contributors because all potential sources either do not use cyanide or are zero dischargers.

Element	Description	Deadline	Status
(1) Review Potential Cyanide Contributors	<p>The Discharger shall submit an inventory of potential contributors of cyanide to the wastewater treatment plant (e.g., metal plating operations, hazardous waste recycling, etc.).</p> <p>If no contributors of cyanide are identified, Tasks 2 and 3 are not required, unless the Discharger receives a request to discharge detectable levels of cyanide to the sanitary sewer. If so, the Discharger shall notify the Executive Officer and implement Tasks 2 and 3.</p>	July 1, 2010	Complete
(2) Implement Cyanide Control Program	<p>The Discharger shall submit a plan for, and begin implementation of a program to minimize cyanide discharges to the sanitary sewer system consisting, at a minimum, of the following elements:</p> <p>i. Inspect each potential contributor to assess the need to include that contributing source in the control program.</p> <p>ii. Inspect contributing sources included in the control program annually.</p>	February 28, 2010 - 2011 Annual P2 Report.	<p>Complete, see the Cyanide Action Plan below.</p> <p>Not required (no contributors of cyanide)</p>

Element	Description	Deadline	Status
	iii. Develop and distribute educational materials to contributing sources and potential contributing sources regarding the need to prevent cyanide discharges.		Not required (no contributors of cyanide)
	iv. Prepare an emergency monitoring and response plan to be implemented if a significant cyanide discharge occurs.		Not required (no contributors of cyanide, however, one had been drafted (see section 5.4.4.1))
(3) Implement Additional Measures	If the Discharger is notified by the Regional Water Board that ambient monitoring shows cyanide concentrations of 1.0 µg/L or higher in the main body of San Francisco Bay, then within 90 days of the notification, the Discharger shall begin taking actions to identify and abate cyanide sources responsible for the elevated ambient concentrations and report annually on these actions.	Report in Annual P2 Report starting with the report due after the notification	San Francisco Estuary Institute's analysis of available Regional Monitoring Program ambient water quality data show that the cyanide concentration trigger was not exceeded, so no further actions are required at this time.
(4) Report Status of Cyanide Control Program	Submit a report to the Regional Water Board documenting implementation of the cyanide control program.	Annually with P2 Reports due February 28	Ongoing

Cyanide Action Plan Inventory of Potential Cyanide Contributors

The following table includes EBMUD's list of facilities that may handle cyanide. Currently there are no cyanide contributors as detailed below:

Discharger	Service Address	Regulatory Category	Summary of Cyanide Use, "ZD" = zero discharger
E-D Coat, Inc.	715 4th Street, Oakland	Electroplating	Facility currently closed due to ongoing enforcement action
Metalco, Inc	1475 67th Street, Emeryville	Electroplating	No cyanide use
Gold Seal Plating	3125 E 7th Street, Oakland	Electroplating	ZD, cyanide waste offhauled
Johnson Plating	2526 Telegraph Avenue, Oakland	Electroplating	ZD, cyanide waste offhauled
Monsen Plating Silversmith	3370 Adeline Street, Berkeley	Electroplating	ZD, cyanide waste offhauled
Boardworks	499 Embarcadero, Oakland	Metal Finishing	No cyanide use
Lawrence Berkeley National Laboratory Bld. 77	1 Cyclotron Road, Berkeley	Metal Finishing	No cyanide use
Lucasey Manufacturing	2744 E 11th Street, Oakland	Metal Finishing	No cyanide use

Discharger	Service Address	Regulatory Category	Summary of Cyanide Use, "ZD" = zero discharger
Fryer Industries, Inc./dba Dougco	1073 34th Street, Oakland	Metal Finishing	No cyanide use
Scientific Platers, Inc.	9809 Kitty Lane, Oakland	Metal Finishing	No cyanide use
Electro-Coatings Of California	893 Carleton Street, Berkeley	Metal Finishing	ZD, cyanide waste offhauled
Melrose Metal Finishing, Inc.	10222 Pearmain Street, Oakland	Metal Finishing	ZD, cyanide waste offhauled
Able Metal Plating	932 86th Avenue, Oakland	Metal Finishing	ZD, no cyanide use
Mercurius Company	3224 Brookdale Ave, Oakland	Metal Finishing	ZD, no cyanide use
Pacific Galvanizing	715 46th Avenue, Oakland	Iron & Steel Mfg	ZD, no cyanide use
Bayer Corporation	4th & Parker Streets, Berkeley	Pharmaceutical	potential cyanide use, waste offhauled
Libby Laboratories, Inc.	1700 Sixth Street, Berkeley	Pharmaceutical	No cyanide use
Novartis	5401 Chiron Way, Emeryville	Pharmaceutical	No cyanide use

5.4.4.1 Cyanide Emergency Monitoring and Response Plan

The following steps are included in the District's Significant Cyanide Discharge Response Plan.

- A. EBMUD defines a significant cyanide discharge as influent 24 ug/L, based on the highest concentration at the main WWTP from 2010-2014. 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 applicable wastewater staff, including the Supervising Wastewater Control Representative, will be alerted through the District's email system.
- B. 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.
- C. If the cyanide source is identified, enforcement action may be taken against the facility.
- D. An incident summary report outlining the actions taken will be included in the District's subsequent Annual Pretreatment and P2 Report.

5.4.5 Polychlorinated Biphenyls (PCBs)

In 2014, EBMUD continued to conduct work with identified/controllable sources, implement PCBs sampling and analyses requirements for dewatering sites, and to conduct influent and effluent monitoring to track regulatory compliance.

5.4.6 Pharmaceutical Disposal

- EBMUD sponsors nine pharmaceutical collection sites within our wastewater service area. In 2014, we participated in two public pharmaceutical collection events.

- The Pharmaceutical Take-back Program has collected over 15,900 pounds of expired/unwanted pharmaceuticals since the program's inception in 2009. In 2014, EBMUD collected over 5,100 pounds of unwanted/expired medication.
- EBMUD continued to support the Product Stewardship Institute in their efforts to move Congressional legislation forward to reduce barriers for establishing pharmaceutical collection programs.
- EBMUD continued to support the Alameda County Safe Medicine Disposal Ordinance through membership in the Alameda County MEDS Coalition.
- EBMUD continued the *Keep the Bay off Drugs* campaign at 132 billboard and bus shelter locations throughout the wastewater service area. See Exhibits 5-B and 5-C.
- EBMUD developed and distributed P2 and pharmaceuticals outreach for residents of long term care facilities.

5.4.7 Pesticides

- As a member of BAPPG, EBMUD submitted comment letters on several EPA pesticide registration reviews and CA Department of Pesticide Regulation's pesticide re-registrations, including PHMB, Dichlobenil, Prallethrin, Bactiblock and Clothianidin. Comments were also submitted on the EPA's proposal for Endangered Species Act enhanced stakeholder input.
- EBMUD supports the *Our Water, Our World (OWOW)* program through BAPPG. The program's website offers alternatives to manage residential/garden pests, while protecting the environment. In addition, BAPPG/OWOW conducted various outreach activities including working with pesticide manufacturers to set up eco-friendly displays of less-toxic pesticide in Home Depot.
- EBMUD continues to sell its award-winning *Plants and Landscapes for Summer Dry Climates* book.
- EBMUD distributes "Grow It!" guides by request/at public events, which provide information on less-toxic pesticide alternatives. The booklet is also available for access on the EBMUD Clean Bay website.
- Per EBMUD's Sustainability Policy (Policy 7.05), the District contracts with certified pest control companies for its facilities and uses only non-restricted pesticides in its watershed.

5.5 Green Chemistry & Producer Responsibility

EBMUD continued to participate in initiatives at the state and national levels regarding green chemistry and producer responsibility. As noted in the previous section, EBMUD staff has continued to collaborate with the Product Stewardship Institute on pharmaceutical disposal and provided support for the San Francisco pharmaceutical product stewardship ordinance.

5.6 Outreach to EBMUD Employees

In 2014, EBMUD continued employee outreach to reduce the pollutants to the environment.

5.6.1 Employee Events & Activities

- EBMUD Earth Day Event for District Personnel - The 15th Annual Earth Day Event was held on April 23, 2014. This well-attended event included exhibitors from 8 District workgroups and 12 local agencies, environmental organizations and green vendors with the purpose of educating employees and visitors about sustainable practices and assisting them in expanding their Reduction, Recycling, Reuse, and Reclamation efforts. E-waste, reading glasses, clothing, and squeeze balls (for cerebral palsy patients) were collected for proper disposal, recycling and/or re-use.

- Bike to Work Month – The EBMUD Bike-to-Work Month team had 62 riders that pedaled a total of 8,195 miles during the month of May. Bicycling and other alternative commute programs help EBMUD reduce greenhouse gas emissions.
- Greenhouse Gas Reductions - The District continues to maintain a fleet of hybrid vehicles and implement energy efficiency programs such as biogas use to power the MWWTP and installation of solar panels and natural gas microturbines at EBMUD's Administration Building.
- During 2014, the District's Sustainability and Recycling Committee continued education efforts to encourage employees' proper use of the green compost and blue recycling bins. The Committee also participated in the RFP process to consolidate recycling and composting contracting for EBMUD facilities in Alameda County to ensure compliance with the Alameda County ordinance that requires facilities to compost and recycle items.
- District-wide Clean Up Event, which is a bi-annual event, took place during the week of August 25 - 29. The District collected 1,728 pounds of electronic and universal waste to be recycled. The next District-wide clean-up event will take place in 2016.
- EBMUD has an ongoing collection program for employee e-waste and spent batteries as part of its established Universal Waste Program.
- The District's Print Shop was recertified as a Green Business.
- The District's janitorial staff began a pilot project for dispensing/mixing third-party certified green chemicals for all-purpose cleaning. The goals of the pilot are to reduce packaging waste and material consumption, and reduce the potential chemical exposure to employees.

5.6.2 Employee Electronic Communications

EBMUD's Sustainability and Recycling Committee maintains a P2 website for employees that:

- includes information on Household Hazardous Waste Facilities; links to the residential P2 webpage on Bay-friendly car washing and household cleaning; and includes information on the proper disposal of residential FOG, household mercury-containing devices, and unwanted/expired medicine;
- encourages use of the public EBMUD website for industrial, commercial, and residential pretreatment and P2 information; and
- reports on the District's sustainable efforts to minimize waste, conserve energy/natural resources, promote long-term economic viability and support safety/well-being for employees, communities, and customers.

The Sustainability & Recycling Committee increased its focus on employee communication by publishing 19 articles on sustainability in *Splashes*, the District's internal newsletter, which reaches more than 2000 employees and retirees. Articles included:

- District facility energy conservation efforts
- Ongoing information regarding the composting and recycling programs
- Bike to Work activities
- 2014 Earth Day Fair and activities
- EBMUD's food waste to energy program
- Reducing fire fuel

5.7 Public Outreach Programs

The District's outreach efforts to industrial/commercial facilities, government agencies, non-governmental organizations, schools, and residential communities are detailed below and summarized in the following tables.

5.7.1 Outreach to Industrial/Commercial Facilities and Government Agencies

EBMUD provides relevant outreach material to its permitted industrial and commercial facilities. In addition, the District provides P2 information to other business categories to educate on specific pollutants of concern. Questions from non-permitted facilities regarding the handling of various wastes are frequently received through the Environmental Services Division Hotline (details are provided in Section 5.7.4).

EBMUD provides interagency coordination of pretreatment and P2 activities, including:

- Interagency referrals (i.e. the California Department of Toxic Substances Control; stormwater agencies) regarding pretreatment or P2 issues at facilities within EBMUD's wastewater service area
- Active participation in the California Water Environment Association (CWEA) Pretreatment, P2, and Stormwater Committees to focus on pretreatment and P2 education and training
- Active participation in the BAPPG on FOG, pharmaceuticals, pesticides, and other emerging contaminants
- Assistance to BACWA in providing comments to EPA on its pending dental amalgam regulations

5.7.2 Outreach to Non-governmental Organizations (NGOs)

EBMUD continued its partnerships with NGOs, including the following activities:

- Continued partnership with Baykeeper to address residential FOG
- Collaborated with the Product Stewardship Institute on reducing federal barriers to pharmaceutical disposal
- Engaged various NGOs to participate in annual Employee Earth Day event

5.7.3 Outreach to Schools

EBMUD provides teachers with P2 curricula upon request. In 2014, EBMUD staff presented P2 topics, including FOG and “disposable” wipes/trash to 2nd graders from a number of schools in Berkeley and Oakland.

5.7.4 Outreach to Residential Community

As previously noted, EBMUD conducted several residential FOG and pharmaceutical outreach events in 2014. The District 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 an alternate 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. In 2014, over 260 hotline inquiries were addressed by EBMUD staff. The District also communicates P2 information through its *Pipeline* publication bill insert, see Exhibit 5-M. Available P2 materials are mailed to customers upon request.

Additional P2 outreach efforts were curtailed by statewide drought issues which affected the continued use and development of graphics and slogans planned for more than 100 billboards and bus shelters as well as the EBMUD *Customer Pipeline* newsletter articles.

COMMUNITY EVENTS AND FESTIVALS IN 2014

Events	Audience	Time of Year	Benefit	Comments
EBMUD Earth Day	EBMUD Employees	April	Distributed FOG scrapers and Bay-friendly house cleaning tips. Education about the reduction of potential mercury and pharmaceutical sources to employees.	
Alameda Earth Day Festival	General public	April	Presented and distributed residential FOG outreach information. Education about pharmaceutical contamination; Grow It! and Clean It! guides were also distributed along with water conservation information.	Approximately 550 people visited EBMUD booth to learn about FOG issues.
Oakland Earth EXPO	General public	April	Education about and reduction of potential mercury, Information on FOG and pharmaceutical contamination was distributed along with Grow It! and Clean It! guides and water conservation information.	EBMUD shared a booth with the City of Oakland Sewer Maintenance Department to educate the event attendees about FOG issues. The City staff demonstrated their Aquatech sewer cleaning equipment to show the environmental impacts of FOG in the collection system.
Healthy Living Festival	Seniors	July	Education about pharmaceutical disposal.	Collected 97 lbs of unwanted/expired medication.
Albany Solano Stroll – Thermometer Exchange and Safe Medicine Disposal	General public	September	Education about and reduction of potential mercury and pharmaceutical contamination. Grow It! and Clean It! guides were also distributed along with water conservation information.	Distributed approximately 500 FOG scrapers, 500 residential FOG brochures,, approximately 450 Clean it Guides, and 40 homeowners guides to finding leaks. Approximately 545 people visited EBMUD's booth.
No Drugs Down the Drain	General public and EBMUD Employees	Year-round	Reduction of pharmaceutical disposal via the sewer or trash.	Nine sites collected over 5,100 pounds of unwanted/expired medication.

OUTREACH FOR BUSINESSES IN 2014

Activity	Audience	Time of Year	Benefit	Comments
P2 Inspections	Business Operators	Year-round		
P2 inspections	Business Operators	Year-round	Promote understanding of P2 permit conditions and BMPs	Inspectors provide outreach materials (some multi-lingual) and discuss BMPs with facility contacts.

P2 BROCHURES AND MATERIALS PRODUCED AND/OR DISTRIBUTED BY EBMUD

Material	Audience	Message	Comments
Dry Cleaner Newsletter	Permitted & Potential New Permittees	EBMUD phasing out dry cleaner permits for those who choose to eliminate perchloroethylene and other solvents, Information on safer spot cleaners and California Air Resources Board's financial assistance for replacing perc systems with non-toxic, non-smog forming systems.	Outreach to inform dry cleaners of success in decreasing amount of perc discharge to sanitary sewer over the past 20 years and EBMUD's planned permit changes and incentive to eliminate perc.
Vehicle Wash Signs	Vehicle Wash Facilities	"Discharge of Brake and Engine Cleaners to the Sewer is Prohibited"	Distributed during facility inspections as needed.
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 plants lists for this BAPPG project. EBMUD also tailored several pages to be East Bay-relevant.
"Think Before You Flush" Brochure	Residents	Emphasizes the message that 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 areas where there are residential grease "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.
FOG Residential Grease Tear-off Pad	Residents	"Recycle Cooking Oil"	Placed at some local grocery stores near oil displays at the holidays.
FOG Brochure and Door hanger	Residents	How to properly dispose of cooking FOG	Includes information on large quantity disposal (i.e. from turkey fryers) and use of kitchen scrap recycling programs. Door hanger has translated information in Spanish and Chinese.
FOG BMP Poster	Food Service Establishments (FSEs)	"FOG Friendly Tips" for food service establishments provide information about FOG and ways to prevent FOG issues. .	Distributed to FSEs in EBMUD service area.

P2 BROCHURES AND MATERIALS PRODUCED AND/OR DISTRIBUTED BY EBMUD

Material	Audience	Message	Comments
FOG Brochure	Food Service Establishments	“Controlling FOG in Food Handling Facilities” brochure: Frequently asked questions on FOG and FOG disposal	Distributed to FSEs in EBMUD service area.
FOG Flyer	Food Service Establishments	“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.
“Guidelines for Film Processors/Printers”	Photoprocessing and Printing Facilities	BMPs and treatment requirements to keep silver rich wastewater out of the sewer	These are distributed at time of P2 photo and printer permit issuance or renewal.
“P2 Practices for Automotive Facilities” (BMP brochure)	Businesses	P2 for vehicle service facilities	
EBMUD “Pollution Prevention Self-Audit Checklist”	Businesses	Good house keeping practices and Business-specific waste reduction practices	Covers 13 business categories modeled after DTSC HWM checklist
“The Tardy Twins Meet Polluto”	Schools	Wastewater treatment and source control	EBMUD comic-book format distributed to schools
P2 Bookmarks	Schools /General Public	EBMUD recognition	
Clean It! Guides	General Public	Household Waste Control, less toxic cleaning product use.	Guides are mailed to customers upon request or via online through Admail.
Maintaining Copper-Free Pools, Spas and Fountains	Public & 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.	

OTHER OUTREACH TOOLS AND RESOURCES

Activity	Audience	Message	Comments
Neighborhood and City Council Member listservs, All-employees email distribution	Various	Announcements of upcoming opportunities/events to dispose of household toxics conveniently and properly.	
Bill Inserts (<i>Pipeline</i>) Articles	General Public/ Businesses	Various P2/wastewater messages.	Each P2 article featured in the Pipeline Newsletter reaches 1.2 million customers.
Pollution Prevention web pages	Residential and Industrial/Commercial	P2 messages, residential page, industrial and commercial source control pages, events and FAQs.	
EBMUD Recycling Committee Intranet Web Page	EBMUD employees	P2/Waste reduction	Coordination with District recycling committee

OTHER OUTREACH TOOLS AND RESOURCES

Activity	Audience	Message	Comments
Environmental Services “Hotline” Information line	General Public/ Businesses	Program and general information.	Provides information on programs as well as answer specific questions/requests for information.
Billboard and Bus Shelter Posters	General Public	<i>Keep the Bay off Drugs</i> campaign	Three slogans were used at 132 locations

OUTREACH THROUGH INTER-AGENCY COORDINATION

Activity	Audience	Message	Comments
Regional FOG Disposal Website www.baywise.org	General Public	“Cooking oil and grease can clog plumbing and cause sewage backups into your home, neighborhood streets and even San Francisco Bay. Prevent backups by disposing of cooking oils and grease by going to baywise.org to find a local drop-off.	EBMUD staff continued to maintain and update baywise.org
www.baywise.org (also .info)	General Public	Web portal for accessing Bay-related links and information	EBMUD staff continued to update, improve and streamline the Baywise.org website. EBMUD, Palo Alto and Mountain View Sanitation District staff maintained the Baywise.org website.
Copper Plumbing Outreach	Plumbers’ unions and plumber/contractor courses	BMPs for reducing copper pollution from plumbing, i.e. correct soldering techniques	Coordinated through BAPPG.
Univision Spanish Radio Outreach (sponsored by BAPPG)	Spanish customers	Residential FOG public service announcement and ads	Reaches the largest Spanish population in the Bay Area. Timed at the Thanksgiving and winter holidays when turkey fryers used and other rich foods are prepared.
<i>Our Water Our World</i>	General Public	Less-toxic pest control.	Support of program through BAPPG.
Asian Language FOG Outreach	Speakers of Mandarin or Cantonese, Tagalog	Residential FOG public service announcement and ads	
Golden Gate Pollution Prevention Committee	Public and other agencies	Coordination with other agencies	
Alameda County Green Business Program/ EBMUD Partnership	General Public/ Businesses	Businesses beyond compliance	EBMUD provides funds to ACGBP and does Green Business inspections for certain types of businesses. Has positive relationship w/ businesses.
CWEA P3S Committee	Pretreatment, P2 and Stormwater Staff	Coordination with other agencies	Includes training conference and technical meetings.

5.8 Criteria used to Measure the Programs' and Tasks' Effectiveness

EBMUD uses the following criteria to measure the effectiveness of its established P2 programs:

- Changes in pollutant concentration levels in the District's MWWTP influent
- Number of people who visit EBMUD's P2 webpages
- Number of gallons of residential cooking oil collected
- Number of pounds of unwanted/expired pharmaceuticals collected
- Number of facilities in compliance with the terms/conditions of their P2 permit

5.9 Pollution Prevention and Zero Discharge Permits

Through its P2 permit program, EBMUD has developed specific control measures, including discharge prohibition and/or best management practices, for point source categories that handle identified pollutants of concern. These permits are generic, requiring no application or fee. The permit program is funded through a *San Francisco Bay Pollution Prevention Fee*, currently at \$5.48/month, assessed on all nonresidential wastewater service accounts.

In 2014, EBMUD continued to regulate the following permitted commercial categories:

- Boatyards
- Commercial photoprocessors
- Dental facilities
- Drycleaning facilities
- Furniture stripping facilities
- Hospital campuses
- Printing shops
- Radiator shops
- Vehicle repair facilities, including repair; autobody; and fleet maintenance facilities
- Vehicle washing facilities

The P2 permits for boatyards were renewed in 2013. Renewal of permits for all remaining listed categories is in process. The following table shows a chronology of the District's P2 and zero discharge permit programs:

Facility Type	Permit Requirements	Initial Permit Implementation Date
Zero Discharge Permits – Federal and local	Process Discharge Prohibition	1983, revised 2008
Radiator Repair	Process Discharge Prohibition & BMPs	1989, revised 2004
Dry Cleaners	Process Discharge Prohibition & BMPs	1990 revised 2004
Photo Processors	Silver Removal Pretreatment & BMPs	1990, revised 2009
Vehicle Repair/Body Shops, including gasoline stations; dealerships and fleet yards	Process Discharge Prohibition & BMPs, car wash water BMPs (auto body permit shops permitted 1995)	1992, revised process specific BMPs 1999
Printing and allied Industries	Process BMPs	1994, renewed 2004
Boatyards	Process BMPs	1994, renewed 2013
Furniture Refinishing	Process Discharge Prohibition & BMPs	1996, revised 2008
Vehicle Washing Facilities	Process Discharge Prohibition & BMPs	2001, revised 2007

Facility Type	Permit Requirements	Initial Permit Implementation Date
Dental Facilities	Self-certification report including: 1) mercury amalgam use; 2) best management practices implementation for amalgam/x-ray spent fixer control; and 3) staffs' review of American Dental Association's prescribed mercury BMPs Process Discharge Prohibition Pretreatment requirement for mercury amalgam/spent fixer solution Reporting requirements	2002 Revised 2003
Hospitals	Process BMPs	2007

With the revision of the Wastewater Control Ordinance that took effect on August 22, 2013, and the simplification of industrial permit fees in the FY14 rates and fees, some of the concerns that delayed renewal of the P2 permits have been clarified. The District plans to review and renew the P2 permits in order of permit expiration date. Two permit classes, dry cleaning and printing have undergone technological shifts that warrant review. Some drycleaners have switched to new, “greener” cleaning chemicals, and appropriate controls for these facilities need to be developed. Many printing facilities are now digital-only and may not require P2 permits at all. The photo processing industry has also undergone significant changes in the past few years. The District plans to review this business class to determine if permits are still necessary.

In 2014, the District continued its review of the new business class of long-term care facilities for potential P2 permitting.

5.9.1 Reduction of Pollutants in Plant Influent

EBMUD’s WWTP influent levels for heavy metals and organic solvents have declined significantly since the implementation of the District’s P2 program, in addition to its established pretreatment program. The influent data, reflecting source reductions from 1988 (year prior to implementation of the P2 program’s initial element - radiator shops) to December 31, 2014 are presented in Figures 5-A through 5-K. The following tables compare the plant influent loadings of metals (between 1974, 1988 and 2014) and organics (between 1988 and 2014), respectively showing significant reductions. Since 1973, when EBMUD began one of the nation's first pretreatment programs, heavy metals have declined overall by 95%, from 1170 kg/day to 61.8 kg/day.

**EBMUD Treatment Plant Influent Loading Reductions
of Selected Metals
(see Figures 5-A-H)**

Parameter	1974 kg/day	1988 kg/day	2014* kg/day	% Reduced Since 1988	% Reduced Since 1974
Cadmium	7	1.1	0.08	93%	99%
Chromium	209	14	1.43	90%	99%
Copper	318	28	16.8	40%	95%
Lead	106	12	2.11	82%	98%
Nickel	35	12	2.25	81%	94%
Zinc	495	110	38.7	65%	92%
Total	1170	183.6	62.3	66%	95%

**EBMUD Treatment Plant Influent Concentration Reductions
of Selected Organic Priority Pollutants
(see Figures 5-I-K)**

Parameter	1988 µg/L	2014 µg/L	% Reduced since 1988
Methylene Chloride	23	0.83	96%
Tetrachloroethene	62	0.75	99%
Toluene	31	5.00	84%

*The required monthly influent monitoring is reported in Tables 2-A, 2-B, and 2-C.

**FIGURE 5-A
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Cadmium (kg/day) in Wastewater Treatment Plant Influent**

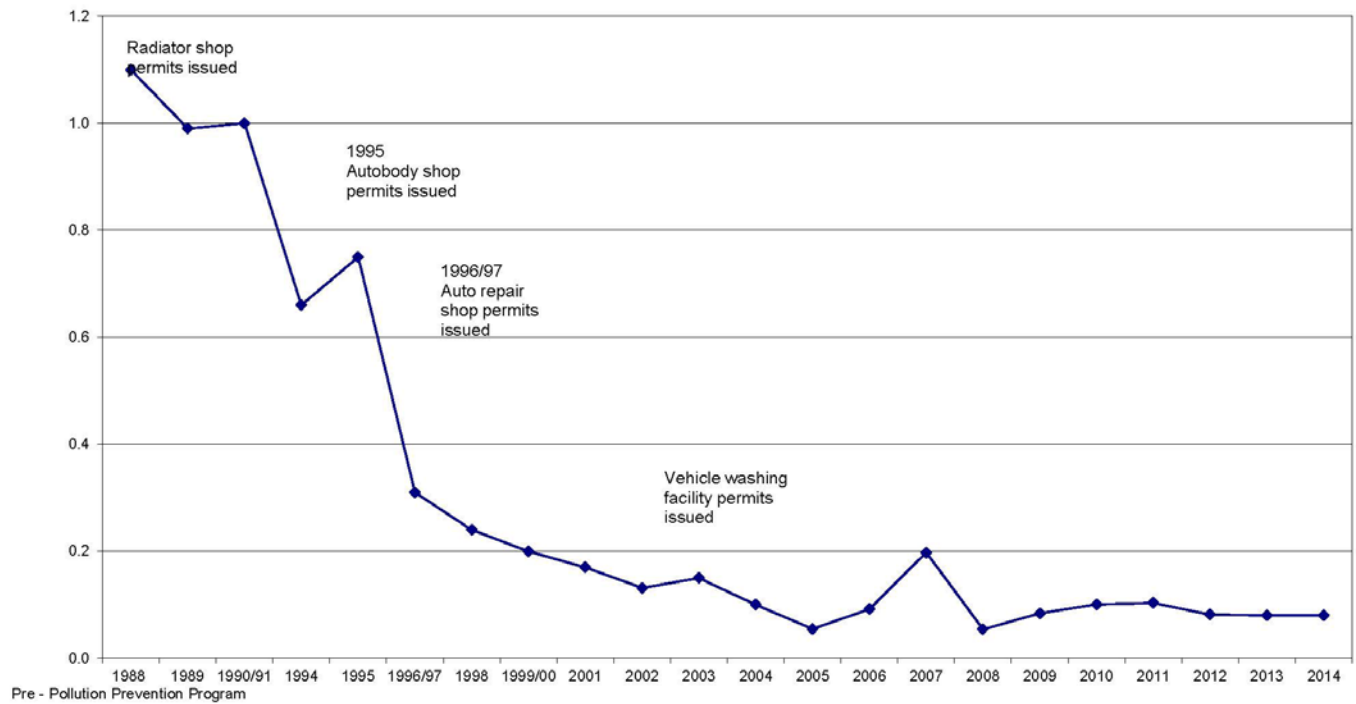


FIGURE 5-B
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Chromium (kg/d) in Wastewater Plant Influent

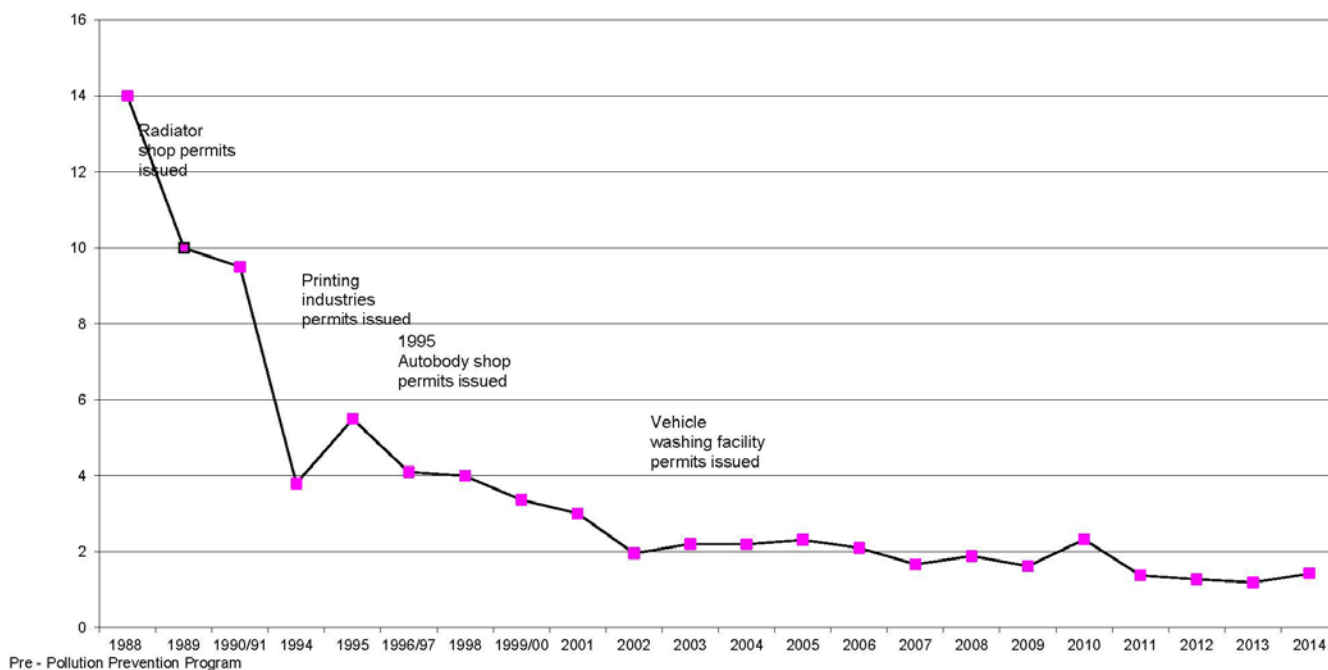


FIGURE 5-C
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Copper (kg/day) in Wastewater Treatment Plant Influent

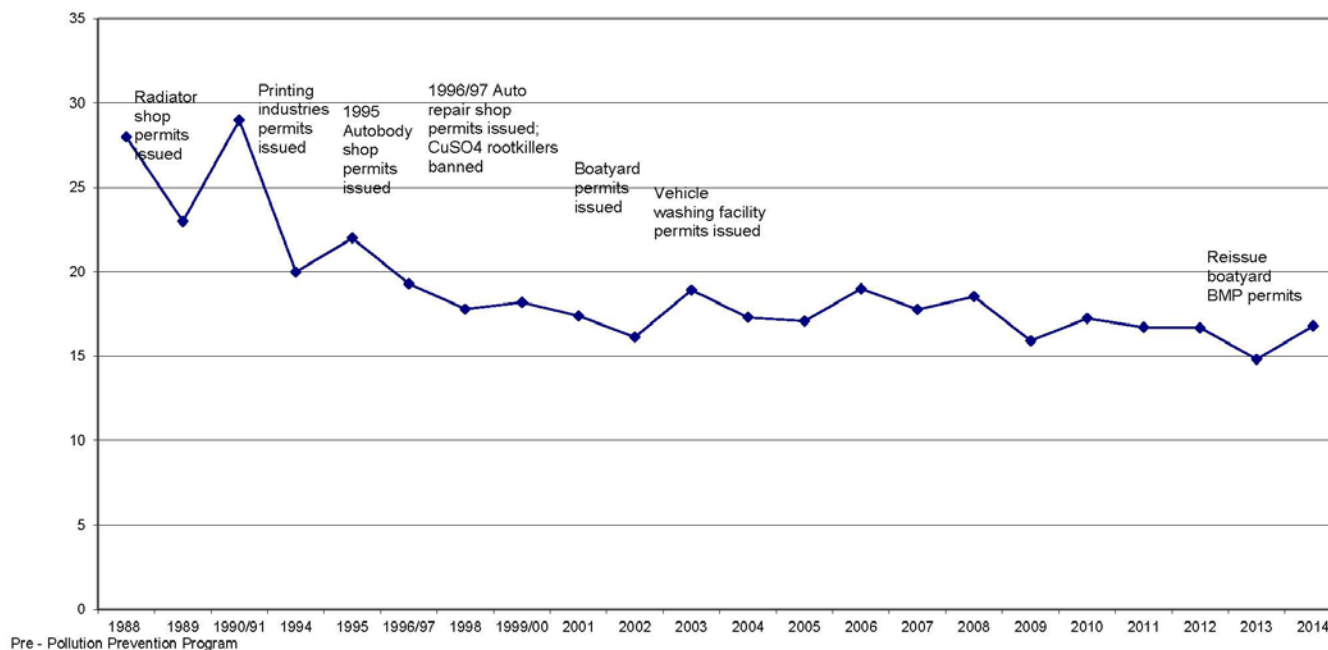


FIGURE 5-D
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988-2014
Lead (kg/day) in Wastewater Treatment Plant Influent

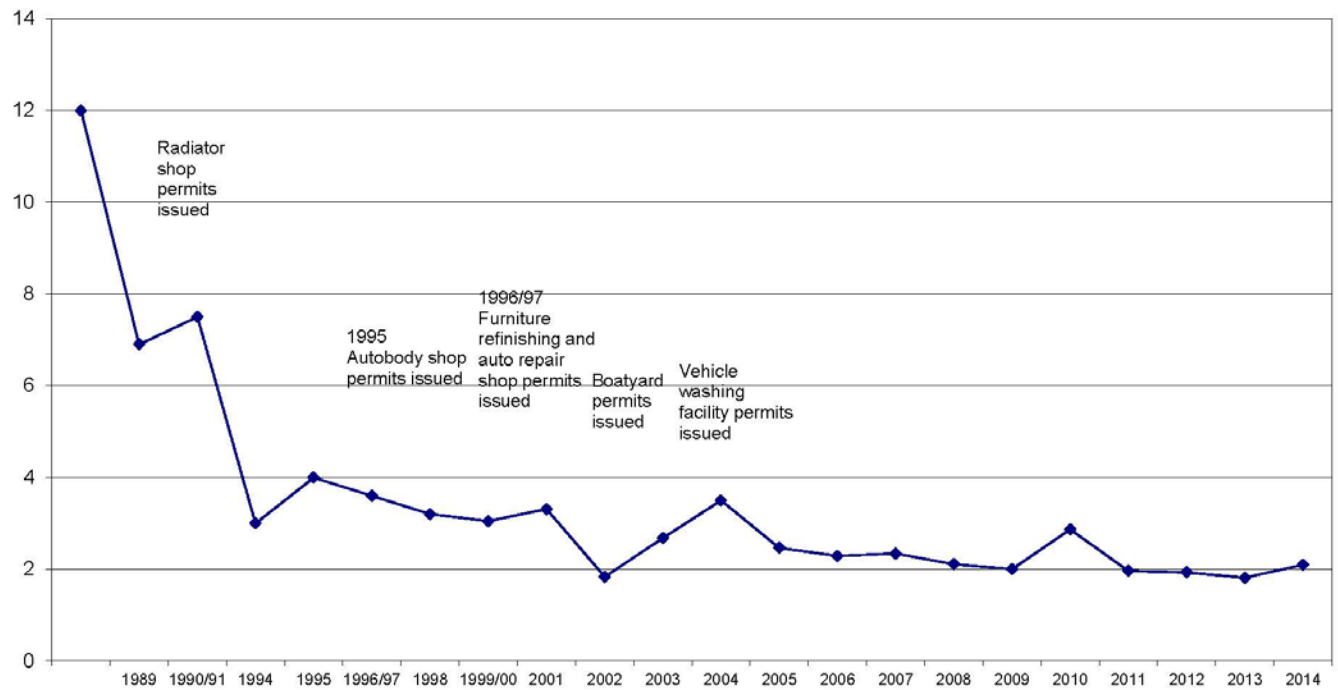


FIGURE 5-E
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Mercury (kg/day) in Wastewater Treatment Plant Influent

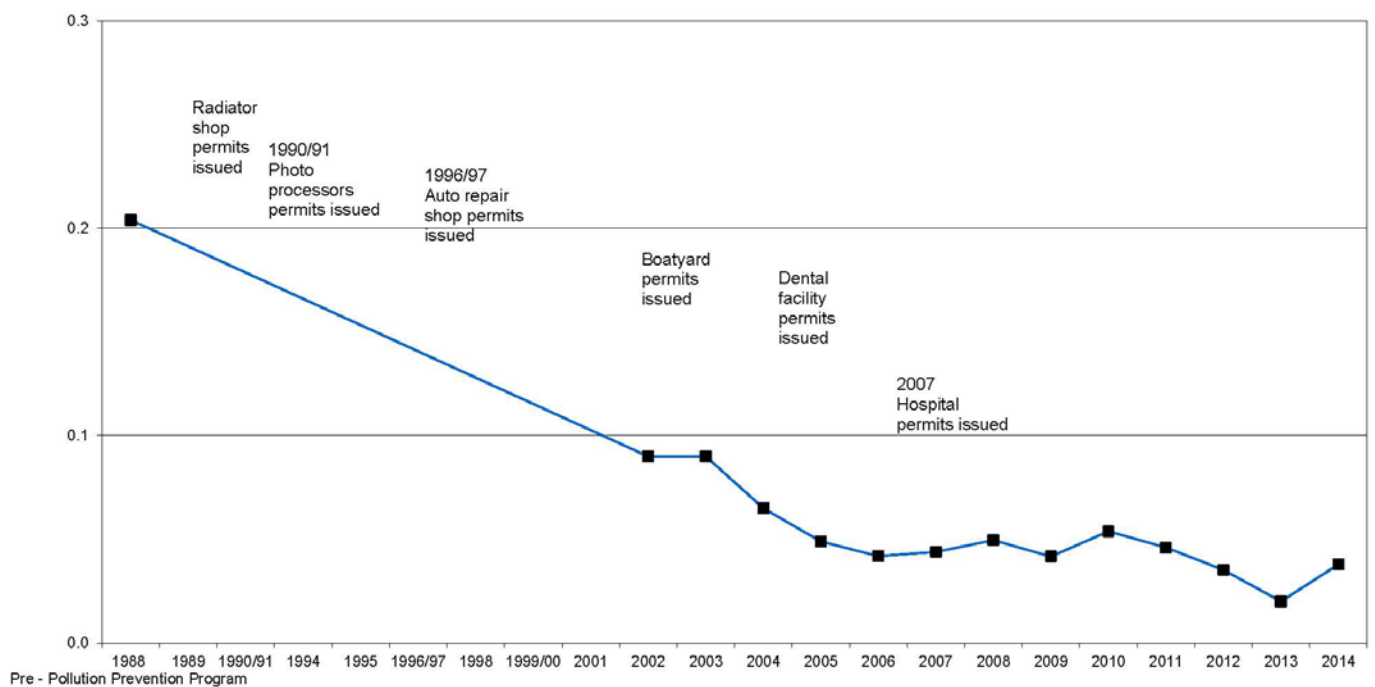


FIGURE 5-F
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Nickel (kg/day) in Wastewater Treatment Plant Influent

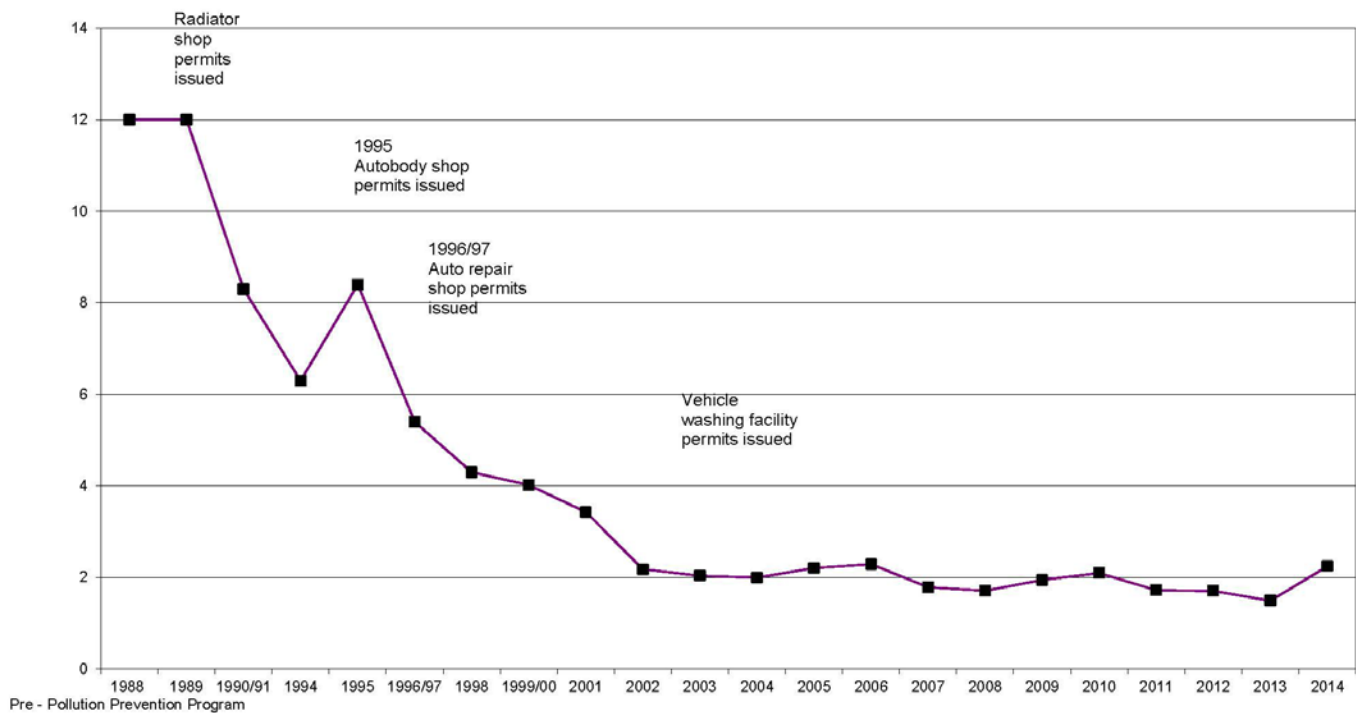


FIGURE 5-G
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Silver (kg/day) in Wastewater Treatment Plant Influent

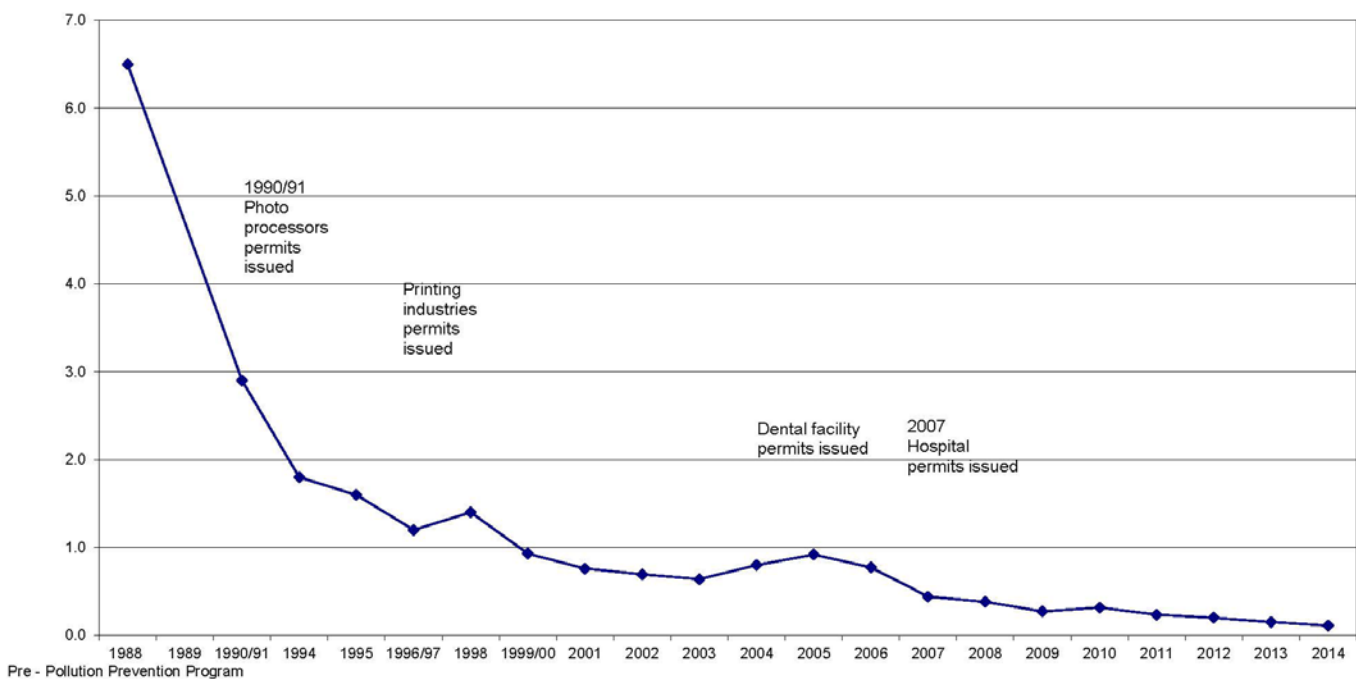


FIGURE 5-H
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Zinc (kg/day) in Wastewater Treatment Plant Influent

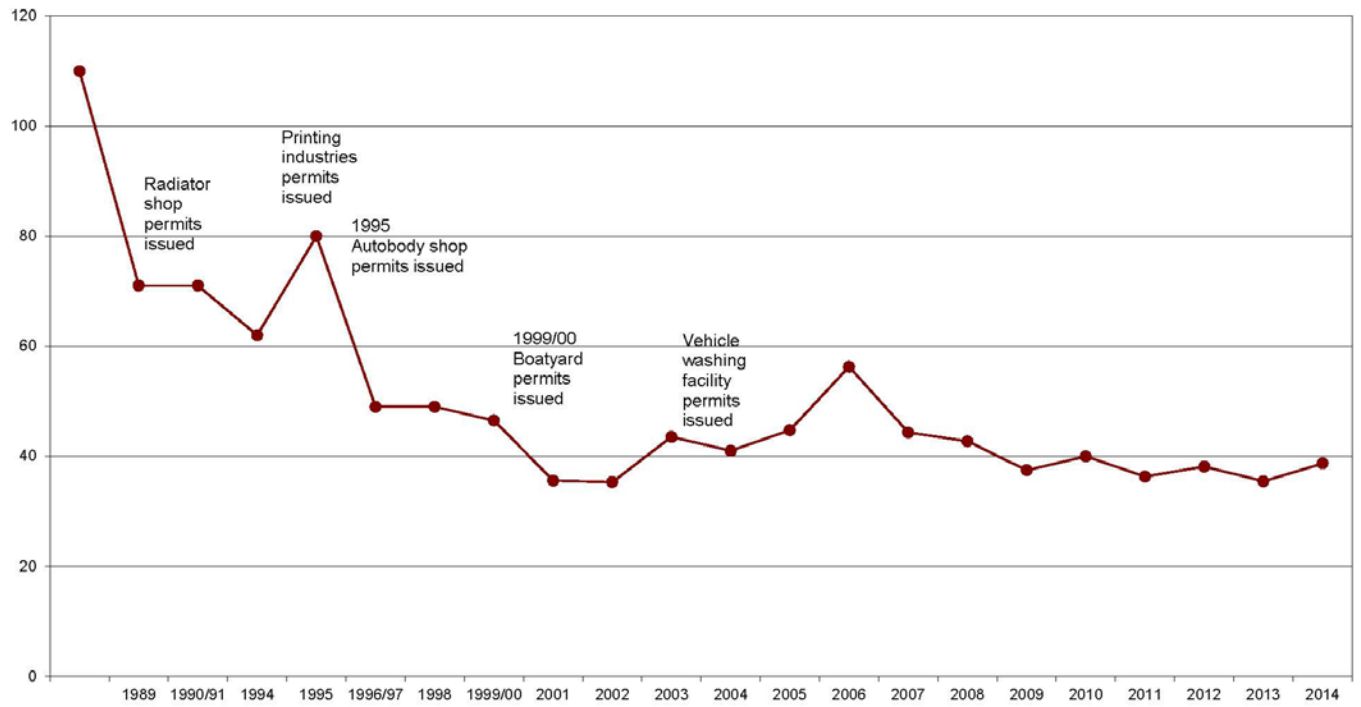


FIGURE 5-I
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Methylene Chloride (ug/l) in Wastewater Treatment Plant Influent

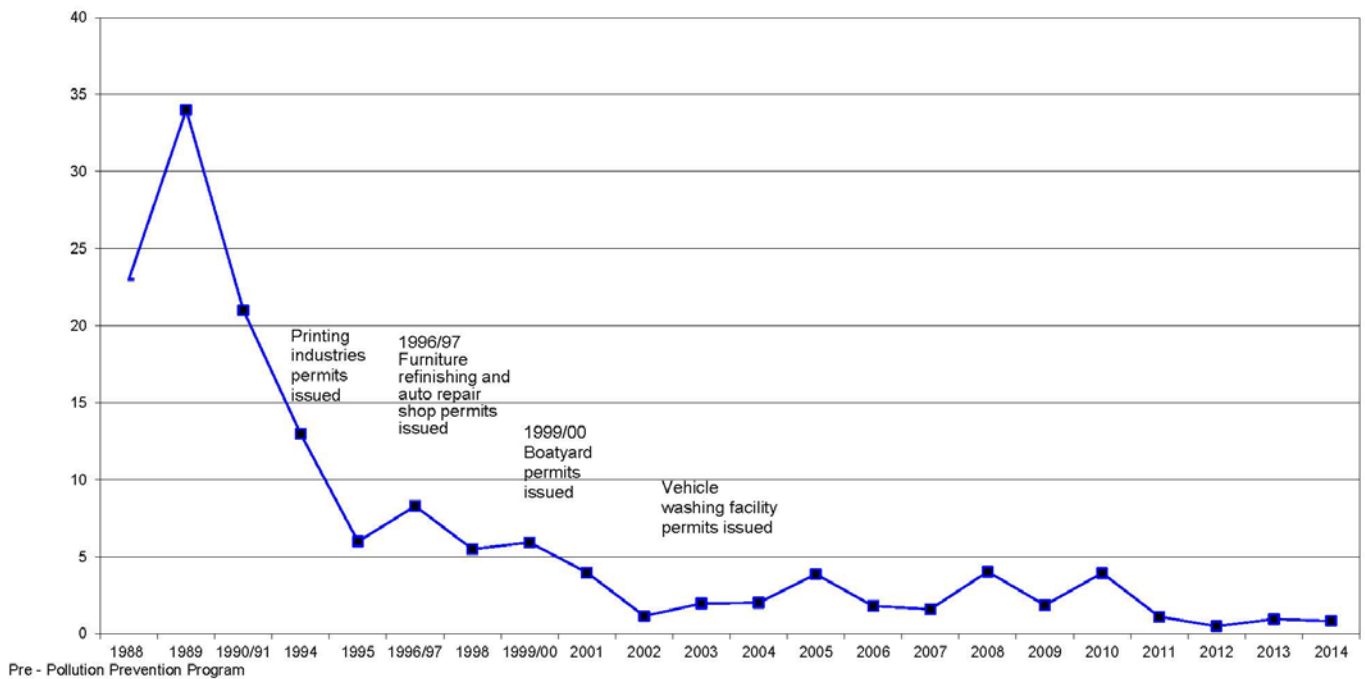


FIGURE 5-J
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Tetrachloroethene (µg/l) in Wastewater Treatment Plant Influent

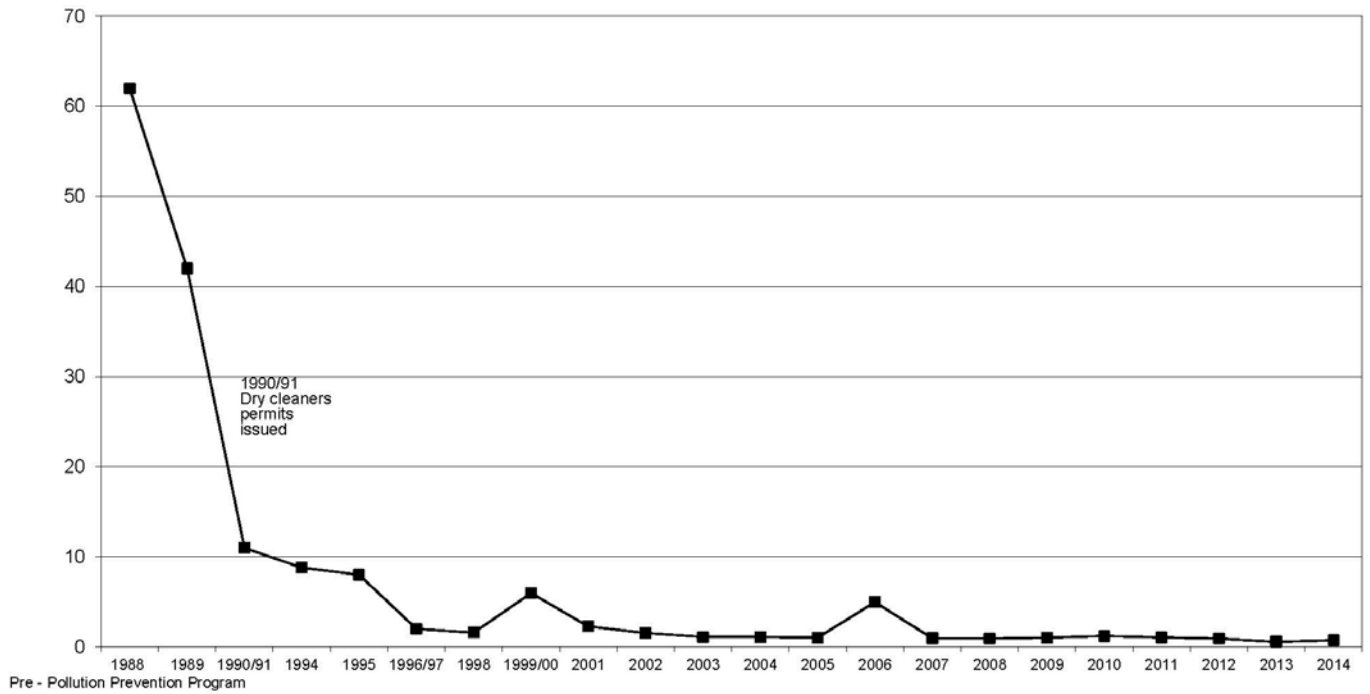


FIGURE 5-K
EBMUD Pollution Prevention Program
Measure of Effectiveness 1988 - 2014
Toluene (µg/l) in Wastewater Treatment Plant Influent

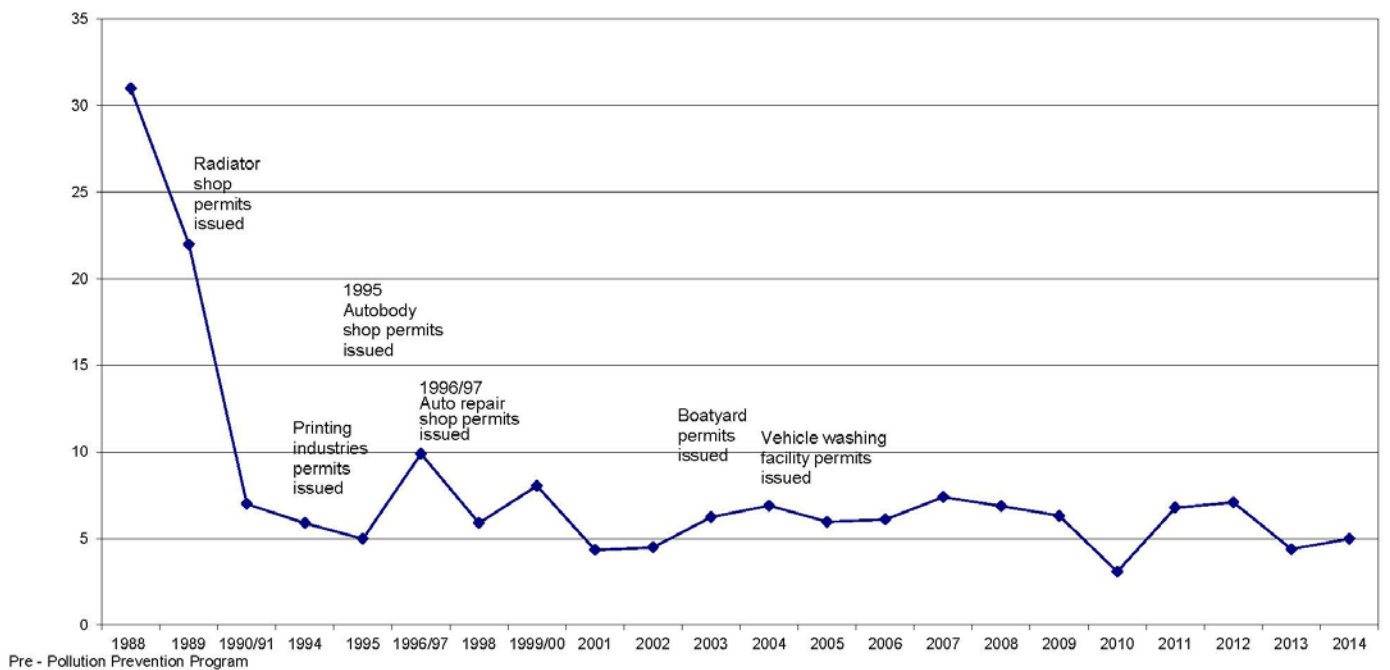


Exhibit 5-A

Pollution Prevention and FOG Outreach for Trash and “Disposable” Consumer Products

In the kitchen

Clogged sink drains can ruin your home, too. Keep all sinks in your home clog-free by following these simple steps:

- Put fruit and vegetable stickers in the trash, not the drain.
- Put small amounts of fats, oils and grease (FOG) into your kitchen composting bin or place into a lidded, disposable container/can and dispose of in the garbage. Never put FOG down your sink drains or toilet.
- Wipe down greasy pots, pans or dishes with a paper towel before washing. Dispose of paper in your kitchen composting bin or in the garbage.

Order a FREE FOG scraper from EBMUD. Visit www.ebmud.com/fog or call (510) 287-1651.

To recycle larger amounts of your used cooking oil, find free, convenient drop-off locations at: www.ebmud.com/fog.

Properly dispose of your hazardous waste

Common household products become hazardous waste when poured down a drain or flushed down a toilet because they may harm our environment and wreck sewers.

Never dump paint, paint thinner, cleaning chemicals, pesticides, fertilizer, root killer or any product marked CAUTION-WARNING-DANGER-POISON. Instead, bring these materials to your local hazardous waste facility.





EBMUD has a proud history of providing high-quality drinking water for 1.3 million customers in Alameda and Contra Costa counties. The District's award-winning wastewater treatment protects San Francisco Bay and serves 650,000 customers.

Find additional pollution prevention information and environmentally-friendly tips on how to protect your sewer pipes and help the environment at www.ebmud.com/cleanbay or contact the EBMUD Environmental Services Hotline at 510-287-1651.



EBMUD
375 11th Street
Oakland, CA 94607-4240
866-403-2683
www.ebmud.com

THINK BEFORE YOU FLUSH



Protect Your Family and Home from Sewage Backups and Overflows

An overflowing toilet can ruin your home in an instant.

Just a small amount of household waste flushed down the toilet (or dumped down the drain or garbage disposal) can clog pipes, cause nasty messes in your home, and result in expensive sewer backups in our community.

AVOID CLOGS BY KEEPING THESE ITEMS OUT OF YOUR TOILET



Put trash in the trash can.

Did you know?

“Flushable” wipes are the biggest problem for sewer backups in our community. Even if the package says “flushable”, they should NEVER be flushed. They belong in the trash.

Dispose of medicines safely

Do not flush unused prescription drugs or over the counter medicines. Visit www.ebmud.com/cleanbay for collection sites.

Flush ONLY human waste and toilet paper.

Exhibit 5-B

Keep the Bay off Drugs Billboard



Keep the Bay off Drugs Campaign

Keep the Bay off drugs



The District continued its pharmaceutical campaign in support of a regional pollution prevention effort to raise awareness of the harmful effects of improper disposal.

Exhibit 5-D

Pollution Prevention and FOG Outreach Brochure for Oakland Residents



Please DO NOT leave
if the bin is full

**Oakland Used Kitchen Oil
Drop-Off Locations:**

**EBMUD Wastewater Treatment Plant
2020 Wake Avenue, Oakland**

All EBMUD residential customers can use our self-service receptacle. Residential cooking oil and grease only – no other wastes. Pour cooking oil in the receptacle and recycle your container at home. Upon arrival, the guard will direct you to the receptacle. Open 24/7.

Whole Foods 230 Bay Place, Oakland

Residential cooking oil and grease only – no other wastes. Self-service receptacle is located in the lower parking lot. Pour cooking oil into the receptacle and recycle your container at home.

www.oaklandnet.com/FOG

Para una copia en español visite www.oaklandnet.com/FOG
如欲索取中文版本，請瀏覽網址 www.oaklandnet.com/FOG

and Public Works
Environmental Services
Frank H. Ogawa Plaza, Suite 5301
Oakland, CA 94612



**Getting Smart
about Kitchen Oil**

in 3



Residents

Handling Kitchen Grease in 3 Easy Steps ① Pour. ② Scrape or Wipe. ③ Toss.

Prevent sewer line clogs by using these tips instead of pouring grease down the drain:



- ① Pour cooled cooking oils and grease into a compostable container (paper carton), and toss into your yard trimmings cart, or pour oils and grease directly into the cart, preferably over leaves or grass clippings.



- ② Scrape or wipe remaining grease from pans and dishes with a scraper* or paper towel, and toss into your yard trimmings cart.



- ③ Absorb small spills with a paper towel and toss into your food scrap pail, then your yard trimmings cart.

If no yard trimmings cart is available, please use trash cart.



Visit www.oaklandnet.com/FOG or call EBMUD at 510-287-1651 to get a free grease scraper.*

Property Managers

Protect Your Property from Sewer Backups.

Sewage backups from fats, oils and grease (FOG) can cause property damage, leading to expensive cleanup and plumbing repairs.

What You Can Do:

- Talk to every resident about the importance of proper FOG disposal.
- Distribute FOG brochures to all residents and new residents upon move-in.
- Post FOG awareness posters in your building.
- Call EBMUD at (510) 287-1651 to get a free grease scraper or more detailed how-to information.
- Call Waste Management at 510-613-8710 to subscribe to yard trimmings collection for recycling food scraps and FOG.



Visit www.oaklandnet.com/FOG or call EBMUD at 510-287-1651 to request a residential used cooking oil collection bin for your property.

Exhibit 5-E

**Pollution Prevention and FOG Outreach Refrigerator Magnet for
Customers in Oakland**



Pollution Prevention and FOG Outreach Postcard Mailer for Property Managers of Multi-family Dwellings in Oakland



Protect Your Property from FOG Clogs

Fats, Oils, and Grease (called FOG) comes from food products like meat, butter and margarine, lard, food scraps, sauces, salad dressing, dairy products, fats, and cooking oil. When FOG does down the drain, it hardens and may cause sewage backups onto your property.

What You Can Do:

- Talk to every resident about the importance of proper FOG disposal.
- Distribute FOG brochures to all residents and new residents upon move-in.
- Post FOG awareness posters in your building.
- Call EBMUD at (510) 287-1651 to get a free grease scraper or more detailed how-to information.
- Call Waste Management at 510-613-8710 to subscribe to yard trimmings collection to recycle food scraps and FOG.



Visit www.oaklandnet.com/FOG or call EBMUD at 510-287-1651 to request a residential used cooking oil collection bin for your property.

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如欲索取中文版本, 請瀏覽網址 www.oaklandnet.com/FOG

Oakland Public Works
Environmental Services
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, CA 94612

Exhibit 5-G

Pollution Prevention and FOG Outreach at the Emery Bay Village Homeowners' Association in Emeryville



HELPFUL TIPS TO REDUCE PLUMBING BACKUPS

Article courtesy of EBMUD

Don't let fats, oils and grease ruin the holidays

Planning to cook deep-fried turkeys, buttery foods and homemade gravy this holiday season? Many of these holiday foods contain large amounts of fats, oils and grease or FOG, which can wreak havoc in sewers.

FOG, when washed down the drain can stick to the inside of sewer lines and can lead to sewage back-ups at homes, businesses or in public sewer pipes and could end up in local creeks and the Bay.



5 tips to prevent sewage backups caused by FOG:

- Don't pour FOG down your kitchen drain or garbage disposal. Hot water and soap does not help dilute it either.
- Scrape FOG from pots, pans and dishes into the compost bin or trash. Call EBMUD to order a free FOG scraper.
- Wipe greasy pots, pans or dishes with a paper towel or newspaper before washing and then toss it in the compost bin or trash.
- Pour small amounts of FOG, such as bacon grease or meat drippings into the compost bin or place in a lidded container and dispose in the garbage.
- Recycle larger amounts of FOG for free at convenient drop-off locations. Find the location nearest you at www.ebmud.com/fog.
- Pouring a small amount of Clorox down the drain can often help break up any prior grease that was improperly poured into the sink.

Think before you flush

"Flushable" wipes are anything but flushable. Unlike toilet paper, these products don't break down. Instead, they get tangled with hair and debris, creating massive sewer backups. Even if products are marketed as "disposable," "flushable" or "sewer-and-septic-safe," wipes, household waste and personal hygiene products should never be flushed. They belong in the trash.

Examples of items that should never be flushed

Wipes
Sanitary napkins and tampons
Diapers
Condoms
Paper towels and rags
Hair
Cigarette butts
Kitty litter and dog waste bags
Dental floss
Unwanted or expired medicine

What can be flushed? Only two things: human waste and toilet paper.

Remember, a clean Bay begins with you.

Find more environmentally-friendly tips at www.ebmud.com/cleanbay or contact the EBMUD Environmental Services Hotline at (510) 287-1651.

Pollution Prevention and FOG Outreach Article in the Park Street Business Association Newsletter in Alameda

Straight FROM THE Street

The Newsletter of the Park Street Business Association

November 2014

Straight FROM THE Street

Page 5

More PSBA Updates

Think Before You Flush

"Flushable" wipes are anything but flushable. Unlike toilet paper, these products don't break down. Instead, they will get tangled with hair and debris, creating massive backups to the sewer system.

Wipes, household waste, and personal hygiene products should never be flushed — even if the products are marketed as "disposable," "flushable," or "sewer-and-septic-safe." Instead, the products belong in the trash.

Examples of items that should never be flushed:

- Wipes
- Sanitary napkins and tampons
- Diapers
- Condoms
- Paper towels and rags
- Hair
- Cigarette butts
- Kitty litter and dog waste bags
- Dental floss
- Unwanted or expired medicine

What can be flushed? Only two things: human waste and toilet paper.

Remember, a clean Bay begins with you.

Find more environmentally-friendly tips at www.ebmud.com/cleanbay or contact the EBMUD Environmental Services Hotline at (510) 287-1651.

Article courtesy of EBMUD

Sunday Fund Day

A fundraiser to help re-establish Angela's Restaurant and bring the community together took place on Sunday, October 26. Restaurants, bars, and eateries offered a special item for the day, of which all proceeds were dedicated to helping the owner replace all that was lost in the fire.

Thank you to these restaurants and bars for supporting a fellow PSBA member in need:

American Oak
Bowzer's Pizza
Cafe Q
C'era Una Volta
East End
Linguini's Pizza
Lola's Chicken Shack
Lost Weekend
Monkey King Pub & Grub
Pappo
Sidestreet Pho
Speisekammer

If you would like to make a contribution, checks can be made payable to *Saboor's Arson Relief Fund* and dropped off at the Bank of Alameda.



Election Results

Congratulations to our newly elected officers and directors for the 2015 PSBA Board:

Vice President

Steve Busse

Park Centre Animal Hospital

Secretary

Debbie George

Bonne Vie

Treasurer

Duane Watson

Lee Auto Supply

Director At Large

Julie Baron

Julie's Coffee & Tea Garden

Kyle Conner

Alameda Theatre & Cineplex

Deb Knowles

Edward Jones

They will join Donna Layburn and Vickie Monize who will be serving their second year terms in 2015, and Ron Mooney who was recently appointed to fill a vacancy on the Board.

At the first meeting of the new Board of Directors in January, the Board will appoint a PSBA member to fulfill the remaining year of Duane's position as an at-large director.

In addition, our new President will appoint, with approval of the Board, the 2015 chairs of our four standing committees:

Membership

Promotions

Landscape & Maintenance

City & Economic Relations

Exhibit 5-I

Pollution Prevention and FOG Outreach Article in EBMUD *Splashes* Newsletter

District in the news

Leftovers

Just in time for Thanksgiving, [KGO-7 aired an exclusive look at how "not-so" flushable wipes clog wastewater treatment plants](#), creating massive clumps of trash known in the industry as "turkeys." The reporter interviews Assistant Wastewater Shift Supervisor **Jeff Biehl** and shows Wastewater Plant Operators **Mike Filler**, **Juan Herrera**, and **Jeff Mount** at work.



Above, EBMUD Wastewater Treatment Plant Operator [Robert Starke](#) holds a bucket full of "turkey" that clogged a screen at Wastewater Treatment Plant.

Exhibit 5-J

Pollution Prevention and FOG Outreach Article in EBMUD *Splashes* Newsletter - *continued*

District in the news

Bottom left, a screen shot of the KGO-7 report shows Assistant Wastewater Shift Supervisor [Jeff Biehl](#) explaining that personal hygiene wipes do not breakdown after being flushed and cause major clogs in the treatment system.

Bottom right shows a "turkey" or massive clump of personal hygiene wipes removed from the treatment system.



Exhibit 5-K

**EBMUD Issued Letter through BACWA to RWQCB Regarding
Funding for the Regional Monitoring Program for Water Quality
in San Francisco Bay (RMP)**



January 17, 2014

Mr. Bruce Wolfe, Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, 14th Floor
Oakland, CA 94612

**Subject: NPDES Permit Requirements for Receiving Water Quality Monitoring,
TMDL/SSO Support, Mercury and PCBs Watershed Permit Support, and**

Dear Mr.

BACWA Permit Compliance Report
January 17, 2014
Page 3 of 4

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D. Copper Action Plan

The copper action plan contained in many Bay Area POTW permits requires permittees to implement a plan to reduce copper discharges, conduct studies to reduce copper pollutant impact uncertainties, and implement additional measures should the three-year rolling mean in various parts of the Bay exceed site-specific concentration triggers.⁴ In addition to the measures being taken by individual agencies to reduce copper in discharges, the BAPPG continued their annual program to train plumbers on best management practices to reduce corrosion in copper water pipes, a major source of copper loading to POTWs. In 2013, four presentations were conducted throughout the Bay Area to contractors, building inspectors and college students, reaching more than 180 participants.

A. Rec

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Regarding studies to reduce uncertainties in terms of the impact of copper on beneficial uses, please see the attached letter from the RMP confirming that funding has been provided to the National Oceanic and Atmospheric Administration's Northwest Fisheries Science Center to study the impact of copper on the salmon olfactory response. In 2012, SFEI analyzed available RMP data and determined that the copper triggers for additional measures were not exceeded in the 30 ppt salinity range.⁵ SFEI set aside funds in 2013 to have NOAA conduct additional work studying the effect of copper on salmon in mid-range salinities (~10 ppt). Federal funding shortfalls during the fall of 2013 necessitated NOAA to switch from Chinook to Coho causing a delay in this work. It is anticipated that the Coho will smolt and be ready for the experiments in Spring 2014. The study results are expected to be available in the Fall of 2014.

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Water I

E. Cyanide Action Plan

Many Bay Area POTW permits require agencies to identify and abate cyanide sources if Bay receiving water monitoring reveals cyanide concentrations equal to or greater than 1.0 µg/L. All of the 2011 results reported to SFEI by the laboratory conducting the analysis for whole water weak acid dissociable cyanide used an elevated method detection limit (MDL) of 1.5 µg/L. The mean of the raw results (the majority individually < 1.0 µg/L) was 0.3 µg/L weak acid dissociable cyanide. Because weak acid dissociable cyanide is a more conservative analytical approach compared to free cyanide (i.e., it is a bulk parameter that includes free cyanide), it is unlikely that the trigger was exceeded even in the absence of quantitative data. Additional monitoring was conducted in 2013, where SFEI coordinated with the laboratory to improve the analysis to get quantitative results below the 1.0 µg/L target level. In 2013, all of the samples were below the reporting limit (RL) of 1.0 µg/L weak acid dissociable cyanide. Four samples were between the MDL of 0.44 µg/L and the RL; the remaining were below the MDL.

Central Contra

⁴ The triggers identified in the San Francisco Bay Basin Plan Amendment incorporating Site-Specific Objectives for San Francisco Bay are as follows: Suisun Bay, 2.8 µg/L; San Pablo Bay, 3.0 µg/L; Central San Francisco Bay, 2.2 µg/L; Lower San Francisco Bay (north Hayward Shoals), 2.2 µg/L; Lower San Francisco Bay (south of Hayward Shoals), 3.6 µg/L; South San Francisco Bay: 4.2 µg/L.

Exhibit 5-L

**EBMUD Issued Letter through BACWA to RWQCB Regarding
Funding for the Regional Monitoring Program for Water Quality
in San Francisco Bay (RMP) - *continued***



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**Table 1
Wastewater Treatment Facilities Contributing**

December 16th, 2013

David R. Williams
Executive Director
Bay Area Clean Water Agencies
Oakland, California

Dear Mr. Williams;

The 34 wastewater treatment facilities (see attached table for a complete list) made a financial contribution to the Regional Monitoring Program for Water Quality in San Francisco Bay (RMP) in 2013. This support is essential to the Program. Through these financial contributions, the RMP is able to conduct regional monitoring to assess the cumulative impact of multiple sources of pollutants to the Bay.

The RMP conducts biennial monitoring of water and sediment throughout the Bay, starting at the confluence of the San Joaquin and Sacramento Rivers near Benicia and ending in the South Bay near San Jose. The biennial monitoring is staggered each year such that the RMP will be on the Bay each year. In 2014, the RMP will collect sediment samples from 47 sites; in 2015, we will conduct water sampling at 22 sites. Also in 2014, we will collect bivalve and sport fish tissues. Monitoring of biota, including bivalves, bird eggs, and sport fish occurs every second, third, or fifth year, respectively. Samples collected are subject to a wide variety of tests including organics analyses (e.g., PCBs, PAHs, PBDEs, and pesticides), metal analyses (e.g., cadmium, lead, total mercury and methylmercury), and toxicity tests.

A report on the most recent round of RMP sport fish sampling was released in 2011 by the State Water Resources Control Board's Surface Water Ambient Monitoring Program (SWAMP), in collaboration with the RMP and the Southern California Bight Regional Monitoring Program. The report analyzed methylmercury levels within San Francisco Bay sport fish and compared levels to other coastal locations. The report received media attention statewide and resulted in updated safe eating guidelines for the Bay. In addition, the RMP continues to monitor bird eggs for mercury on a triennial basis. Most recent sampling occurred in 2012.

In addition, the RMP has provided funding to the NOAA Northwest Fisheries Science Center to conduct a study to evaluate the effects of copper on the olfactory nerve of salmonids under estuarine conditions. A preliminary update for this study has been written and sent to stakeholders. Additional work will continue in 2014.

The RMP has prepared three draft documents summarizing the state of our knowledge on mercury, PCBs and the flame retardants polybrominated diphenyl ethers (PBDEs). An update on the state of our knowledge regarding chemicals of emerging concern was the focus of this year's Annual Meeting and the Pulse of the Bay.

All of the data undergo rigorous quality assurance and quality control before being made public through the RMP web site (www.sfei.org/RMP), RMP documents (<http://www.sfei.org/documents>), and the RMP Annual Meeting (http://www.sfei.org/calendar_events/2012RMPAnnualMeeting). All RMP participants receive a copy of the biennial Pulse of the Estuary or a copy of the more concise RMP Update in alternate years; both summarize key RMP findings. In addition, all of the RMP data are reported in the Annual Monitoring Results report, which is available from our web site. The 2013 data will be reported in 2014. Again, we thank you for your valuable contribution to the Program.

Regards,

Margaret Sedlak
RMP Program Manager
San Francisco Estuary Institute

Benicia
Burlingame
Calistoga
Contra Costa County Sanitation District
Central Marin
Delta Diablo
EBDA
EBMUD
Fairfield-Suisun
Las Gallinas
Millbrae
Mountain View
Napa
Novato
Palo Alto
Petaluma
Pinole/Hercules
Rodeo
San Francisco Airport
San Francisco C&C SE
San Jose/Santa Clara
San Mateo
Sausalito
Sewer Agency So. Marin
South SF/San Bruno
Sonoma
South Bayside
Sunnyvale
St. Helena
Tiburon (SD#5)
Union Sanitary District
Vallejo SFC
West County
Yountville



Pollution Prevention Article on Keeping Pollutants Out of the Drain
Customer Pipeline publication

customer **Pipeline** 

January • February 2014

Don't spoil the Bay

Five types of pollutants to keep out of drains

It's a New Year and the perfect opportunity to renew your resolution to reduce pollution in our San Francisco Bay. Help EBMUD ensure the water we release back into the ocean is free of pollutants. Keep the following materials out of sinks and toilets to prevent **SPOILING** the water.

S Soaps, solvents and cleaning supplies labeled "toxic," "corrosive," "flammable," or "ignitable," contain harmful chemicals that can affect aquatic life.

P Pills, including unwanted or unused prescriptions, release dangerous drugs into the Bay. Discard your unwanted medicines at a designated collection site.

O Oils, fats and grease from cooking clog drains. This includes grease drippings from meat. Scrape cooking fats into the garbage or into your green recycling bin.

I Intimate one-time-use products labeled "disposable," or "flushable," such as condoms, tampons, dental floss and personal hygiene wipes clump in the sewer line and cause backups. Always throw these products in the trash.

L Landscaping materials like fertilizers and pesticides contain potentially hazardous chemicals that can pollute local creeks and the Bay. Rain or other water currents can carry these products to storm drains, bypassing the treatment process.

For more information visit
www.ebmud.com/cleanbay.