

2014 Pollution Prevention Report





7051 Dublin Blvd. Dublin, CA 94568 www.dsrsd.com

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Introduction

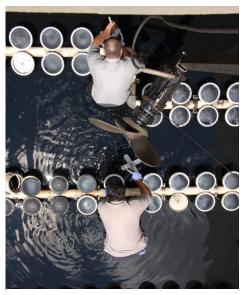
This report on the Dublin San Ramon Services District Pollution Prevention Program from January 1 through December 31, 2014 is prepared in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Order R2-2012-0005, NPDES Permit CA0037613.

DSRSD Background & Service Area

Founded in 1953, Dublin San Ramon Services District (DSRSD, District) serves 159,000 people, providing potable and recycled water service to the City of Dublin and the Dougherty Valley area of the City of San Ramon, wastewater collection and treatment to Dublin and south San Ramon, and wastewater treatment to the City of Pleasanton (by contractual agreement). Its distribution and collection network includes 305 miles of potable water pipe, 60 miles of recycled water pipe, and 204 miles of wastewater pipe, along with 14 potable water tanks, 16 potable water pump stations, 4 recycled water tanks, 4 recycled water pump stations, and a wastewater lift station. With other local agencies, DSRSD pumps treated wastewater to San Francisco Bay through pipelines operated by the Livermore Amador Valley Water Management Agency (LAVWMA) and the East Bay Dischargers Authority (EBDA).

Treatment Plants & Processes

DSRSD's Regional Wastewater Treatment Facility is located in Pleasanton and treats domestic, commercial, and industrial wastewater. The wastewater treatment plant discharges under National Pollutant Discharge Elimination System (NPDES) Order No. R2-2012-0005 effective January 18, 2012. With a permitted capacity of 17 million gallons per day (MGD), the plant currently treats approximately 10.01 MGD of wastewater utilizing an activated sludge process, sedimentation, and hypochlorite disinfection. An adjacent recycled water plant supplies advanced tertiary treatment to up to 12.7 MGD of secondary effluent, using either sand filtration and/or microfiltration, followed by ultraviolet disinfection.



Plant operators change aeration diffusers.

Pollutants of Concern & Their Sources

A pollutant of concern (POC) is defined as a substance that exceeds the applicable water quality objectives from the California Toxic Rule (CTR), NPDES permit limits, or the water quality criteria established in the Regional Water Quality Control Board (RWQCB) Basin Plan. The District identifies pollutants of concern:

- By reviewing monitoring data from DSRSD and EBDA influent, effluent, biosolids, and industrial discharges;
- When they are designated as such by the RWQCB in the District's NPDES permit; or
- When applicable pollutants are addressed by the Bay Area Pollution Prevention Group (BAPPG).

DSRSD has had a Pollution Prevention Program since 1995. During the current reporting period, District staff worked to monitor and reduce four pollutants of concern: mercury, copper, fats/oils/grease (FOG), and pharmaceuticals. The District does monitor perchloroethylene (perc) use, however many of the dry cleaners have moved away from using perc. The District also has evaluated cyanide and polychlorinated biphenyls (PCBs) and determined control programs are not necessary.

In addition, the District actively participated in several regional collaborations that address pollution minimization, such as with the BAPPG. Priorities and accomplishments are outlined in Chapter 4, Table 5.

The District has identified these sources for the above referenced POCs and the other pollutants:

- Mercury dentists (amalgam waste) and the general public (thermometers, light bulbs, mercury containing products)
- Copper vehicle service facilities, potable water system, copper plumbing, and pool/spa maintenance
- Fats/Oils/Grease (FOG) kitchen waste from restaurants and residences
- Pharmaceuticals improper disposal by the general public and human consumption
- Perchloroethylene dry cleaners
- Cyanide industrial users
- PCBs industrial users

Tasks to Minimize Pollutants

Pretreatment & Waste Minimization Audits for Industrial Users

Environmental Compliance inspectors continue to look for ways to expand and enhance the District's Pretreatment Program to reduce pollutants discharged into the sanitary sewer system. The Pretreatment Program currently has 26 permitted industrial and commercial users. During annual inspections, District staff evaluates the users' practices for cleaning, storing material and waste, and cleaning up secondary containment, as well as their efforts for minimizing waste. Detailed information is available in the District's Pretreatment Program Annual Report.

Mercury Control

Dental Amalgam Waste

Mercury continues to be a pollutant of concern for the District since the San Francisco Bay is impaired for mercury. The RWQCB adopted a Total Maximum Daily Load (TMDL) for mercury in 2006. The regional watershed permit, Order No. R2-2012-0096, requires San Francisco Bay municipal wastewater dischargers to implement and maintain programs that reduce discharges of mercury amalgam waste from dental practices.

Developed in accordance with permit requirements and current American Dental Association guidelines, the District's Mercury Source Control Program requires dental offices that generate mercury amalgam waste to implement Best Management Practices (BMPs) and install amalgam separators approved by the International Standards Organization (ISO). Since the implementation of the mercury TMDL, the District's Mercury Source Control Program has accomplished the following:

- Currently has 76 permitted dental practices.
- 96% of the permitted dental practices have instituted BMPs for managing mercury amalgam waste.
- 97% of the permitted dental practices have installed amalgam separators.
- Performs inspections as needed to ensure separators are installed, maintained, and used in accordance with BMPs.

 Maintains an up-to-date database of dental facilities that includes tracking program results.

During the next 12-month period, the District plans to:

- Continue to maintain an up-to-date list of dental practices to ensure all have submitted dental practice surveys and been issued permits, if qualified.
- Escalate enforcement actions until the remaining non-compliant dental practices achieve compliance.
- Reissue permits to qualifying dental practices that include self-monitoring reporting requirement.
- Continue to perform inspections as needed to ensure compliance with permit requirements.

Collection & Recycling

The District educates the public about problems associated with mercury on an ongoing basis by collecting and recycling mercury-containing products such as thermometers and thermostats. This program is explained further in Chapter 3, Public Outreach.

Copper Control

To comply with the NPDES Permit Copper Action Plan, the District has completed an inventory of potential copper sources to the treatment plant. The results of the inventory are as follows:

- Four industrial users exceeded local limits and/or categorical limits for copper in the last five years:
 - Cooper Bussman (polymer research & development) one instance in February 2014;
 - Roche Molecular Systems (in-vitro and in-vivo diagnostic substances) one instance in January 2012;
 - Alameda County Heavy Equipment Repair Building (heavy equipment maintenance facility) – three instances: January 2010, January and February 2012; and
 - Valent Technical Center (research and development laboratory) –
 three instances: April 2011, April 2012, and May 2012.
- The District identified vehicle wash and service facilities as potential commercial sources of copper.
- Other potential copper sources include water pipe corrosion and pool and spa maintenance.

Local limits for copper are not chronically exceeded in the District's service area. Less than 3% of samples collected from significant industrial users in calendar years 2006-2008 tested above normally observed background concentrations for copper. Also, copper levels in plant effluent declined markedly after ultra-clean sampling techniques for copper were implemented beginning in February 2006. These results confirm that copper is not a concern in DSRSD's effluent.

To ensure that our copper concentrations remain well below the maximum allowable limits, the District has continued inspections and outreach as outlined below. See also Chapter 4, Table 2.

- Businesses that wash vehicles as part of their work must install wash pads equipped with solids removal devices.
- Vehicle service facilities with open floor drains that are not connected to a trap or an interceptor receive inspections semiannually to ensure they are in compliance with the District's regulations.
- Car washes within the City of Dublin and southern portion of San Ramon are
 inspected annually and City of Pleasanton car washes are inspected biannually. This
 will ensure all vehicle service facilities within the District's service area and the City
 of Pleasanton are not discharging pollutants of concern to the sanitary sewer
 system.
- The wastewater treatment plant accepts discharges of pool and spa water from
 residential and commercial customers to ensure it is not discharged to the storm
 drain system. The District's website provides information for residential and
 commercial customers regarding proper pool and spa maintenance to minimize the
 amount of copper-based algaecides discharged to the sewer system.
- The BAPPG fact sheets, "Preventing Corrosion Protects San Francisco Bay" and
 "Steps for Installing/Replacing Copper Pipe" are available to plumbers and installers
 at the District's permit counter and posted on the District's website.
- Mandatory installation of dental amalgam separators will also contribute to copper control, since amalgam waste may contain copper. However, mercury is the primary component of amalgam waste.
- A 1996 study indicated that drinking water is a significant source of copper, due to the corrosion of copper plumbing. In 1999, the District negotiated with Zone 7, its water wholesaler, to adjust drinking water pH to reduce corrosion of copper pipes.

Fats/Oils/Grease (FOG) Control

The District has had a grease reduction program for more than 10 years. Currently, 186 businesses participate in this program. All restaurant grease traps and grease interceptors are inspected annually to ensure that equipment is functioning as designed and being serviced at proper intervals. Vehicle service facility sand/oil interceptors are inspected annually as well. District staff also checks the overall integrity of the equipment and verifies that the business is complying with the District's pretreatment requirements. Public outreach on FOG is discussed in Chapter 3, Adult Education, and in Chapter 4, Table 3.

Pharmaceutical Collection

On September 29, 2014, a permanent pharmaceutical collection center officially opened for business at the City of Pleasanton's police department. The District and the City of Pleasanton partnered to make it possible. It is the first collection center hosted by a police department in the Tri-Valley, which includes Dublin, Pleasanton, and Livermore. The District filed a Medical Waste Generator Permit with Alameda County for the collection center and is paying pharmaceutical disposal costs. The collection center, which is open 24 hours a day and seven days a week, collected 514 pounds of pharmaceuticals during this reporting period. The District's website promotes this and other local drug collection sites and events, as well as the regional BAPPG website, www.Baywise.org, which lists collection pharmaceutical centers throughout the Bay Area.



24/7 drug drop box located in Pleasanton's Police Department lobby.

Perchloroethlyene Control



Perchloroethylene (perc) is a chlorinated aliphatic hydrocarbon compound containing a double bond. As a solvent, it is used in a wide variety of industrial and consumer activities: dry cleaning, degreasing, in paints and coatings, and as an adhesive. It is considered a toxic air pollutant and is subject to federal regulations under the Clean Water Act. Discharging perc to wastewater treatment systems has been linked to soil and groundwater contamination. The majority of these discharges come from dry cleaning facilities.

In 2008, the District sent letters to dry cleaning businesses located in areas served by the Regional Wastewater Treatment Facility to explain the District's policy prohibiting the discharge of wastes or wastewater contaminated with perc into the District's wastewater system. That same year, DSRSD permitted 21 dry cleaning facilities that used perchloroethylene and conducted inspections to monitor its use.

In 2007, the California Air Resources Board approved amendments to the Airborne Toxic Control Measures for Emissions of Perchloroethylene (Perc) from Dry Cleaning Operations (Dry Cleaning ATCM). The amendment prohibits dry cleaners from installing new perc dry cleaning machines, requires that converted machines and those that are 15 years or older be removed from service by July 1, 2010, and requires all perc machines to be removed from service once they are 15 years old. With these regulations, perc will no longer be used in the dry cleaning industry by January 1, 2023. Due to the Air Resources Board's amendments, the majority of the dry cleaners in the District's service area are no longer using perc.

Cyanide Control

In August 2008, the Alternate Effluent Limitations for Cyanide footnoted in NPDES permit CA0037613 were determined effective and superseded the interim cyanide limits listed in the permit's Table 4. The District was required to submit to the RWQCB an inventory of potential contributors of cyanide to the Regional Wastewater Treatment Facility. The District conducted a review of the businesses within its service area and determined there are no potential contributors of cyanide to the treatment plant: cyanide levels were low and not considered to be significant in Significant Industrial User (SIU) discharges, treatment plant influent, and final effluent, as explained below.

During the reporting year, 59 compliance samples were collected from industrial users and analyzed for cyanide. A majority of the samples (52 out of 59) were "non-detect" and seven samples had levels below the District's local limit, which is 0.50 mg/L.

A cyanide study was conducted of the plant's influent and effluent from September 2005-September 2008. The majority of influent cyanide concentrations (24 out of 36) were lower than the detection limit. In the majority of the final effluent samples (35 of 36), cyanide results were lower than the detection limit. The only final effluent result above the detection limit was estimated to be 4.2 μ g/L (in a November 2007 sample). Based on all these results, the District concludes it is not necessary to implement a Cyanide Control Program at this time.

PCBs Control

NPDES Permit, Order R2-2012-0096, requires the District to evaluate controllable sources of polychlorinated biphenyls (PCBs) to the treatment plant. The District has reviewed sampling data from industrial and commercial users within its service area and determined there are no potential contributors of PCBs to the treatment plant: sample results for PCBs have been virtually "non-detect" for all industrial and commercial users for the last 15 years.

PCBs have been found in older building sealants, but it is highly unlikely PCBs would be discharged to the sanitary sewer system during building remodeling or demolition. Sealants are solid and would be physically removed with other debris during remodeling, with little chance of being washed to the sanitary sewer. Additionally, the District requires sanitary sewer systems to be disconnected during building demolition. Based on the sampling results noted above and the requirement to disconnect sewer drains during building demolition, the District has concluded the implementation of a PCBs Control Program is not necessary at this time.

Outreach Programs

Public Outreach

The District uses public outreach programs to directly reduce sources of mercury and pharmaceuticals, encourage proper disposal of wastewater pollutants, and educate adults and school children about the ways wastewater and storm water become polluted and what they can do to prevent it. The District website contains all forms, program descriptions, staff contacts, and resources for Pretreatment & Pollution Prevention Program participants. The District collaborates with other wastewater agencies to provide pathways to careers related to pollution prevention, prevent pollution of our waterways more efficiently and effectively, and advocate for legislation, regulations, and new technologies that reduce and prevent pollution.



Forms and other resources for Pretreatment & Pollution Prevention programs are available online to simplify customer participation.

Waste Mercury Collection & Recycling

Through its website, the District encourages the public and employees to properly dispose of batteries and other products that contain mercury. Anyone can drop off such products at the

District Office or wastewater treatment plant for recycling or find other locations on the Bay Area Pollution Prevention Group (BAPPG) website, www.Baywise.org. In 2014, the District recycled 831 lbs. of fluorescent lights and other mercury containing products and 470 lbs. of alkaline, lead acid, nickel, and lithium batteries.

Waste Pharmaceuticals Collection

Through bill inserts and its website, the District promoted a pharmaceutical take-back event conducted by Dublin Police Services on National Drug Take-Back Day, April 26. In September, the District and the City of Pleasanton established a new permanent pharmaceutical collection site. Located in the lobby of the city's police department, the site is accessible to the public 24 hours a day, 7 days a week. The District provided the collection bin and is paying disposal costs. Throughout the year, the District's website lists other permanent drop-off locations for controlled and non-controlled medications.

Bill Inserts Target So-Called Flushables, FOG

During October and November, District customers received bill inserts about proper disposal of so-called "flushable" products and fats, oil, and grease (FOG). The insert (on right) provided links to



helpful information on the District's website, including videos demonstrating the problems with flushing wipes and links to www.Baywise.org, which features a searchable directory of FOG collection centers.

Education Efforts for Adults

In 2014, District staff
provided 11 tours of the
Regional Wastewater
Treatment Facility to 180
adults and 71 students.
Tour guides emphasize how
individuals and businesses
can prevent pollution
through proper disposal of
hazardous waste and
grease. Quarterly public
tours are promoted
through customer bills, the
District website, and local
media.







Public Information distributed pollution prevention materials at the Dublin Farmers Market and at a Green Fair hosted by Dublin Corporate Center.

- District management hosts an annual Neighborhood Meeting to promote constructive dialog with residents living near the wastewater treatment plant. In 2014, 16 people attended and discussed on-going efforts to reduce odors and improve treatment processes.
- The District hosted information tables and provided handouts at community events to promote pollution prevention, Bay-friendly lawn conversion, sheet mulching, non-toxic pest control, and water conservation. Events included the annual St. Patrick's Day parade in Dublin, a Green Fair hosted by Dublin Corporate Center, an Earth Day Fair hosted by the Clorox Corporation, a Water Wise Workshop during Dublin Pride Week, two evenings at the Dublin Farmers Market, twenty-one National Night Out parties in Dublin and San Ramon, and a Lose Your Lawn Open House sponsored by the Bay-Friendly Landscaping and Gardening Coalition.

Education Programs for Children

- The District demonstrated its watershed diorama at an elementary school science night in San Ramon attended by about 150 people. Staff talked with students and parents about pollution prevention and water conservation and distributed *The Bay Begins at Your Front Door*, a pamphlet about activities that pollute creeks, groundwater, and the bay.
- District staff conducted four "Filter Challenge" workshops for forty-five Boy Scouts, aged 11-14, at the first STEM Encampment in the Bay Area. The event fosters interest and increases knowledge in the fields of Science, Technology, Engineering, and Mathematics (STEM). Scouts designed water filters, applying concepts involved in pollution prevention and wastewater treatment and experienced how engineers work in teams to develop and test new ideas.

- From 2003-09, the District made 612 classroom presentations on water conservation and pollution prevention, reaching more than 9,414 students in grades K-12. The program was suspended in July 2009 and may be reinstated if funding becomes available. In the interim, DSRSD asked its water wholesaler, Zone 7 Water Agency, to expand its water education program to include schools in Dublin and San Ramon. In 2014, Zone 7 visited 145 classrooms in the DSRSD's service area, reaching approximately 3,678 students, 27% more than in 2013. Zone 7's Grade 2 lesson, *Creek and Stream Environments*, teaches how water from storm drains and pollution from residential areas ends up in creeks and how students can prevent such pollution. In the middle school lesson, *The Wonder Down Under*, students learn about how our groundwater and surface water systems are connected, pollutants common to our valley, and effects of urban development on our watershed.
- The District's website offers free lesson plans for grades K-6. Grade 3, The Amazing Watershed, teaches pollution prevention and watershed protection. Grade 5, Every Drop Counts, reveals how little potable water we have on the earth and the need to recycle and protect water. Grade 6, Sum of the Parts, demonstrates the cumulative effects of pollution and the best management practices that protect the Earth's resources.



Sixth grade students visualize the impacts of riverfront development.



Country Club Elementary students learn the sources of their water.

- The District organized the regional Excellence in Water Research Awards for the 2014 Contra Costa County and Alameda County Science and Engineering Fairs, annual events affiliated with the Intel International Science and Engineering Fair. The awards are jointly sponsored and promoted by 19 water and wastewater agencies to honor outstanding student research on water and wastewater topics. Six of the nine winning projects related to preventing pollution of waterways.
- To help students understand the value of recycled water, the District distributed an
 activity booklet, Give Water a Second Chance...Re-Cycle It, to all fifth graders in
 areas where we treat wastewater (2,778 students at 21 schools). Teachers were
 encouraged to borrow the equipment needed to teach the fifth grade lesson plan,
 Every Drop Counts, and schedule tours of the wastewater and recycled water
 treatment plants.

Career Training

To train a skilled workforce for Bay Area wastewater treatment plants and utilities, DSRSD participates in two career training programs.

- The Bay Area Consortium of Water and Wastewater Education (BACWWE), a 21-agency partnership, teams with Solano Community College to offer college-level training in water and wastewater operations. Since 2007, 1,500 students have participated, either to obtain entry-level or additional certifications that will advance their careers. Students attend courses at treatment plants throughout the East Bay, including DSRSD's facility. The sponsoring agencies pay for students' tuition and books and provide working professionals as instructors. DSRSD's Laboratory Supervisor Raj Gumber and Wastewater Treatment Plant Operations Supervisor Levi Fuller are among the adjunct faculty. The program is filled to capacity.
- The District's WWTP has hosted or taught the Water Pollution Control Program sponsored by the Tri-Valley Regional Occupational Program (ROP) since 1971. Through this entry-level program, high school and adult students learn how a wastewater treatment plant operates and become familiar with the biological, chemical, and physical processes that remove harmful contaminants from wastewater before it is recycled or returned to the environment. The course and materials cost \$190 for high school students and \$940 for adults. Typically 20-25 students complete the nine-month program each year.



DSRSD provides training to future wastewater operations through a regional consortium.

Employee Outreach

Three District Office employees - a
Customer Service Representative,
Human Resources Analyst, and Junior
Engineer - participated in quarterly
public tours of the wastewater
treatment and water recycling plants.
With greater understanding of
treatment processes, these
employees are better equipped to
educate customers and the business
community on how the District and the
public work together to prevent
pollution.



A wastewater systems operator describes microfiltration during a public tour.

Partnering with Other Agencies and Cities

Collaborating with other agencies enables DSRSD to reach a larger audience at a lower cost. Consistent pollution prevention messages and coordinated outreach are particularly important among Bay Area wastewater agencies, which all discharge to the San Francisco Bay and its tributaries.

Bay Area Pollution Prevention Group

The District's Clean Water Programs Specialist participates in meetings of the Bay Area Pollution Prevention Group (BAPPG), a committee of Bay Area Clean Water Agencies (BACWA) that is responsible for implementing public outreach related to pollution prevention. DSRSD also contributes funding to BAPPG to support meaningful information exchanges among wastewater agencies and coordinated regional projects. BAPPG is comprised of 43 wastewater agencies that discharge primarily into the San Francisco Bay and local waterways.

California Association of Sanitation Agencies

The DSRSD Community Affairs Supervisor co-chairs the Communications Work Group of the California Association of Sanitation Agencies (CASA). In 2014, the Committee:

- Provided guidance for the Association's communications plan;
- Published various articles related to outreach, marketing and public relations in the Association's e-news and hardcopy conference newsletters;
- Participated in strategic planning and implementation of communications projects on behalf of the Association.

City of Dublin

In 2014, the District promoted a prescription drug take-back event conducted by Dublin Police Services during Dublin Pride Week and provided other pollution prevention materials at community events (see details under **Public Outreach**, *Waste Pharmaceuticals Collection* and *Education Efforts for Adults*, page 14).

Bay Area Biosolids to Energy Coalition

DSRSD's Graphic Designer continued to maintain a public website for the Bay Area Biosolids to Energy Coalition (BAB2E) and the program's fact sheets and brochures. This consortium of 19 public agencies, representing 4.3 million residents, is determining the feasibility of regional biosolids processing that generates energy from the natural byproducts of wastewater treatment (biosolids) and organic waste that currently ends up in landfills. Reducing organic wastes in landfills will reduce associated greenhouse gasses, and locating facilities in the Bay Area to convert biosolids into energy would reduce hauling and associated emissions.

East Bay Municipal Utility District & Recycled Water Users

The District partners with East Bay Municipal Utility District to provide recycled water for irrigation and other non-potable uses in Dublin and San Ramon through the San Ramon Valley Recycled Water Program (SRVRWP). In 2014, SRVRWP produced 1.3 billion gallons of recycled water from wastewater that otherwise would have been pumped into San Francisco Bay. The partnership has signed agreements with the City of Pleasanton that will expand the program by fully utilizing the city's wastewater for recycled water production.

Legislative and Regulatory Advocacy

DSRSD supports a deliberate legislative agenda that contributes to achieving its pollution prevention goals. In 2014, DSRSD opposed AB 371 (Salas), which would have made it more difficult for California cities and agencies to recycle or dispose of their biosolids. The bill died in committee. The District also supported funding of water- and wastewater-related research by the U.S. Environmental Protection Agency. The District actively participates in regional, state, and federal associations that seek to speak with one voice on legislative and regulatory issues related to pollution prevention, including California Association of Sanitation Agencies (CASA), Association of California Water Agencies (ACWA), WateReuse Association, and Western Recycled Water Coalition (WRWC).

Measuring Effectiveness & Progress

It is simpler and less costly to measure the effectiveness and progress for site-specific programs than it is to measure public outreach aimed at raising general awareness. For site-specific programs related to its industrial, institutional, and commercial customers, the District tracks the number of targeted businesses that are implementing best management practices, number of permits issued, number of inspections conducted, site-specific sampling results, and wastewater treatment plant influent sampling results. The District evaluates site-specific outreach and education based on the number of events and participants, the amount of materials distributed, number of impressions, or other activity-based criteria such as the amount of waste (e.g., mercury) collected or survey responses received. The District has not attempted to measure changes in general awareness of pollution prevention messages due to the prohibitive cost of such analysis.

The following tables include criteria used to measure the effectiveness of DSRSD pollution prevention programs and document the District's progress. When a public outreach activity is not easily measured, it is labeled as N/A in the table.

- 1. Mercury Education and Outreach
- 2. Copper Education and Outreach
- 3. FOG Education and Outreach
- 4. Pharmaceutical Education and Outreach

Table 1Mercury Education and Outreach

Source	Audience	Message/ Program	Implementation Plan/Timeline for 2014	Evaluation Criteria	Evaluation of Effectiveness	Specific Tasks and Time Schedule for 2015
Residences and Employees	General and Employees	Direct general public to baywise.org; in addition, collection containers are placed at the District Office and WWTP for waste mercury products and used alkaline batteries	Year-round: collect products during regular business hours	The quantity of mercury items collected and recycled	831 lbs. of mercury- containing products and 470 lbs. of used alkaline, lead acid, nickel, and lithium batteries	Collect mercury containing products during regular business hours
Dental Offices	Dentists	Follow recommended Dental Amalgam Best Management Practices (BMPs) Install amalgam separators if they replace and/or remove amalgam fillings Perform regular maintenance on the amalgam separator	Ongoing throughout the year: Issue permits to qualifying dental practices Require dentists to submit forms that document implementation of BMPs and installation of amalgam separators Conduct dental facility inspections as needed to ensure compliance Post BMPs, forms, program description and staff contacts on District website	 Number of permits issued Number of dentists participating in the program Number of separators installed 	 76 active dental permits 99 participating dentists Collected 72 completed BMP forms 74 amalgam separators have been installed 	Ongoing throughout the year: Maintain up-to-date list of dental facilities Issue new permits to qualifying dentists and reissue expiring permits Track the number of permitted dental offices that have installed amalgam separators Conduct site inspections as needed

Table 2Copper Education and Outreach

Source	Audience	Message/Program	Implementation Plan/Timeline for 2014	Evaluation Criteria	Evaluation of Effectiveness	Specific Tasks and Time Schedule for 2015
Commercial	Plumbers and pipe installers	Distribute BAPPG's "Preventing Corrosion Protects San Francisco Bay" and "Steps for Installing/Replacing Copper Pipe" outreach flyer at the District's permit counter and website	Ongoing	N/A	N/A	Ongoing
Commercial	Vehicle service and wash facilities	Clean sand/oil interceptors regularly and keep brake pad shavings out of the sewer and storm drains	Ongoing	Number of inspections and number of notice of violations (NOVs) issued	Conducted 40 inspections; no NOVs were issued	Ongoing
Residential/ Commercial	Pool /Spa owners	Do not add chemicals that contain copper algaecides and drain your pool and spa to the sanitary sewer system properly. Instructions available on District website and in public lobby.	Ongoing	N/A	N/A	Ongoing

Table 3FOG Education and Outreach

Source	Audience	Message/Program	Implementation Plan/Timeline for 2014	Evaluation Criteria	Evaluation of Effectiveness	Specific Tasks and Time Schedule for 2015
Residences	General	Inform residents about problems caused by putting used cooking oil and grease down sinks	Ongoing outreach through bill inserts, website and events	N/A	N/A	Ongoing through bill inserts and website esp. during holiday season; promote at community events
Residences	General	Advertise proper FOG disposal on District vehicles	Used "truck wrap" ads on CCTV truck to create mobile billboard that was featured in a community parade and seen year- round as it works in service area	N/A	N/A	Continue using magnetic signs on DSRSD pickups and "wrapped" CCTV truck as mobile billboard, including as float for parades
Restaurants	Restaurant managers/employees	Restaurant owners and managers shall maintain their grease trap systems properly and follow the BMPs	Conduct restaurant inspections	Number of inspections, number of NOVs issued	Conducted 163 inspections; no NOVs were issued	Continue to conduct site inspections

Table 4Pharmaceutical Education and Outreach

Source	Audience	Message/Program	Implementation Plan/Timeline for 2014	Evaluation Criteria	Evaluation of Effectiveness	Specific Tasks and Time Schedule for 2015
Residences	General	Pharmaceutical Collection	Promote the baywise.org website and local pharmaceutical collection days	N/A	Since opening September 29, the collection center has collected 514 lbs. of pharmaceutical waste	Continue promoting disposal sites. DSRSD paying for disposal of unwanted pharmaceuticals.
Residences	General	Established permanent pharmaceutical collection center at City of Pleasanton Police Department	Opened September 2014	Amount of pharma-ceuticals collected	N/A	N/A
Residences	General	Maintain up-to-date information on proper disposal and collection sites on District website	Ongoing	N/A	N/A	N/A
Community	Government and Pharma- ceutical Producers	Support Alameda County's Safe Drug Disposal Ordinance and the California Product Stewardship Council efforts to establish producer- funded take-back programs	Ongoing	N/A	N/A	Contribute \$1,000 to the Product Stewardship Council's efforts