# 2014 Annual Pollution Prevention Report

Reporting Period: January 1, 2014 – December 31, 2014

Prepared By: City of San José Environmental Services Department



Administered by the Environmental Services Department, City of San José SERVING THE FOLLOWING TRIBUTARY AGENCIES Cities of San José, Santa Clara and Milpitas & Cupertino Sanitary District West Valley Sanitation District – including Campbell, Los Gatos, Monte Sereno and Saratoga & County Sanitation Districts No. 2-3 & Burbank Sanitary District San José-Santa Clara Regional Wastewater Facility 2014 Pollution Prevention Annual Report

San José-Santa Clara Regional Wastewater Facility Pollution Prevention Annual Reports are posted on the City of San José website at: www.sanjoseca.gov/Archive.aspx?AMID=157&Type=&ADID=



The Plant has a new name and logo. The San Jose/Santa Clara Water Pollution Control Plant was rechristened as the "San José-Santa Clara Regional Wastewater Facility" in March 2013. The round shape symbolizes the Earth. The four panels represent the juncture of land, water, infrastructure, and habitat – a fitting representation of the Facility's location and mission.

#### **For More Information**

Additional program information is available at the Environmental Services Department web site: www.sjenvironment.org. Questions about this document should be directed to the San José-Santa Clara Regional Wastewater Facility, 200 E. Santa Clara Street, 7th Floor, San José, CA 95113, 408-945-3000, wspinbox@sanjoseca.gov.

#### Acknowledgements

The Pollution Prevention Annual Report is produced by the City of San José's Environmental Services Department, and describes the pollution prevention activities of the Industrial Waste and Source Control programs. Key staff members in the development and implementation of this plan include Jo Andrade-Bunnell, John Brazil, Chris Donaldson, James Downing, Eric Dunlavey, Jim Ervin, Casey Fitzgerald, Mike Foster, Sandra Freitas, Jon Gire, Eric Hansen, Cathy Hoang-Mendoza, Jack Judkins, Paul Ledesma, Walter Lin, Alleyne Long, Stephen Lowes, Emy Mendoza, Mary Morse, Liz Neves, Sharon Newton, Steven Osborn, Paul Prange, Hossein Rahnema, Alana Rivadeneyra, Jennifer Seguin, Dan Sunseri, Simret Yigzaw, and Michele Young.

**On the cover:** Baylands looking toward East Bay Coastal Range.

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#### Environmental Services Department

San José-Santa Clara Regional Wastewater Facility

#### WATERSHED PROTECTION

#### CONTRIBUTING AGENCIES

COUNTY SANITATION DIST. NO. 2 - 3

WEST VALLEY SANITATION DISTRICT CITIES OF CAMPBELL, LOS GATOS

MONTE SERENO AND SARATOGA

BURBANK SANITARY DISTRICT CUPERTINO SANITARY DISTRICT

CITY OF SAN JOSÉ CITY OF SANTA CLARA

CITY OF CUPERTINO

CITY OF MILPITAS

February 27, 2015

#### SUBMITTED ELECTRONICALLY

Mr. Bruce Wolfe Executive Director California Regional Water Quality Control Board San Francisco Bay Region 1515 Clay Street, Suite 1400 Oakland, CA 94612

SUBJECT: 2014 Annual Report Submittals NPDES Permit No. CA0037842, Order Number R2 2014-0034

Dear Mr. Wolfe:

As required by the San Jose/Santa Clara Water Pollution Control Plant's (Plant) NPDES permit, the City of San José is submitting the attached Pollution Prevention Annual Report documenting the City's pollution prevention activities.

This Annual Pollution Prevention Report provides update on efforts to reduce pollutant loadings to the Plant and the receiving waters, as required by NPDES permit provision VI.C.3.b. The report also includes information on other related pollution prevention activities that the City performs and regional efforts in which the City participates which are not direct requirements of the Plant's permit.

If you desire more information on programs summarized in the Annual Pollution Prevention Report, please contact Casey Fitzgerald at (408) 793-5378.

Sincerely

Kerrie Romanow Director, Environmental Services Department

> Cc: Marcia Liao, RWQCB, Permitting Section Bill Johnson, RWQCB, Pollution Prevention

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The City of San José operates and manages the San Jose/Santa Clara Water Pollution Control Plant (recently renamed the San José-Santa Clara Regional Wastewater Facility (Wastewater Facility) on behalf of the following cities and agencies (Tributary Agencies) including San José, Santa Clara and Milpitas; Cupertino Sanitary District; West Valley Sanitation District including Campbell, Los Gatos, Monte Sereno and Saratoga; County Sanitation Districts 2-3; and Burbank Sanitary District. This 2014 Annual Pollution Prevention Report has been prepared in accordance with the requirements of Order Number R2-2014-0034, National Pollutant Discharge Elimination System (NPDES) Permit no. CA0037842 issued to the San José/Santa Clara Water Pollution Control Plant on September 15, 2014.Pollutants of concern are discussed in individual sections of this report:

- Copper (Section 3),
- Mercury (Section 4),
- PCBs (Section 5),
- Cyanide (Section 6),
- Fats, oils, and grease (FOG) (Section 7), and
- Pesticides (Section 8).

In addition, the City continues to develop and implement programs that address other pollutants, and study the sources and prevention options for some emerging contaminants (Section 9).

Highlights for 2014 pollution prevention activities are summarized below.

#### MERCURY

A total of 875 Dental Wastewater Discharge Permits have been issued to active practices in the Wastewater Facility's service area, representing more than 99% of all identified dentists.

Inspections confirmed that amalgam separators were installed at over 99% percent of inspected practices and corroborated the accuracy of previouslysubmitted self-certification statements. In addition, nearly all of the inspected dental practices were noted



to be following the Dental Amalgam Program best management practices (BMPs). In 2014, there was an increased use of the online Dental Amalgam Program Annual Report form with almost 77% of practices submitting electronically.

The City continued its public education program offering residents opportunities to exchange their mercury fever thermometers for a digital one free of charge. A total of eight thermometer exchange events were held in the Tributary area in 2014. Tributary area residents exchanged a total of 208 mercury thermometers and miscellaneous mercury containing items, resulting in collection of approximately 137 grams of mercury. Beyond offering attendees a free digital thermometer in exchange for their mercury containing one, these events educated residents on mercury pollution prevention and proper disposal of household hazardous waste, including pharmaceuticals, wipes, and fats, oils and grease, in addition to a broad array of pollution prevention tips. Instead of hosting thermometer collections, the City plans to encourage and assist partner organizations in the tributary area to host thermometer exchanges in 2015.

Additional pollution prevention activities integrated into local solid waste programs include supporting the countywide household hazardous waste (HHW) residential drop off program that collected 550 pounds of mercury containing products, 133,577 pounds of fluorescent lights, and 137,548 pounds of household batteries.

Finally, the City initiated a partnership with the Almaden Quicksilver Mining Museum (AQMM) to distribute mercury disposal and HHW brochures.

The museum is visited annually by approximately 450 4th grade students from local schools in addition to the general public.

#### Fats, Oils, and Grease

During 2014, the City continued the Food Service Establishment (FSE) Inspection Program in all jurisdictions within the Tributary Area. A total of 1,425 FSEs were inspected in Fiscal Year (FY) 13-14; 636 FSEs in San José and 789 in the Tributary cities.

In addition, the City coordinated the Bay Area Pollution Prevention Group (BAPPG) regional Spanish radio advertising campaign promoting proper disposal of residential fats, oils,



An inspector conducts a grease control device inspection.

and grease. The advertisements aired between Thanksgiving week and New Year's Day on Univision radio stations with an estimated 1.7 million impressions. Univision Spanish radio stations air in nine Bay Area counties.

Finally, the City continued work began in 2013 with two social practice artists, Claire Napawan and Brett Snyder, to develop a community engagement procedure to yield pilot artwork for education and awareness about the proper management of residential FOG. The San José Public Art Committee reviewed the artists' artwork in June 2014, and the Public Art team is pursuing a contract with the artists to implement some of their proposed tactics which could include truck signs on vactor trucks and redesign of the door hangers left on doors in neighborhoods where the sewer lines have been maintained to communicate important pollution prevention messages.

#### Emerging Contaminants

In 2014, the City continued to conduct activities to increase public awareness of the impact of pharmaceuticals on the Bay. During National Pollution Prevention Week, September 13-20, 2014, the City hosted four pharmaceutical collection events and educated residents not to flush unwanted and expired medications down the drain. The events were held in Cupertino, Milpitas, and San José at senior centers, community centers, and a hospital. A total of 678 pounds of medicines were collected from more than 180 residents.



Staff member assists with proper disposal of unwanted medicine.

The City of Santa Clara continued collecting pharmaceuticals at its police station, utilizing a receptacle installed in 2009. Through this service over 1,324 pounds of used and expired medicines were collected and disposed of properly in 2014.

The City continued its program to collect unwanted medications at Neighborhood Cleanup events hosted by the City's Code Enforcement Division. In 2014, a total of 934 pounds of pharmaceuticals were collected at twenty-two events. The program is scheduled to continue in 2015.

The San José Police Department participated in the Drug Enforcement Agency (DEA) National Prescription Take Back Days on April 26 and September 27, 2014 and collected 1,832 pounds of unused medications.

City staff also promoted the County's permanent pharmaceutical drop-off locations at community events.

Finally, City began work in June on a three-year grant from the Santa Clara Water District, in partnership with the California Product Stewardship Council (CPSC) and the County Department of Environmental Health's (DEH) Household Hazardous Waste Program, to install 50 pharmaceutical take back boxes at pharmacies within Santa Clara County. This grant comes just as the DEA released its regulations on the collection of controlled medicines which added pharmacies to the list of entities that can collect them. In 2014, grant work included site recruitment for new bin placement and promotion of the existing collection locations.

### HOUSEHOLD HAZARDOUS WASTE



Drop off line at new San José HHW Facility.

The City continues to support the County of Santa Clara DEH Household and Small Business Hazardous Waste program. DEH hosted 19 hazardous waste drop-off events for households and conditionally exempt small quantity generators (small businesses) at two separate Santa Clara Valley Transit Authority parking lots in San José. The County also held similar events in other County venues, available to all County

residents, including those in San José. This service allows small businesses in the County to properly dispose of their hazardous wastes, including mercury-containing products. Small businesses were served, including local government agencies, Goodwill Industries, and the Salvation Army.

Construction of the City's new permanent HHW facility began in October 2011, and the facility opened in September 2014.

## GENERAL POLLUTION PREVENTION OUTREACH EFFORTS

In addition to pollutant specific outreach, the City produces general outreach materials and participates in events that promote water quality management and pollution prevention messages that address more than one specific pollutant. In September 2014, the City hosted activities in connection with National Pollution Prevention Week focused on engaging the community and City employees. Four resource fairs were held at locations throughout the Tributary area. At these resource fairs, almost 230 Tributary area residents



*Staff members discuss pollution prevention topics with event attendees.* 

were able to collect resources to help them practice pollution prevention at home. Public education topics covered included proper disposal of mercury-containing devices, pharmaceuticals, fats oils and grease, wipes, and household hazardous waste among others.

Finally, the City's Pretreatment Program began an effort to update and reformat all education material for permitted Industrial Users (IUs). This project is expected to be completed in 2015.

#### WORK PLAN HIGHLIGHTS

Future activities include continued Dental Amalgam Program inspections and increased collaboration with partner organizations and other agencies to promote

pollution prevention messages, apply for grants, and support legislation to establish product stewardship models to address pollutants of concern. The City's Watershed Pollution Prevention Team is finalizing an "Event Kit" to facilitate efforts of partner organizations interested in hosting event at which pharmaceuticals or mercurycontaining devices can be collected.

Table ES-1 presents the Pollution Prevention Program (P2) highlights of 2014 activities and plans for 2015.

# Table ES-12014 Accomplishments and 2015 Plan<br/>(see referenced report section for details)

2014 Accomplishments	2015 Work Plan	Evaluation Criteria		
Copper – Section 4				
<ul> <li>Copper pipe fact sheets for installers and designers were available on the City website. Due to a change in software, download data was not available.</li> <li>22 copper pipe fact sheets were distributed at the IU Academy sessions.</li> <li>Monitored Wastewater Facility influent, effluent, and Lower South Bay to ensure that treatment processes were working and industrial discharges and ambient copper levels were not significantly increasing. The overall copper loading pattern has been trending downward with a 5-year trend of a relatively stable range.</li> </ul>	<ul> <li>Communicate with plumbers and installers through presentations through BAPPG.</li> <li>Distribute copper fact sheet at all city permit centers in Plan service area.</li> <li>Continue to monitor Facility influent, effluent, and Lower South Bay for copper levels.</li> </ul>	<ul> <li>Increased awareness of bay-friendly copper pipe installation and design practices.</li> <li>Numbers of fact sheets distributed at permit center and downloaded from website.</li> <li>Measure influent loading of copper levels.</li> </ul>		
Mercury – Section 5	Mercury – Section 5			
<ul> <li>Continued Dental Amalgam Program inspections in City of San José and Tributary cities.</li> <li>A total of 875 active permits for dental practices in the Wastewater Facility service area, (99% of applicable dentists); 26 permits were issued in 2014.</li> <li>Completed construction of San José's HHW facility.</li> </ul>	<ul> <li>Continue to conduct inspections of dental facilities in 2015 (target 20% of dental practices).</li> <li>Permit or exempt, as appropriate, dentists who have not applied for a permit.</li> <li>Track and comment on EPA Federal Dental Regulations.</li> <li>Continue support of the County HHW program.</li> <li>Encourage and support other agencies to conduct thermometer collection events.</li> </ul>	<ul> <li>Number of inspections completed.</li> <li>Number and percent of practices with amalgam separators installed.</li> <li>Number of Tributary area residents dropping off mercury devices at one-day events and at the County HHW facilities</li> <li>Pounds of mercury disposed of properly.</li> <li>Number of event participants, number of thermometers, and amount of mercury collected.</li> </ul>		

2014 Accomplishments	2015 Work Plan	Evaluation Criteria
<ul> <li>Supported and promoted the HHW program in San José for the disposal of mercury thermometers, fluorescent bulbs, and other household sources of mercury. The Countywide HHW program recycled:</li> <li>845 pounds of elemental mercury</li> <li>127,490 pounds of fluorescent lights</li> <li>159,598 pounds of household batteries</li> <li>Held seven thermometer exchange events in the Tributary Area during 2014 at which 82 fever thermometers (41 grams of mercury) were collected.</li> <li>The City recycled approximately 14,508 pounds of mercury-containing lamps in FY 13- 14 and continued to replace them with low mercury lamps.</li> <li>The citywide employee battery collection program collected and properly recycled 7,167 pounds of alkaline, lithium, and rechargeable batteries.</li> </ul>	<ul> <li>Finalize plans for including permanent thermometer exchange at new HHW facility.</li> <li>Continue to replace lamps with low mercury fluorescents as needed in all City facilities.</li> <li>Continue to maintain battery collection locations for City employees to properly dispose of batteries generated in the workplace.</li> <li>Finalize development of an event kit to aid partner organization to host collections of mercury-containing devices.</li> <li>Assess possible opportunities to implement a program to replace mercury containing equipment in local college laboratories with mercury free equipment.</li> </ul>	<ul> <li>Pounds of mercury-containing lamps recycled through the City's Lamp Recycling Program.</li> <li>Quantity of batteries collected.</li> <li>Number of mercury-containing devices and amount of mercury collected.</li> <li>Pounds of mercury disposed of properly.</li> </ul>
PCBs – Section 6		
<ul> <li>Required all IUs suspected or known to have Total Toxic Organics (TTOs) to conduct sampling or submit certification that a plan is in place to manage TTOs.</li> </ul>	<ul> <li>Have all wastewater discharge applicants disclose any TTOs, including polychlorinated biphenyl s (PCBs), stored onsite.</li> <li>Require all IUs suspected or known to have TTOs to conduct sampling or submit certification that a plan is in place to manage TTOs.</li> </ul>	<ul> <li>100% of all IUs suspected or known to have TTOs conduct sampling, or certify that a management plan is in place.</li> </ul>

2014 Accomplishments	2015 Work Plan	Evaluation Criteria	
Cyanide – Section 7			
<ul> <li>Monitored influent/effluent for elevated cyanide levels entering the Wastewater Facility.</li> <li>Wastewater Facility cyanide influent concentrations were below the reporting limit of 3 ppb.</li> <li>Provided education on cyanide to facilities during inspections, as needed.</li> <li>Continued surveillance and monitoring of industrial discharges.</li> </ul>	<ul> <li>Provide education on cyanide to facilities during inspections, as needed.</li> <li>Continue surveillance and monitoring of industrial discharges.</li> <li>Update and reformat Cyanide Fact Sheet.</li> </ul>	<ul> <li>Decreased influent levels of cyanide to the Wastewater Facility coming from IUs.</li> </ul>	
FOG – Section 8	FOG – Section 8		
<ul> <li>Inspected 1,425 FSEs in FY 13-14 (636 in San José and 789 in Tributary jurisdictions). 33% of facilities had one or more violations.</li> <li>14% of sanitary sewer overflows showed grease as contributing cause. (32% decrease)</li> <li>Investigated 13 grease related complaints, involving 18 facilities in FY 13-14.</li> <li>Performed 360 plan checks of 251 food service facilities in 2014.</li> <li>558 tons of grease hauled from the Wastewater Facility (consistent with last year's 576 tons but still a noticeable decrease from the 645 tons reported for 2010).</li> <li>Translated Fact Sheets into multiple languages (see Attachment 1)</li> <li>Distributed 2,676 educational pieces to FSEs in FY 13-14.</li> </ul>	<ul> <li>Inspect and educate owners and operators of local restaurants and food service facilities on best management practices for grease management. Inspect approximately 1,200 food service facilities and distribute educational materials as part of inspection.</li> <li>Continue to implement grease control device inspection pilot program.</li> <li>Continue as opportunities arise to deliver messages through BAPPG, door hangers, and poster display, and other methods.</li> <li>Pilot implementation of targeted public art education campaign in the residential sector for reducing FOG in the collection system.</li> </ul>	<ul> <li>Number of food service facilities inspected.</li> <li>Percent of facilities with recorded violations.</li> <li>Number of educational materials distributed.</li> <li>Percent of blockages attributed to FOG.</li> <li>Number of food service facilities inspected.</li> <li>Number of placements, interviews, articles, etc., through BAPPG.</li> <li>Number of Bay Area residents reached through BAPPG FOG Campaign messages.</li> <li>Number of residents reached.</li> </ul>	

2014 Accomplishments	2015 Work Plan	Evaluation Criteria
<ul> <li>In coordination with BAPPG and Univision, presented a media campaign that delivered pollution prevention messages to Hispanic audiences in the 9-county San Francisco Bay Area. In 2014, the campaign featured 220 spots promoting the FOG message and resulted in 1.7 million impressions during the holiday season.</li> </ul>	<ul> <li>Assess risks of sanitary sewer overflows based on various asset and geographical characteristics.</li> </ul>	
<b>Pesticides</b> – Section 9		
<ul> <li>Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) conducted an Advanced Green Gardener Training session in FY 13-14. A total of 25 individuals attended these trainings.</li> <li>31 Green Gardeners re-certified that they use other pest control options.</li> <li>The City hosted the Bay-Friendly Landscape Maintenance training in the fall for 63 participants including 9 City of San José municipal staff.</li> <li>City employees that apply or transport pesticides received annual safety training on Integrated Pest Management (IPM) techniques.</li> <li>All new City facility maintenance contracts included standard IPM provisions.</li> <li>The Santa Clara County HHW Program served 2.7% of the City's total households and over 269,000 lbs of poisons (including diazinon and dursban) were managed.</li> <li>Participated in the Our Water Our World campaign and the Watershed Watch campaign. Both deliver IPM messages to residents and area businesses.</li> </ul>	<ul> <li>Continue to support the SCVURPPP Green Gardener training program and host training for maintenance gardeners in Santa Clara County.</li> <li>Hold training for all City employees that apply pesticides.</li> <li>Include language in new contracts to ensure that IPM techniques and City policies regarding pesticide application will be followed.</li> <li>Advertise HHW availability for disposal of waste pesticides.</li> <li>Participate in the Our Water Our World and Watershed Watch campaigns.</li> <li>Hold training for all City employees that apply pesticides.</li> <li>Include language in new contracts to ensure that IPM techniques and City policies regarding pesticide application will be followed.</li> </ul>	<ul> <li>Number of participants.</li> <li>100% of applicable employees receive IPM training over a three year cycle.</li> <li>100% of contracts include IPM content.</li> <li>Number of impressions.</li> <li>Percentage of households using HHW facility for drop-off of pesticides.</li> <li>Amount of pesticides collected.</li> <li>Number of events attended.</li> <li>Variety of methods applied to reach a broad audience.</li> <li>100% of contracts include IPM content.</li> </ul>

2014 Accomplishments	2015 Work Plan	Evaluation Criteria
<ul> <li>In FY 13-14, the Watershed Watch advertising campaign included online, television, print, and radio ads in English and Spanish. The campaign placed a total of 446 placements on IPM and pesticide reduction.</li> <li>Participated on the steering committee for the statewide "Got Ants" campaign that was implemented using grant funding to the San Francisco Estuary Partnership from the California Department of Pesticide Regulation (DPR).</li> </ul>		
<b>Emerging Pollutants –</b> Section 10		
<ul> <li>Participated in National Pollution Prevention Week, September 13-20, educating residents to properly dispose of expired and unwanted medicines. A total of 678 pounds of medicines were collected at four events hosted by the City.</li> <li>Continued to provide ongoing promotion of the Santa Clara County program as a mechanism for safe pharmaceutical disposal.</li> <li>1,324 pounds of expired and unwanted medicines were collected at the Santa Clara police station.</li> <li>1,832 pounds of expired and unwanted medicines were collected at the San José Police Department during DEA National Take Back events in April and September 2014.</li> <li>934 pounds of expired and unwanted medicines were collected at 22 Neighborhood Cleanup events.</li> </ul>	<ul> <li>Encourage and support partner agencies to host one-day collection events for residential pharmaceutical waste.</li> <li>Continue collection at the Santa Clara police station.</li> <li>Continue collection at Neighborhood Cleanup events.</li> <li>Implement grant received from Santa Clara Valley Water District to install pharmaceutical collection boxes at pharmacy partners within the tributary area.</li> <li>Assess opportunity of a Drug Disposal Ordinance with other Bay Area jurisdictions.</li> <li>Develop plan for targeted outreach to residents, hospitals, child care centers, etc. about not flushing wipes.</li> <li>Continue support as appropriate for regional efforts to promote producer responsibility through participation in the California Product Stewardship Council.</li> </ul>	<ul> <li>Amount of pharmaceuticals collected.</li> <li>Number of residents attending events.</li> <li>Amount of pharmaceuticals collected.</li> <li>Amount of pharmaceuticals collected.</li> <li>Reduction in pounds of wipes removed from pump stations and Wastewater Facility headworks.</li> </ul>

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This 2014 Annual Pollution Prevention Report for the San Jose/Santa Clara Water Pollution Control Plant (recently renamed the San José-Santa Clara Regional Wastewater Facility), has been prepared in accordance with the requirements of Order Number R2-2014-0034, National Pollutant Discharge Elimination System (NPDES) Permit no. CA0037842 issued to the San Jose/Santa Clara Water Pollution Control Plant (Plant) on September 15, 2014.

The City of San José (City) is required by Provision VI.C.3.b. of the Permit to submit to the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) an annual report by February 28 of each year to document ongoing accomplishments of its Pollution Prevention Program. This report summarizes pollution prevention activities and programs of the San José-Santa Clara Regional Wastewater Facility (also referred to as the "Wastewater Facility") during the period from January 1, 2014 to December 31, 2014.

#### WASTEWATER FACILITY OVERVIEW

The Wastewater Facility receives wastewater from roughly 1.4 million residents and more than 17,000 commercial and industrial facilities and discharges to the Artesian Slough, a tributary to Coyote Creek, which flows to the southern end of the San Francisco Bay. As lead agency of a joint powers authority, the City of San José operates and manages the Wastewater Facility, located at 700 Los Esteros Road, in San José, California on behalf of the following Cities or agencies:

- San José,
- Santa Clara,
- Milpitas,
- Cupertino Sanitary District,
- County Sanitation Districts 2-3,
- Burbank Sanitary District, and

 West Valley Sanitation District (serving Campbell, Los Gatos, Monte Sereno, and Saratoga).

The Wastewater Facility provides advanced treatment of wastewater from domestic, commercial, and industrial sources. The treatment process consists of screening and grit removal, primary sedimentation, secondary (biological nutrient removal) treatment, secondary clarification, filtration, disinfection, and dechlorination.

The Wastewater Facility has an average dry weather flow design capacity of 167 million gallons per day (MGD), and a 271 MGD peak hourly flow capacity. In 2014, the Wastewater Facility's Annual Average Influent Flow was 106.9 MGD. The Wastewater Facility's permit includes a requirement for maintaining average dry weather effluent flow (ADWEF) below 120 MGD or to levels that do not negatively affect salt marsh habitat. For 2014, the ADWEF was 82.3 MGD and therefore remained well below the dry-weather flow trigger for the thirteenth consecutive year.

#### Service Area Description

The Wastewater Facility's service area includes a 300-square mile area encompassing the territories of the above mentioned tributary cities (hereinafter called Tributary Agencies).

The current service population is comprised of approximately 1.4 million residents and more than 17,000 commercial and industrial facilities of which 253 are permitted industrial users (IUs). Of the total wastewater flow to the Wastewater Facility, 66 percent is estimated to come from the residential sector, 5 percent from the industrial sector, and 29 percent from the commercial business sector.



Figure 1-1 Area Tributary to the San José-Santa Clara Regional Wastewater Facility

#### Pollutant Reduction Strategies and Activities for 2014

The scope and type of pollution prevention activities in the City have changed over the last two decades based on the successful implementation of source control measures and pollution prevention partnerships with local industry, changes in the type of permitted industrial base, changes in pollutant priorities and sources, changes in behavior, and availability of resources. The City's pollution reduction strategies focus on behavioral changes of broad audiences and include increased public outreach to targeted residential and commercial sectors, which differ depending on the pollutant of concern.

The City prepares an annual pollution prevention work plan that describes how pollution prevention activities will be implemented to address pollutants of concern and any program issues.

In executing the Pollution Prevention Program, the City endeavors to:

- Employ a watershed-wide approach in addressing pollutant issues;
- Maximize the use of regional venues, tools, and resources to address regional issues;
- Participate in technical studies that meaningfully contribute to the understanding of pollutant impacts and control strategies; and
- Implement local solutions that represent a reasonable investment of resources and effectively contribute to Bay-wide watershed protection.

The outreach activities implemented by the City in 2014 are presented in Sections 3 through 10 by both targeted pollutants of concern (POC) and general pollution prevention messages. Activities are reported for the calendar year 2014, when possible. However, when implementation takes place or is managed on a fiscal year basis, such as under a contract or a regional work plan that operates on a fiscal year basis, the activity reported is from the last complete fiscal year of implementation. Samples of new or revised outreach materials created and distributed in



Aerial view of the Wastewater Facility

2014 may be found as Attachment 1 at www.sanjoseca.gov/regulatoryreports.

In addition to what the City does within its own jurisdiction, the City's key P2 accomplishments can be measured through its various regional watershed activities. The City participates in multiple regional outreach and pollutant monitoring efforts. These partnerships and leadership initiatives will be discussed in Section 11.

#### 2014 POLLUTANTS OF CONCERN

In accordance with NPDES permit provision VI.C.3.b., pollution prevention programs and efforts are focused on minimizing pollutant loadings to the San José-Santa Clara Regional Wastewater Facility. Pollutants of concern are identified if they meet one of the following criteria:

- Pollutant required by the Plant's NPDES Permit
- Meets a federal regulatory requirement
- Potential to cause a water quality exceedance
- Total Maximum Daily Load (TMDL) driven
- Pollutant of growing public concern
- Potential to impact collection system operation
- Potential to impact recycled water quality

Prioritization of pollutants of concern helps guide City programs to particular pollutants and supports long-term pollution prevention program effectiveness by allowing the City to adapt its approach based on the best available information and resources. The primary 2014 pollutants of concern are:

Pollutant	Priority
Mercury	Continue program efforts already established
Fats, Oils, and Grease	Continue program efforts already established
Copper	Continue program efforts already established
Cyanide	Continue program efforts already established
Pesticides	Continue program efforts already established
PCBs	Continue program efforts already established
Other Emerging Contaminants (Pharmaceuticals, wipes, etc)	Continue program efforts already establish and pilot programs

The pollutants of concern include U.S. Environmental Protection Agency (EPA) listed priority pollutants (mercury, copper, cyanide, pesticides, and polychlorinated biphenyl [PCBs]). The City has also targeted other pollutants such as fats, oils, and grease (FOG), pharmaceuticals, and wipes as pollutants of concern.



The City's Pollution Prevention (P2) Program formally began 20 years ago when the Regional Water Board ordered the Wastewater Facility to reduce its copper and nickel discharges by more than 50% to protect aquatic organisms in the South Bay and meet water quality objectives. In addition to employing traditional "end of pipe" industrial and commercial controls to meet the new discharge requirements, the City's program evolved into a multi-faceted approach to pollution prevention incorporating the following elements:

- Implementation of pollutant-specific reduction programs,
- Development of comprehensive P2 outreach and education campaigns,
- Adoption of new policies and strategies to support P2 efforts,
- Sponsorship of or support for legislation and regulations supporting P2 objectives,
- An increasing focus on a watershed/regional approach to P2 including partnership with other regional agencies and formation of regional stakeholder processes and work groups to develop long term solutions to P2 issues, and
- Collection of scientific data in conjunction with special P2 studies

Special studies are an integral part of today's P2 program. The City became a Bay Area leader by performing technical studies such as the copper and nickel TMDL support studies in the South Bay that helped dischargers and regulators understand the fate of pollutants and resolve scientific uncertainties.

The City continues to be committed to performing research and sharing its results to ensure that policy development, regulations, and the level of effort to control a pollutant source are based on the best available site-specific information whenever possible. The City is currently conducting monthly nutrient monitoring by boat in the Lower South San Francisco Bay to supplement the additional nutrient effluent monitoring required by the 13267 Letter issued by the Water Board to all POTWs in March 2013. Many of the City's research documents and publications can be found on the City's website at www.sanjoseca.gov/regulatoryreports.

Finally, outreach and public education remain strong components of the City's P2 efforts today. The City commits resources each year to develop and disseminate targeted P2 messages and trainings to the industrial, commercial, and residential sectors, as well as to its employees.

Table 2-1 lists the historical summary of the City's P2 accomplishments from 1983 to the present.

Year	Actions
1983	<ul> <li>Received formal approval of the City of San José Industrial Pretreatment Program from the Environmental Protection Agency (EPA).</li> </ul>
1989	<ul> <li>Initiated waste minimization efforts to control 3 pollutants of concern: copper, zinc, and lead.</li> <li>Completed Pollutant Source Evaluation.</li> <li>Completed Waste Minimization Study.</li> </ul>
1990	<ul> <li>Adopted City Council Resolution No. 62501 in support of a Waste Minimization Program.</li> <li>Implemented Pilot Waste Minimization Program targeting specific metals of concern: copper, nickel, lead, and zinc.</li> <li>Implemented improvements to Pretreatment Program (flow monitoring requirements; increased sampling, inspection, and enforcement activities).</li> <li>Developed waste minimization programs for targeted non-permitted industries that contribute significant metals loading in their waste streams. Radiator repair shops, auto and parts cleaning shops, and photo processors were added to group of permitted industries and required to take part in the pilot waste minimization program aimed at residential, commercial, and industrial sectors.</li> </ul>
1991	<ul> <li>Implemented a waste minimization program for radiator shops, automotive shops, and photo processors.</li> <li>Completed Waste Minimization Implementation Program Report.</li> <li>Implemented a waste minimization program for all permitted industrial dischargers.</li> </ul>
1992	<ul> <li>Initiated local controls and participated in regional activity targeting the control of copper-based root control chemicals and tributyltin.</li> <li>Completed commercial and residential sampling program to identify pollutant contribution from these sources.</li> </ul>

 Table 2-1
 Historical Summary of P2 Accomplishments

Year	Actions
1993	<ul> <li>Initiated Mass Audit Studies Program.</li> <li>Required effluent flow monitoring and completed Flow Verification for all permitted Industrial Users.</li> </ul>
	Developed Reasonable Control Measures Plan.
1994	<ul> <li>Developed San José Pollution Prevention Strategy for a Clean Bay.</li> <li>Completed Mass Audit Studies and a Summary Report.</li> </ul>
	<ul> <li>Revised the local limits for copper, nickel, and cyanide.</li> </ul>
1995	<ul> <li>Began Nickel Initiative Partnership Program.</li> </ul>
	<ul> <li>Restructured Source Control Program. Three teams - regulations, outreach, and detection – were formed to increase efficiency.</li> </ul>
	<ul> <li>Joined the San Francisco Bay Area Pollution Prevention Group (BAPPG).</li> </ul>
	<ul> <li>Formed an internal youth education collaboration to promote wastewater and stormwater pollution prevention and water conservation.</li> </ul>
	<ul> <li>Began trunkline and upstream monitoring program to identify pollutant sources to the Plant.</li> </ul>
1996	<ul> <li>Became a signatory to the Santa Clara Basin Watershed Management Initiative (WMI), actively participated in the WMI Core Group, Water Resources Protection Collaborative, Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), and subgroups of the WMI.</li> </ul>
	<ul> <li>Held a "Heavy Metals Workshop" to discuss issues specific to metals and permitted industrial dischargers.</li> </ul>
	<ul> <li>Started the Industrial User Academy to educate representatives from permitted Industrial Users about the pretreatment program and their permit requirements.</li> </ul>
	<ul> <li>Developed, printed, and distributed best management practices (BMPs) for educational institutions, hospitals, printers, and plumbers.</li> </ul>
	<ul> <li>City Council approved the Water Policy Framework.</li> </ul>
	<ul> <li>Completed the Direct Metalization Study and report for printed circuit board industries.</li> </ul>
	<ul> <li>Joined the Bay Area Stormwater Management Agencies Association (BASMAA)/ Bay Area Clean Water Agencies (BACWA) Regional Media Relations committee.</li> </ul>
	<ul> <li>Started Industry Focus Group to work with industry on developing environmental issues.</li> </ul>

Year	Actions
1997	<ul> <li>Initiated Phase I of the Flow Audit Studies Program.</li> </ul>
	<ul> <li>Developed the Flow Audit Study Protocol, a technical guidance document to assist industrial users with performing the flow audit studies.</li> </ul>
	<ul> <li>Approximately 40 high flow companies (over 100,000 gpd) were required to conduct flow audit studies and to identify potential flow/pollutant reduction projects for their facilities.</li> </ul>
	<ul> <li>Developed, printed, and distributed BMPs for machine shops.</li> </ul>
	<ul> <li>Initiated and managed annual Hispanic radio ad campaign through BAPPG.</li> </ul>
	<ul> <li>Completed Nickel Initiative Partnership Program.</li> </ul>
	<ul> <li>Began Printed Circuit Board Partnership Program to focus on copper and flow reduction.</li> </ul>
	<ul> <li>Began annual tracking of permitted industrial influent loading of copper, nickel, and flow.</li> </ul>
	<ul> <li>Began ambient monitoring program in the South Bay.</li> </ul>
1998	<ul> <li>Funded a \$3.5 million contract for a stakeholder effort to develop technical studies in support of the South Bay Copper and Nickel Site- Specific Objective. Studies found that the South Bay was unlikely to be impaired for copper and nickel.</li> </ul>
	<ul> <li>Initiated New Development Review Program to ensure certain environmental requirements (flow, pollutant discharge, industrial wastewater reuse, etc.) are incorporated as a condition of development within the City.</li> </ul>
	<ul> <li>Launched the quarterly Tributary Tribune newsletter, serving the permitted industrial user community.</li> </ul>
	<ul> <li>South Bay Water Recycling Phase I facilities begin distributing recycled water to Santa Clara, Milpitas, and San José.</li> </ul>
	<ul> <li>Initiated and funded a grant for educational programs at the Alviso Education Center about wastewater, stormwater, and water conservation for teachers, students, and the public.</li> </ul>
	<ul> <li>In support of the Bay-wide mercury TMDL development, continued low- level, ultra clean mercury effluent monitoring.</li> </ul>
	<ul> <li>Began the multi-year Special Study for Certain Organic Pollutants using ultra-clean techniques at ultra-low levels at the request of the Regional Water Board to investigate the accuracy of this type of testing.</li> </ul>
	<ul> <li>Began the Watershed Grant Program that provided funding to foster and implement innovative solutions to watershed problems.</li> </ul>

Year	Actions
1999	<ul> <li>Completed Phase 1 Flow Audit Studies.</li> <li>Completed Headworks Loading Analysis Study.</li> <li>Completed Printed Circuit Board partnership.</li> <li>Participated in development of award winning "When Ants Invade" regional ad campaign.</li> <li>Developed the award winning Wastewater Paths poster.</li> <li>Completed baseline survey of Industrial Users.</li> <li>Completed cyanide fact sheet.</li> <li>Performed initial hospital and dental office monitoring.</li> <li>Began multi-year bioassessment and biocriteria studies in the South Bay to investigate additional tools and measurements to characterize South Bay water and sediment quality in the lower South Bay.</li> <li>Held Industrial Water Efficiency and Reuse Workshop.</li> </ul>
2000	<ul> <li>Completed Final Report for Phase 1 Flow Audit Studies Program. Over 50 cost-effective projects were identified.</li> <li>Copper and Nickel Action Plans incorporated into South Bay dischargers' NPDES Permits in lieu of TMDLs.</li> <li>Led BAPPG project to develop a Restaurant Grease Fact Sheet.</li> </ul>
2001	<ul> <li>Initiated Phase 2 of the Flow Audit Studies Program.</li> <li>10 additional companies with flows over 100,000 gpd were required to conduct flow audit studies and identify potential flow/pollutant reduction projects for their facilities.</li> <li>Revised Flow Audit Study Protocol.</li> <li>Launched Watershed Watch campaign in conjunction with the WMI and SCVURPPP programs.</li> <li>Released the Watershed Management Initiative Characteristics Report.</li> </ul>
2002	<ul> <li>Completed Cooling Tower Guidelines and conducted workshop for permitted industrial users.</li> <li>Published the first "Success Stories", a periodic publication to highlight local companies that have successfully completed flow or pollutant reduction projects via the Water Efficient Technologies Program.</li> <li>Initiated Food Service Inspection Program which addressed stormwater management practices including the control of fats, oils, and grease.</li> <li>Held Water Efficient Technologies Workshop for wastewater treatment vendors.</li> </ul>

Year	Actions
2003	<ul> <li>Obtained approval of a Revised Policy for Pollution Prevention from the City Council that included City's commitment to apply Integrated Pest Management (IPM) in its approach to pest control and to require the same of contracted pest control operators.</li> </ul>
	<ul> <li>Developed standard operating procedures (SOPs) and BMPs for City operations.</li> </ul>
	<ul> <li>Instituted IPM policy training for City employees and its contractors.</li> </ul>
	<ul> <li>Implemented Phase 1 of the Food Service Inspection Program.</li> </ul>
	<ul> <li>Bioassessment study completed.</li> </ul>
	<ul> <li>Published the Watershed Management Initiative Information Sheet on Endocrine Disrupting Compounds and Potential Impact on Water Use in the Santa Clara Valley Watershed. This report was distributed widely and used by the EPA as a handout at a national conference.</li> </ul>
2004	<ul> <li>Determined Cyanide Attenuation Factor for South Bay.</li> </ul>
	<ul> <li>Initiated Mercury Fate and Transport Study at the Plant.</li> </ul>
	<ul> <li>The City's Environmental Services Department certified as "Green Business".</li> </ul>
	<ul> <li>Began series of Brown Bag training sessions on "Green" issues for City of San Jose Environmental Services Department (ESD) employees.</li> </ul>
2005	<ul> <li>Completed new set of BMPs for restaurants.</li> </ul>
	<ul> <li>Completed cyanide investigation of permitted industries.</li> </ul>
	<ul> <li>Continued Phase I of the Mercury Fate and Transport Study at the Plant.</li> </ul>
	<ul> <li>Three area hospitals given awards from Mercury Elimination Leadership Program for removal of mercury sources.</li> </ul>
	<ul> <li>Began coordinating among City Departments of Transportation, Environmental Services and Public Works to complete Sewer System Management Plan.</li> </ul>
2006	<ul> <li>Began development of a dental mercury reduction program.</li> </ul>
	<ul> <li>Began development of a FOG program to comply with the Sewer System Management Plan (SSMP).</li> </ul>
	<ul> <li>Completed Phase I of the Mercury Fate and Transport Study at the Plant</li> </ul>
	<ul> <li>Sponsored an HHW drop off station.</li> </ul>
	<ul> <li>Completed cyanide surveillance monitoring of identified permitted users of cyanide.</li> </ul>
	<ul> <li>Co-hosted the Third Annual Regional IPM Conference.</li> </ul>
	<ul> <li>Hosted Safe Medicine Disposal Days event.</li> </ul>
	<ul> <li>Completed sample collection for the Sector Loading Study.</li> </ul>
	<ul> <li>Implemented Residential outreach on emerging contaminants.</li> </ul>

Year	Actions
2007	<ul> <li>Completed Mercury Fate and Transport Study-Final Report.</li> <li>Completed Sector Loading Study.</li> <li>City Council approved San José Sewer Ordinance Changes.</li> <li>Completed Survey of Tributary area Dentist regarding use of amalgam separators and BMPs.</li> <li>Hosted pollution prevention week activities which included safe medicine disposal.</li> </ul>
2008	<ul> <li>Tributary cities adopt Sewer ordinance changes.</li> <li>Expanded FOG inspections program to Santa Clara, Saratoga, Los Gatos, Campbell and Monte Sereno.</li> <li>Completed stakeholder input process for Dental Amalgam Program and FOG Expansion.</li> </ul>
2009	<ul> <li>Expanded FOG inspections to the City of Cupertino.</li> <li>Began issuing Dental Wastewater Discharge Permits to San José Dentists.</li> <li>City Council approved municipal code changes to implement Dental Amalgam Program.</li> <li>City Council approved municipal code changes for FOG Program.</li> <li>Participated in Regional Monitoring Program (RMP) study of pharmaceuticals and personal care products in the lower south Bay.</li> <li>Participated in regional No Drugs Down the Drain Campaign.</li> <li>Began collection of household batteries at Neighborhood Cleanups.</li> </ul>
2010	<ul> <li>Expanded Dental Amalgam Program to Tributary cities.</li> <li>Expanded FOG inspection to the City of Milpitas.</li> <li>Conducted Grease Hauler Workshop on proper grease pumping and disposal.</li> <li>Piloted residential one day fats, oils, and grease drop-off event.</li> <li>Participated in National Pollution Prevention Week.</li> <li>Received a Pesticide Alliance Grant from California Department of Pesticide Regulation (DPR) to support training in sustainable landscape maintenance, development of a pesticide free urban park, and implementation of two demonstration gardens to promote IPM.</li> </ul>
2011	<ul> <li>Collected pharmaceuticals at Neighborhood Clean-up Events.</li> <li>Participated in National Pollution Prevention Week.</li> <li>Conducted a residential grease drop-off event.</li> </ul>
2012	<ul> <li>Collected pharmaceuticals at Neighborhood Clean-up Events.</li> <li>Participated in National Pollution Prevention Week.</li> <li>Conducted a residential grease drop-off event.</li> <li>Expanded Dental Amalgam Program on-line reporting.</li> <li>Completed sample collection for the Sector Loading Study.</li> </ul>

Year	Actions
2013	<ul> <li>Collected pharmaceuticals and Neighborhood Clean-up and other events</li> </ul>
	<ul> <li>Participated in National Pollution Prevention Week.</li> </ul>
2014	<ul> <li>See Table 1-1 for 2014 Program Accomplishments.</li> </ul>

#### PROGRAM EVALUATION OVERVIEW

The City strives to create and implement an effective pollution prevention program. Quantifying effectiveness of individual program elements can be challenging, as it involves more than just measuring influent and effluent pollutant concentrations. Many of the P2 efforts in which the City participates today are focused on achieving long-term and regional solutions to P2 issues.

The City evaluates its Pollution Prevention Program based on:

- Periodic local limits and pollutant loading reviews
- Program evaluation criteria

The City continues to implement programs in accordance with the its goals of ongoing evaluation and identification of pollutants of concern, developing appropriate effectiveness measures for planned P2 activities, and measuring overall program effectiveness.

#### SECTOR LOADING STUDY

Sector loading sampling is intended to update the residential, commercial, and industrial source identification information for specific pollutants of concern.

Extensive sampling for sector loading was performed from late 2012 into early 2013. The goal of the sampling was to update the existing data and account for more variation within the sectors to eliminate some of the unknown loading observed in previous years. A total of nine locations were sampled to represent the residential, commercial, and dental sectors. Additional sample sites were added to represent high-density residential sources and commercial retail sources. The sector loading results shown in Tables 2-2 and 2-3 below were updated using the updated concentration data, 2014 flow, and 2014 Wastewater Facility Headworks data. A report summarizing the 2013 Sector Loading Study results was completed in 2013.

Source	Copper Concentration (µg/L)	Flow (mgd)	Copper Loading (ppd)
Commercial	68	28.8	16.3
Industrial*		5.7	4.7

Table 2-2 2014 Copper Sector Loading Resu	Copper Sector Loading Results
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Residential	49	67.2	27.5
Total of all Sectors		101.7	48.5
Wastewater Facility Headworks Loading	127	101.7	101.7

\* Loading based on monitoring of Permitted Industrial Users.

Source	Mercury Concentration (µg/L)	Flow (mgd)	Mercury Loading (ppd)
Commercial	0.042	28.3	0.010
Industrial	0.01	5.7	0.001
Residential	0.071	67.2	0.040
Dental	7.5	0.5	0.031
Total of all Sectors		101.7	0.082
Wastewater Facility Headworks Loading	0.103	101.7	0.087

#### Table 2-3 2014 Mercury Sector Loading Results

A consulting firm, EOA, Inc., reviewed the historic Sector Loading information and the newest sampling plan and recommended some changes. They evaluated the sampling sites for location, water supply, and subsector variety and recommended additional sampling sites for high-density residential and retail. They also recommended the geometric mean be used to represent the concentration rather than the average.

The new sample results, including those from the new sample locations, do not differ significantly from the previous data. The mercury loading from dental practices appears to be dropping. This may be at least partially due to the permitting of dental practices including the requirement to install amalgam separators. Many variables may affect the dental mercury sample results, and further sampling will be needed to confirm the drop in dental mercury discharge. The data indicates the day of the week the samples are collected is not a significant factor, and future sampling efforts can be accelerated by placing less priority on collecting an equal number of samples on each day of the week.

The Wastewater Facility continues to meet all permit limits for copper and mercury.

#### PROGRAM EVALUATION CRITERIA

A variety of factors in addition to pollution prevention and pretreatment program enforcement activities affect mass loads and pollutant concentrations. For example, pollutant loads to the Wastewater Facility could be reduced by:

Economic downturns especially in large manufacturing and R&D facilities

- Operational efficiency improvements
- Wastewater reclamation

And, conversely pollutant loads could increase as a result of:

- Sewer discharge of wastewater previously sent to storm drains
- Infiltration and inflow from heavy rain
- Regional growth and business expansion due to economic prosperity and a shift in business types locating in the area

Because these factors are difficult to quantify, they complicate the evaluation of the Wastewater Facility's pollution prevention and pretreatment programs. It also must be recognized that it is not generally possible to distinguish the effects of individual pollution prevention programs on overall pollutant loadings. Pollutant loading data needs to be used as only one of many evaluation tools.

In addition to pollutant loading data, the following measurements are collected and reported to document the reach of the Wastewater Facility's P2 program activities:

- Number and variety of outreach materials distributed and feedback received
- Public awareness of pollution prevention issues
- Participation survey and evaluation results
- Results of surveys to targeted groups
- Quantity and total weight of HHW material collected from Tributary Area residents
- Percentage of households using the household hazardous waste (HHW) facility
- Number of City employees reached through training
- Number or percent of a targeted audience participating in a specific initiative
- Estimated load reductions from specific targeted activities.

A discussion of the efforts and results toward reduction of each of the pollutants of concern follows in Sections 3 through 9, incorporating the above evaluation criteria.



After mitigating compliance issues with copper and nickel in the early 1990s, a Basin Plan Amendment, approved by the EPA on January 6, 2009, replaced previous copper and nickel action plans with a Bay-wide Copper Management Strategy (CMS). This strategy removed requirements for the Wastewater Facility to monitor copper and nickel in the Lower South Bay (LSB). The BPA also removed nickel as a pollutant of concern. Monitoring by the RMP, discussed in Section 11, of Bay copper concentrations ensures that dissolved copper concentrations do not significantly increase in the Bay.

#### COPPER SOURCES

The Wastewater Facility receives copper contributions from industrial, commercial, and residential sources. The largest contribution of copper comes from the residential sector followed by the commercial sector. Copper contributions from the residential sector are difficult to control because they primarily result from corrosion of copper water supply pipes and treated tap water supplies.

Some copper also enters the Bay via stormwater runoff from accumulation of automotive metallic brake pad residue, industrial activities, and copper algaecides. Table 3-1 lists the known sources of copper to the Wastewater Facility.

Residential	Commercial	Industrial
Corrosion from copper water supply lines	Corrosion from copper water supply lines and cooling water systems.	Corrosion from copper water supply lines and cooling water systems.
Treated tap water supply	Treated tap water supply	Treated tap water supply.
	Automotive repair and cleaning operations.	Industrial facilities that include metal finishing
	Machine shops.	operations (i.e., electroplating, printed
	Printing shops that use certain types of metallic inks.	circuit board manufacturing, and disk and disk head manufacturing).

#### Table 3-1 Sources of Copper in Wastewater

### COPPER ESTIMATED LOADINGS

The estimated percentage of copper loading to the Wastewater Facility by sector is illustrated below in Figure 4-1. Measured industrial sources account for only 10% of the total copper loading to the Wastewater Facility. The loading for the residential and commercial sectors was derived from concentration data from the 2012-2013 Sector Loading Study. A report summarizing the 2012-2013 Sector Loading Study results was completed in 2013. Additional sample locations were selected to better represent the residential and commercial sectors. The data analysis of the sample results was performed differently for this round of sampling, specifically the use of the geometric mean for the concentration used for further calculations, and the elimination of a direct comparison of the total loading to the Wastewater Facility headworks.



Figure 3-1 Copper Sector Loading for 2014

#### COPPER INDUSTRIAL LOADING

The overall copper loading pattern has been trending downward with a 10-year trend of a relatively stable range. This is due to many factors including source control and pollution prevention efforts, production efficiencies, fluctuations in the economy, and facility closures. Figure 4 -2 illustrates the overall downward trend in industrial sector copper influent loading to the Wastewater Facility since 1993. Copper industrial loading remains well below the 1997 baseline level.

The local limits for copper currently in effect for all industrial dischargers in the Wastewater Facility's Tributary area are as follows:

- For all industrial dischargers of 1,000 gpd or more, the maximum allowable concentration for copper is 2.3 mg/l.
- For all industrial dischargers less than 1,000 gpd, the maximum allowable concentration for copper is 2.7 mg/l.

Industrial users were discreetly monitored during 2014 and enforcement actions were taken on all violations. The pretreatment program will continue to take action to minimize industrial loadings to the Wastewater Facility. Surveillance monitoring of appropriate industrial users will continue in 2015.



Figure 3-2 Average Daily Copper Industrial Loading

## COPPER CONTROL PROGRAM

Provision VI.C.6.c. of the Wastewater Facility Permit requires the Wastewater Facility to implement a copper control program. The Wastewater Facility has been implementing a copper pollution prevention plan since the early 1990s. Provisions required by the Wastewater Facility Permit for a Copper Control Program have been incorporated in the Copper Pollution Prevention Plan below:

COPPER POLLUTION PREVENTION PLAN – 2014 EVALUATION AND 2015 WORK PLAN

The City's goals to address copper are to:

- Continue to perform activities of the 2009 Basin Plan Amendment.
- Continue to monitor receiving waters to gauge whether ambient copper levels exceed the numeric triggers for additional P2 actions.

The following table contains a summary of activities the City will continue and new planned activities to accomplish these goals.

Table 3-2	Copper Pollution	Prevention Plan -	- 2014 Evaluation	and 2015 Work Plan
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Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
Commercial / I	Industrial			
Copper pipe corrosion	Plumbing Professionals Engineers and Designers of HVAC Systems Follow BMPs during installation. Use less corrosive fluxes. Use good design practices to minimize pipe corrosion.	Educate plumbers, designers, and maintenance contractors for pools and spas to encourage use of best management practices that minimize copper discharges.	Brochures were not distributed by the San José building permit center this year. In 2014, copper pipe fact sheets for installers and designers were available on the City website. Due to a change in software, download data was not available.	BAPPG to communicate copper pipe corrosion message to plumbing unions, contractors, building inspectors, and colleges. BAPPG to give copper pipe corrosion presentation to the apprentice classes of United Association of Journeyman and Apprentices Local 393. Track numbers of fact sheets and brochures distributed at permit center in San José and downloaded from City website.
Metal-bearing wastewater from industrial and commercial operations	Permitted industrial users with copper, nickel, or other metal processes Metal machine shops, metal finishers, and printed circuit board manufacturers Use best management practices and best available treatment technologies to minimize pollutant loading to the Bay.	Distribute "Guidelines for Industrial Wastewater Reuse" and "Guidelines for Efficient Water Use" brochures as appropriate.	The Guidelines for Industrial Wastewater Reuse is available on the City website for download. Due to a change in software, download data for 2014 was not available. Approximately 32 copies were distributed at the IU Academy sessions. The Guidelines for Efficient Water Use is available on the City website. Due to a change in software, download data for 2014 was not available. Approximately 32 copies distributed at the 2014 IU Academy sessions.	Ongoing Track numbers of Guidelines for Industrial Wastewater Reuse and Guidelines for Efficient Water Use distributed and downloaded from City website as well as any new documents produced in 2015. Reformat BMPs materials into standard format.

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In 2014, 305 automotive (up from 170) and 26 machine shop (up from 25) BMPs were distributed during inspections, at events, permanent displays, trainings, and other City activities, 2 printing and	Ongoing Track numbers of BMPs distributed and downloaded from City website.			
chy derivities. 2 prinning drid photo processing BMPs were distributed to pertinent ndustrial users in San José during 2014 (up from none in 2013). Due to a change in software, download data for 2014 was not available. No roof vent fact sheets were distributed to pertinent industrial users in San José during 2014. In fiscal year (FY) 13-14, companies desiring training were directed to the Bay Area Stormwater Manage-	Ongoing Ongoing			
softwo 2014 v No rod distrib ndust during un fisc comp were Area ment (BASA	are, download data for was not available. of vent fact sheets were buted to pertinent rial users in San José g 2014. al year (FY) 13-14, panies desiring training directed to the Bay Stormwater Manage- Agencies Association MAA) online training am and offered a live			
Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
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Residential				
Swimming pools, spas, and fountains	Residential / Homeowners Select alternatives to copper algaecides. Keep pool, spa, and fountain waters out of storm drains.	Provide educational outreach to the public (e.g. focus on proper pool and spa maintenance and plumbers' roles in reducing corrosion). Respond to resident inquiries about proper draining of pools and spas.	Distributed brochures at various events, in displays at public counters, and on the My Watershed Watch website. Due to a change in software, download data for 2014 was not available. Responded to resident inquiries about proper draining of pools and spas. Environmental inspectors distributed 21 (up from 2) brochures in 2014.	Ongoing Track numbers of brochures distributed.
Automobiles	Residential / Homeowners Benefits of alternative transportation. [Less driving equates to less brake pad deterioration and less copper on the roadways]	Host "energizer station" for Bay Area Bike to Work Day. Promote commute alternatives.	Bike to Work Day was held on June 25, 2014. The City hosted a morning "energizer station." Energizer Stations were strategically placed along major commute routes throughout the Bay Area with many in Santa Clara County. Distributed information on the benefits of alternative transportation. City employees signed up to participate in the Team Bike Challenge, a month-long initiative to encourage people to ride their bike. Employees logged their commute mileage on the website.	Ongoing

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Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
			The City installed 20 miles of new on-street bikeways.	
	Drivers Take your vehicles to commercial car washes instead of washing them at home.	Offer discount car washes	Discount car washes were offered by Watershed Watch partners; four Classic Car Wash locations and one Premier Car Wash location. Discounts were valid through December 2014.	Pursue additional discounts in 2015.
Government A	gencies			-
	Water purveyors, plumbers Minimize pipe corrosion.	If corrosion is determined to be a significant copper source, work cooperatively with local water purveyors to reduce and control corrosivity, as appropriate, and ensure local plumbing contractors implement best management practices to reduce corrosion in pipes.	Posted copper pipe fact sheet on City website. In 2014, due to a change in software, download data was not available. Santa Clara Valley Water district, the primary water purveyor in the Wastewater Facility's service area, operates in accordance with the EPA's Lead and Copper Rule (LCR) and adds an orthophosphate inhibitor to control corrosion in the pipelines.	As needed.
Wastewater Facility effluent	Wastewater Facility Staff	Monitor Wastewater Facility influent and effluent to ensure that treatment processes are working and that industrial discharges of copper levels are not increasing significantly.	The Wastewater Facility continues to monitor influent and effluent to ensure that treatment processes are working properly.	Ongoing



Mercury is a concern for the entire San Francisco Bay due to its toxic properties. Mercury has accumulated in some Bay Area fish species to a level that requires health advisory warning against human consumption of large quantities of those fish. In addition to human health, mercury is also of concern due to its potential bioaccumulative effect on wildlife and rare and endangered species.

The San Francisco Bay Mercury TMDL and Basin Plan Amendment were approved by the State Water Resources Control Board (SWRCB) on July 17, 2007. On November 1, 2007, the Regional Water Quality Control Board unanimously approved the Mercury Watershed Permit which set the wasteload allocation of 17 kg mercury per year as an aggregate for all dischargers and individual mercury limits for each discharger if the aggregate limit is not met. The permit also specified a phasing period, whereby aggregate mass limits for mercury would be reduced to 11 kg mercury per year by 2018. These were approved by the State Office of Administrative Law and finalized on February 11, 2008 by the EPA.

On March 9, 2011, the Regional Board approved Order No. R2-2011-0012, Amendment to Add PCBs Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges of Mercury to San Francisco Bay. The amendment included effluent limitations, monitoring and reporting requirements, and a requirement to evaluate and identify controllable sources of PCBs that are identified as pilot projects required by Provision C.12.b. of the Municipal Regional Stormwater Permit. On December 12, 2012 the Regional Water Quality Control Board (RWQCB) approved Order No. R2-2012-0096 re-issuing the San Francisco Bay Mercury and PCBs Watershed Permit, reducing the aggregate mercury limit from 17 kg per year to a new limit of 11 kg per year for all dischargers, effective 2013. The 11 kg per year aggregate mass limit for all dischargers and the associated individual mass limits reflect the final limits that were to be phased in by 2018. The new permit also removed language specific to Provision C.12.b of the Municipal Regional Stormwater Permit and replaced it with general language regarding evaluation and proposed control measures of identified controllable sources of PCBs or mercury. The Mercury and PCBs Watershed Permit established the following mercury limits for San José.

	Annual Limit (kg/yr)	Monthly Limit (µg/L)	Weekly Limit (µg/L)
Average Effluent Limits	0.8	0.025	0.027
2014 Maximum Results	0.177	0.00214	0.00214

 Table 4-1
 Mercury Watershed Permit Limits and Results

In 2014, the Wastewater Facility met all of its total mercury concentration limits as indicated above in Table 4-1. Monthly average and daily maximum mercury concentration triggers were established in the Mercury Watershed Permit as a pollution prevention measure.

Table 4-2	Mercury Concentration	Triggers
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	Monthly Average	Daily Maximum
Triggers for Advanced Secondary Plants	0.011 µg/L	0.021 µg/L

## MERCURY SOURCES

Mercury is considered a legacy pollutant, meaning that its presence in the Bay is primarily due to historical contributions. In the mid 1800s, liquid mercury (quicksilver) was widely used to recover gold in mining operations. The New Almaden Mine located in the South Bay was once the largest producer of mercury in North America and provided quicksilver for gold mines. Over time, stormwater runoff carrying mercury residuals from this and other abandoned mines in the Sierra Nevada has made its way into the Bay and accumulated in the sediment. Sediment from former gold and quicksilver mining operations remains the primary source of mercury deposition in the Bay today.

Secondary sources of mercury are summarized in Table 4-3.

Residential	Commercial	Industrial
Erosion from dental amalgam fillings	Dental, medical, and veterinary offices	No identifiable industrial sources of mercury
Mercury-containing products such as thermometers and fluorescent bulbs	Mercury-containing products such as thermometers and fluorescent bulbs	Mercury-containing products such as thermometers and fluorescent bulbs

 Table 4-3
 Sources of Mercury

#### MERCURY ESTIMATED LOADING

Past sewer sampling results indicated that dental procedures were the largest source of mercury to the Wastewater Facility. The latest sampling shows residential sources are now the largest contributor. This may be due to reduction of the dental contribution from the installation of amalgam separators at all dental practices that remove and place amalgam restorations. Sample locations include some nondental discharge and the flow rate from dental practices is low. The density of dental amalgam particles makes the collection of a homogeneous representative sample difficult. Figure 5-1 shows the estimated percentage of mercury loading from each of the four indentified sectors.



Figure 4-2 Mercury Sector Loading for 2014

# MERCURY POLLUTION PREVENTION PROGRAM EFFORTS

#### Dental Mercury Amalgam Program

The Dental Amalgam Program issued 26 new permits in 2014 to dentists located in the Tributary area, bringing the total number of permitted dental practices in the program to 875. Amalgam Separator Installation Certifications have been received from 97% of dental practices.

Inspections completed in 2014 confirmed that amalgam separators were installed at over 99% of these practices, verifying the accuracy of their previously submitted self-certification statements. The remaining 1% represents newly identified dental facilities. Only one dental facility inspected in 2014 received a violation indicating that dentists or dental office staff has a greater understanding of program requirements. The violation was corrected prior to the due date.

Initial inspections of the dental practices located in the Tributary cities and follow up inspections in San José will continue in 2015. The program completed initial inspections of all practices in 2014. In 2014, there was increased use of the online

Dental Amalgam Program Annual Report form with almost 77% of practices submitting electronically through Constant Contact.

#### 2014 Thermometer Collection Events

The City continued its public education program offering residents opportunities to surrender their mercury fever thermometers free of charge. A total of seven thermometer exchange events were held in the Tributary area in 2014. These events took place at senior centers, community centers, and farmers markets. Four of the seven events were held during National Pollution Prevention Week, September 13-20, and the remaining events took place throughout the year. This year, residents exchanged a total of 82 mercury fever thermometers, resulting in the collection of 41 grams of mercury. Additionally, the program received 1 thermostat containing an estimated 4 grams of elemental mercury. In total, 45 grams of mercury were collected.

Beyond removing mercury containing thermometers from the environment, these events educated residents on mercury pollution prevention, proper disposal of household hazardous waste, and general pollution prevention.

#### Thermometer Collection Program History and Results

The Thermometer Collection program was launched in spring 2007 in connection with the BAPPG Regional Thermometer Exchange campaign. Figure 5-3 below illustrates the program results over the past seven years.



#### Figure 4-3 Thermometers Collected

In 2007, regional advertising supported by local outreach drew residents to the five events held between May and September. In 2008, the City hosted sixteen events

in the Tributary area, more than three times the number held in 2007, yet realized a significant decrease in the number of thermometers collected. This decrease may have resulted from the City hosting events at various locations that did not specifically target seniors. The seven events held at senior venues in 2008 yielded an average of 74 thermometers per event, as compared to Wastewater Facility Tours (nine thermometers per event), and other venues (43 thermometers per event). In 2009, the City held a total of 25 events, primarily at community and senior centers, and collected a significantly higher number of thermometers. Staff attributed the increase to holding events on a regular basis and expanding into new parts of the Tributary area. In 2009, events were held in Campbell, Los Gatos, Milpitas, and Saratoga for the first time. At these four events alone, more than 547 thermometers were collected. 945 thermometers were collected from 21 events in 2010. Of these, nine were held in the tributary service area and were held at community or senior centers.

In 2011, 431 thermometers were collected from 266 residents. In 2012, 440 thermometers were collected at seventeen events at community and senior centers as well as fairs and farmers markets. The most effective events were those held at senior centers. In 2014 the City held five thermometer collection events and collected no thermometers at three of them. At the other two events, 30 thermometers were collected. Because of the decreasing number of thermometers collected per event, the City plans to conduct thermometer collection in partnership with other events and partner agencies in 2015 rather than as stand-alone events. To this end, staff has developed an "Event Kit" which will aid partner organizations to safely host mercury device collection events.

#### Almaden Quicksilver Mining Museum Partnership

In 2014, the City continued its partnership with the Almaden Quicksilver Mining Museum (AQMM) to communicate to visitors the importance of proper disposal of mercury-containing devices and distribute mercury disposal and HHW brochures. The museum is visited annually by approximately 450 4<sup>th</sup> grade students from local schools in addition to the general public, and 100 mercury disposal brochures were distributed to visitors in 2014.

# MERCURY POLLUTION PREVENTION PLAN – 2014 EVALUATION AND 2015 WORK PLAN

The City's goals to address mercury are:

- Continue to administer a comprehensive dental amalgam program with all required dental practices within the Wastewater Facility's service area participating.
- Implement a mercury control program to address high potential sources in the Wastewater Facility's service area in conformance with the Mercury Watershed Permit.
- Participate in regional efforts to address mercury.

The following table contains a summary of activities the City will continue and new planned activities to accomplish these goals.

# **Table 4-4**Mercury Pollution Prevention Plan – 2014 Evaluation and 2015 Work Plan

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
Commercial	/ Industrial			
Dental amalgam	Dental offices Dental amalgam is an identifiable source of mercury. Install an amalgam separator. Follow dental BMPs.	Continue to implement a comprehensive dental amalgam program. Issue Dental Wastewater Discharge Permits to dental facilities. Target: 99% amalgam separator installation and BMP implementation by service area dentists by 2014.	Continued program implementation and Inspections for Tributary cities dental practices. By the end of 2014, a total of 875 permits were active. Issued permits to 27 practices. 97% of practices have certified amalgam separators have been installed. 98% of practices have certified they are following BMPs for Dental Amalgam.	<ul> <li>Continue to track the following:</li> <li>Number of permits issued.</li> <li>Percent of practices with installed amalgam separators.</li> <li>Percent of offices following dental amalgam BMPs.</li> <li>Bring non-responsive dental practices into compliance.</li> <li>Issue permits to newly identified dental practices.</li> <li>Mercury concentration in Wastewater Facility influent, effluent, and biosolids.</li> <li>Track and comment on EPA Federal Dental Regulations</li> </ul>
	Partner with Santa Clara Valley Dental Society (SCVDS) to educate local dental practitioners about mercury issues and dental amalgam BMPs.	Coordinated with the SCVDS to remind dentists to submit their Annual Reports.	Ongoing	
		Continue to maintain dental inspection program database.	Database operated as designed with little need for modification.	Make adjustments to the database, as needed.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Develop and maintain a list of dental facilities in the Wastewater Facility service area.	Obtained list of business licenses for all cities of Wastewater Facility service area and cross referenced to database listings to identify any new dentists.	Cross reference dentists in database with updated business license lists from cities in the Wastewater Facility service area to identify new dental practices.
			Sent application packets to all newly identified dental practices and practices that moved or were under new ownership.	Send application packets to newly identified dental practices, and practices that moved or are under new ownership.
		Distribute program brochures and other outreach and support materials for program.	Updated the dental program website content on the City's new website.	Update dental program brochure and or website as needed.
		Ongoing program implementation and dental inspections.	Completed dental office inspections in 2014.	Continue inspections of dental facilities.
Mercury containing medical devices	Hospitals Replace devices containing mercury with less toxic alternatives.	Contact the seven hospitals in the Tributary area and encourage them to become mercury free.	No contact was made with the hospitals this year. Previous contact verified they were all mercury free.	Follow up with any new hospitals to confirm they are mercury free.
Mercury containing laboratory devices	University laboratories Replace devices containing mercury with less toxic alternatives.	Replace mercury containing equipment in local college laboratories with mercury free equipment.	Developed list of potential schools and universities. Evaluated options for developing program to replace lab equipment.	Engage schools to replace mercury containing equipment in local college laboratories with mercury free equipment.
Businesses	Businesses Mercury Pollution Prevention messages	Distribute universal waste handling information to local businesses.	In 2014, two "What Responsible Businesses Need to Know About Mercury and Universal Waste" brochures were distributed.	Continue distributing What Responsible Businesses Need to Know About Mercury and Universal Waste brochures as appropriate.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
Fluorescent tubes and mercury- containing devices	Businesses Proper handling and disposal of universal wastes.	Support the County of Santa Clara Department of Environmental Health (DEH) Household and Small Business Hazardous Waste program.	In FY 13-14, the County DEH hosted 18 temporary and 37 permanent hazardous waste drop-off events for households and conditionally exempt, small quantity generators (small businesses). This service allows small businesses in the County to properly dispose of their hazardous wastes, including mercury-containing products. Small businesses served, include local government agencies, Goodwill Industries, and the Salvation Army. Opened the permanent San José Household Hazardous Waste drop-off facility at the San José Environmental	Continue support of the County Household and Small Business Hazardous Waste Program. Assess grant opportunities for pilot program to replace mercury containing equipment in local college laboratories with mercury free equipment.
Residential				
Fluorescent bulbs, thermometers, and other mercury containing devices Fri th thermometers, m thermometers, fluores flu	Residential Proper disposal of mercury containing thermometers and devices. Proper disposal of fluorescent lights. Proper disposal of universal waste.	Host thermometer collection events.	A total of 7 thermometer exchange events were held in the Tributary area in 2014. 82 thermometers were collected, resulting in the collection of 41 grams of mercury. The program received additional items containing 4 grams of elementary mercury. In total, 45 grams of mercury were collected. Distributed information on proper disposal of mercury containing products at all events.	Conduct thermometer collection in conjunction with other events and partner agencies. Track number of thermometers, devices, and grams of mercury collected. Pursue ongoing collection at the County HHW collection sites including the San José Environmental Innovation Center.
		Provide San José location for HHW collection.	San José's permanent HHW facility located at 1608 Las Plumas Avenue opened in September 2014.	Provide at least two collection events per month at the new HHW facility.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Promote proper disposal of mercury containing products and the Household Hazardous Waste Program through websites, social media, and collateral.	SCVURPPP continued to promote on their website and social networking sites the "Watch Out for Mercury Pollution!" campaign designed to encourage residents to take spent fluorescent lamps to any of 39 drop-off locations in Santa Clara County. See 13-14 SCVURPPP Annual Report for details.	Continue promoting HHW Program through websites, social media, and collateral material available online.
			County HHW website identifies universal wastes and disposal options.	
			County HHW Program was promoted at most outreach events and in collateral material available online.	
			In FY 13-14, the HHW program recycled: 845 pounds (up from 550) of elemental mercury, 127,490 pounds (down from 133,577) of fluorescent lights, and 159,598 pounds (up from 129,620) of household batteries.	
		Promote HHW at Events and Venues	HHW information was shared directly with local residents by staff at 15 events listed in Appendix A)	Continue promoting HHW Program through distribution of collateral material provided directly to residents
			Several thousand residents attended the events. HHW information was also distributed at various smaller events throughout the year.	at community meetings, events, and venues.
			HHW information was shared with attendees of all Zero Waste Events listed in Appendix B.	
			Continued partnership with the Almaden Quicksilver Mining Museum which distributed 100 mercury disposal and HHW brochures. Anticipate visits from 450 4 <sup>th</sup> grade students annually.	

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Promote HHW in Campaigns	The City and SCVURPPP worked with the County to publicize its fluorescent tube drop-off program. The program continued to promote on their website and social networking sites the "Watch Out for Mercury Pollution!" media campaign designed to encourage residents to take their spent fluorescent lamps to any of39 drop off locations in Santa Clara County.	Continue Watershed Watch campaign in 2015.
			Proper HHW disposal was promoted through the San Jose Earthquakes soccer public outreach campaign.	Continue San Jose Earthquakes Campaign during 2015 soccer season
		Promote HHW with Recycling Program(s).	Residents were informed not to place HHW into their garbage or recycling carts through the San José Recycling Guide, Recycling Reference Sheet, and Non- Collection Notices left on carts by garbage and recycling truck drivers. Residents were also encouraged to contact their recycling company for a free bag and jug to place used motor oil and oil filters for curbside pick-up.	Continue as opportunities arise.
			An HHW themed truck sign was displayed on haulers' garbage and recycling collection vehicles.	Continue use of themed truck signs throughout 2015
		Support producer responsibility for mercury containing products.	The City supported the (CPSC) and the Product Stewardship Institute (PSI) and their missions to promote extended producer responsibility (EPR) for all mercury containing products. City staff is on the board of CPSC and chairs the Policy and Education Advisory Committee.	Continue work with California Product Stewardship Council to promote legislation for producer responsibility.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
			The City monitored legislation for possible support options.	Monitor progress toward legislation including green chemistry regulations, fluorescent and light-emitting diode (LED) lamps stewardship programs, and pharmaceutical take back programs.
Municipal	-			_
Fluorescent bulbs	City operations / City employees Purchase low mercury fluorescent lamps. Recycle fluorescent lamps when replaced.	Continue a Citywide program to purchase and install low mercury fluorescent lamps in City facilities and to recycle fluorescent lamps when replaced.	The City continues to purchase lamps with low mercury for replacement of expired lamps in all City facilities. The City recycled approximately 14,508 lbs in FY13-14 (down from 18,465 in FY 12-13) of mercury- containing lamps through its Lamp Recycling Program.	Ongoing Track pounds of mercury-containing lamps recycled.
Universal Waste	City employees Change in California law regarding disposal of universal wastes. Keep universal waste out of the garbage and how to properly dispose of them.	Provide information during training opportunities.	Information on the proper handling, storage and disposal of universal waste such as paint, batteries and florescent tubes was provided during Stormwater Pollution Prevention Plan trainings for corporation yard employees and inspectors.	Ongoing
Batteries	City employees Proper collection, handling and disposal of City generated batteries	Make battery collection locations available to City employees.	Battery recycling is available at all City facilities (approximately 100). In FY 13- 14, 7,167 pounds (up from 5,310) of alkaline, lithium, lead acid and rechargeable batteries were collected and properly recycled.	Ongoing Track amount of batteries collected.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Distribute information to employees through email, newsletters, training opportunities, and other mechanisms.	Information on proper disposal of batteries is included in the orientation packet for all new employees. Recycle@Work program posters instruct readers on the disposal ban and refer them to a City intranet site for instructions on proper disposal.	Ongoing Replace posters and outreach to new employees as needed
	Water Quality Monitoring & Regional Efforts	Voluntary quarterly monitoring of mercury in the Lower South Bay.	All Plant effluent results were well below triggers and limits in the new Mercury Watershed Permit.	Ongoing



Order No. R2-2012-0096, the re-issued Mercury and PCBs Watershed Permit, was adopted by the Regional Board on December 12, 2012. The re-issued permit includes general language regarding evaluation and proposed control measures of identified controllable sources of Polychlorinated Biphenyls (PCBs) or mercury.

#### PCB Sources

Table 5-1 lists possible sources of PCBs to the Wastewater Facility.

Residential	Commercial	Industrial
Human waste	Building demolition	Industrial equipment
	Transformers	
	Stormwater inflow	

#### Table 5-1Sources of PCBs

# PRETREATMENT PCBs CONTROL PROGRAM

PCBs pollution prevention is incorporated into the Wastewater Facility's Pretreatment Program management of industrial user facilities. The Pretreatment Program evaluates (IUs) every five years as part of the wastewater discharge permitting process. The permitting process requires IUs to disclose any Total Toxic Organics (ITOs) maintained onsite, including PCBs. Additionally, the Pretreatment Program samples for TTOs at facilities where TTOs are known or suspected based on federal regulations. At these facilities the sample analysis for TTOs includes PCBs. If TTOs are known or suspected to be present at an IU facility, the Pretreatment Program requires the IU to either conduct analysis for TTOs, or certify that a plan is in place to manage TTOs to prevent discharge to the sanitary sewer.

#### ASSESSMENT OF STORMWATER-RELATED PCB CONTROL EFFORTS

Since stormwater is recognized as a significant ongoing source of PCBs to the Bay, the City's Stormwater Management Program is engaged in regional activities to address PCBs in urban runoff. Detailed reporting of these efforts is included in the City, SCVURPPP, and BASMAA annual stormwater reports submitted to the Water Board as required by the Municipal Regional Stormwater Permit.

PCBs Pollution Prevention Plan – 2014 Evaluation

#### AND 2015 WORK PLAN

The City's goals are to address PCBs through:

Pretreatment Program activities

The following table contains a summary of activities the City will continue and new planned activities to accomplish these goals.

#### Table 5-2 PCBs Pollution Prevention Plan – 2014 Evaluation and 2015 Work Plan

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan				
Commercia	Commercial / Industrial							
Industrial wastewater discharge	Permitted Industrial Users	As part of the wastewater discharge permitting process, require all applicants to disclose any PCBs maintained on site.	All wastewater discharge applicants were required to disclose any TTOs, including PCBs, stored onsite. No sources of PCBs were identified in 2014.	Ongoing				
		Require IU facilities known or suspected to have TTOs, including PCBs, based on federal regulations, to either conduct sampling and analysis for TTOs and submit results to the City, or submit certification that a plan is in place to manage TTOs.	The Pretreatment Program required all IUs suspected or known to have TTOs based on federal regulations to conduct sampling or submit certification that a plan is in place to manage TTOs.	Ongoing				



On July 22, 2008, the EPA approved the Cyanide BPA and implementation strategy for San Francisco Bay. The BPA established a chronic site-specific cyanide objective of 2.9  $\mu$ g/L (4-day average) for San Francisco Bay and a dilution credit of 3:1 (dilution of 2X) for the Wastewater Facility. The Wastewater Facility's NPDES Permit includes a limit due to a demonstration of reasonable potential and also due to mandatory limits for the Site-Specific Objective established by the Regional Water Board. The Wastewater Facility's maximum daily and average monthly cyanide limits are 13 and 5.7  $\mu$ g/L, respectively.

#### CYANIDE SOURCES

The primary source of cyanide discharged by the Wastewater Facility is the Wastewater Facility itself. The City's 2004 Cyanide Attenuation Study reported an average increase in cyanide concentration of 0.9 µg/L from Nitrification to Final Effluent in the Wastewater Facility's treatment process based on 25 measurements taken between September 2003 and June 2004. This increase is attributed to the Wastewater Facility's chlorination disinfection process. Many other wastewater treatment plants have experienced similar findings—higher levels of cyanide in the Plant effluent than in the influent. Table 6-1 lists possible sources of cyanide to the Wastewater Facility that are more readily controlled.

Table 6-1	Sources of Cyanide

Residential	Commercial	Industrial
No significant sources of cyanide	No significant sources of cyanide	Electroplating operations

#### CYANIDE ESTIMATED LOADING

The cyanide influent concentration levels have remained at or below quantification levels of detection (3 ppb) since November 2005. The minimum detection limit is 0.5 ppb, and detected, but not quantified, values average between 0.7 and 0.9 ppb. Nearly all cyanide results in 2014 were reported as detected, not quantified with the exception of the January 2014 results, which were non-detect (ND). It is not possible to determine the exact breakdown for industrial cyanide loading versus commercial cyanide loading at this time; however, the majority of the cyanide loading is expected from industrial electroplating operations.

#### CYANIDE CONTROL PROGRAM

The Wastewater Facility has administered a cyanide pollution prevention plan since 2005. Permit requirements under Provision VI.C.6.b. for a Cyanide Control Program are incorporated in the Cyanide Pollution Prevention Plan below:

# CYANIDE POLLUTION PREVENTION PLAN - 2014 EVALUATION

#### AND 2015 WORK PLAN

The City's goals are to address Cyanide through:

- Education, inspection, surveillance, and monitoring of industrial dischargers
- Control Wastewater Facility operations

The following table contains a summary of activities the City will continue and new planned activities to accomplish these goals.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan			
Commercia	Commercial / Industrial						
Industrial wastewater discharge	Permitted industrial Users	Inspect each potential contributor to assess the need to include that contributing source in the control program.	In 2014, reviewed business licenses, internet listings, and referrals for new potential cyanide dischargers. All potential users are included in the cyanide control program.	Review business licenses, internet listings, and referrals for new potential cyanide dischargers. Update inventory of potential cyanide contributors annually.			
			Inspected 97 facilities, with a potential to use cyanide in their processes.				
			All potential users are included in the cyanide control program.				
		Inspect contributing sources included in the control program annually. Inspection elements may be based on EPA guidance such as Industrial User Inspection and Sampling Manual for POTWs.	Inspected all potential cyanide contributors, a total of 97, at least semi-annually.	Inspect all potential cyanide dischargers at least semi- annually.			
				Provide education on cyanide issues associated with wastewater through fact sheets, as needed.			
		Surveillance monitoring of IUs with cyanide processes with enforcement action for any violations found.	No dischargers were targeted for surveillance based on cyanide. In 2014, the Wastewater Facility observed no cyanide pass- through events and Wastewater Facility cyanide influent concentrations were all below the reporting limit of 3 ppb.	Continue ongoing surveillance and monitoring of industrial discharges and monitor influent for need to include cyanide dischargers in surveillance program.			
				Decrease of influent levels of cyanide to the Wastewater Facility coming from IUs.			

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Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Develop and distribute educational materials to contributing sources and potential contributing sources regarding need to prevent cyanide discharges.	A cyanide fact sheet is available on the City website and is distributed by inspectors as needed. Due to a change in software, download data was not available. Fact sheet was distributed at the April 2014 IU Academy. Pretreatment program inspectors	Provide education on cyanide issues associated with wastewater through fact sheets, web site, or newsletter, as needed. Update and reformat the Cyanide Fact Sheet.
			regularly stress the importance of proper cyanide control during inspections.	
	Ambient Monitoring	If ambient monitoring shows cyanide concentrations of 1.0 µg/L or higher in the main body of San Francisco Bay, undertake actions to identify and abate cyanide sources responsible for the elevated ambient concentrations.	The Regional Monitoring Program monitors measures pollutant concentrations in the Bay. RMP data shows that the cyanide concentrations did not exceed the trigger for additional requirements.	Continue to support RMP monitoring and take necessary actions if trigger is met.
	Emergency Monitoring and Response Plan	Prepare an emergency monitoring and response plan to be implemented if a significant cyanide discharge occurs.	The Bypass Prevention, Surveillance Monitoring, and Pollutant Anomaly Response Guideline was finalized in 2013 and will continue to be updated as necessary. There has been no anomalous cyanide monitoring events.	Implement plan as applicable. Continue to update Bypass Prevention, Surveillance Monitoring, and Pollutant Anomaly Response Guideline.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
Municipal				
Wastewater Facility effluent	Wastewater Facility processes and operations	Monitor cyanide in Wastewater Facility effluent monthly.	Continued monthly monitoring of cyanide in Wastewater Facility effluent. During 2014, the Wastewater Facility cyanide effluent concentrations were all below the reporting limit of 3 ppb.	Ongoing

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Fats, oils, and grease (FOG) are produced from residential and commercial food preparation activities and are pollutants of concern due to their impact on the sanitary sewer collection system and increased regulatory focus on FOG-related sanitary sewer overflows.

#### FOG Sources

The primary sources of FOG entering the Wastewater Facility are the commercial and residential sectors. Very small contributions of FOG are estimated to come from the industrial sector. Table 7-1 lists the main sources of vegetable and animal-based grease in the Wastewater Facility's service area.

Residential	Commercial	Industrial
Single Family Homes	Restaurants	Food Processing Companies
Multiple Family Dwellings	Grocery Stores	Tallow Companies
	Hospitals/Social	Industrial Laundries
	Hall/Churches	Meat Packing Companies
	Schools/Universities	
	Shopping Mall/Food Courts	
	Bakeries	

#### FOG ESTIMATED LOADING

An estimated 558 tons of grease were hauled from the Wastewater Facility during 2014. Figure 8-1 illustrates the change in the volume of grease hauled from the Wastewater Facility since 2006.



Figure 7-1 Grease Removed from Wastewater Facility 2006 - 2014

#### SANITARY SEWER OVERFLOWS

Within the City of San José, the City's Department of Transportation (DOT) sewer crews are responsible for maintaining the collection system and clearing blockages in the sanitary sewer. Some blockages in the sewer lines may result in sanitary sewer overflows (overflows). Since December 2004, the City has been reporting all overflows into a publicly accessible statewide electronic database in accordance to applicable Water Board directives. The reports include the location, time, volume, and cause of the overflows, as well as the volume, if any, that was not recovered during the cleanup. There were 101sanitary sewer overflows reported during 2014 (down from 126 in 2013) of which City sewer crews identified grease as a contributing cause for a total of 14 (14%) (down from 46 or 37% in 2013). If an overflow or significant blockage occurs in a predominantly residential area, and grease is determined to be the primary cause, City Sewer crews distribute door hangers in the area.

Figure 8-2 illustrates the documented causes for overflows in the San José collection system. The collection systems for the Wastewater Facility's Tributary Agencies are managed and maintained by their respective agencies and their SSSMP implementation and overflow reporting activities are not included in this report.



Figure 7-2 Causes for Overflows in the San José Collection System

As previously reported, during FY 11-12, the City Auditor examined all programs being implemented by ESD. One of the recommendations included in the audit report was for ESD to, in coordination with DOT, review the efficiency and effectiveness of the approaches currently being used for reducing sanitary sewer overflows. After reviewing available data, ESD modified the Food Service Establishment (FSE) Inspection Program to include an overflow risk-based approach. This approach, starting in FY 13-14, prioritizes FSE inspections based upon whether a site is grease producing, has adequate pretreatment, the likelihood of an overflow to occur in that area, and the potential for the site to generate grease, in addition to the prior criteria of FOG violation history and last inspection date. This adaptive riskbased approach to prioritizing FSE inspections increases inspection frequencies at locations most likely to cause or contribute to overflows in San José, while maintaining a minimum frequency of at least once every five years at lower-risk grease producing locations.

#### SEWER SYSTEM MANAGEMENT PLAN

The FOG section of the City's SSMP describes the three key elements of the City's FOG program: 1) plan checks for FSEs, 2) routine inspections of FSEs, and 3) investigations of sanitary sewer blockages caused by grease. A revised SSMP was approved by the San José City Council and submitted to the Water Board in late 2014.

Plan checks are required for all FSEs being built or significantly remodeled in the Wastewater Facility's Tributary area and are performed as part of the building permit process. Plan checks require the installation of appropriate type and size of grease control devices based on multiple factors such as the size of the restaurant, type of food served, and kitchen equipment. Depending on the need, requirements range from a 40-pound grease trap to a several-thousand gallon grease interceptor. The

applicant must certify that grease traps will be cleaned a minimum of once per month and grease interceptors will be cleaned a minimum of once per quarter. In 2014, the City performed 360 FSE plan checks for 251 facilities in the Wastewater Facility's Tributary Area up from 251 in 2013. During 2015 the sizing criteria for grease interceptors will be modified, in order to incorporate the current Uniform Plumbing Code criteria and to allow additional flexibility in requirements for commercial dishwashers. The City is planning to coordinate the changes with a consultant to ensure the sizing criteria incorporate standard industry practices.

FSEs in San José are inspected for compliance with BMPs related to grease management and grease removal device maintenance, as well as stormwater pollution prevention. During FY 13-14, 636 FSEs were inspected in San José and 789 FSEs were inspected in the Tributary jurisdictions of the Cities of Cupertino, Milpitas, Santa Clara, Saratoga, Monte Sereno, Campbell, the Town of Los Gatos, and in the unincorporated portions of Santa Clara County served by the Burbank Sanitary District and County Sanitation Districts 2 and 3.

A major component of the FSE Inspection Program is educating food service owners, managers, and workers on ordinance requirements and grease controlling BMPs.

FOG-related educational materials have been developed to assist with education efforts. During FY 13-14, more than 2,676 educational pieces were distributed during FSE inspections to help FSE operators achieve and maintain compliance.

Enforcement actions are taken against any FSE that does not clean their grease control device at the minimum frequency and/or fails to keep records documenting the cleaning. Facilities found to have violations are re-inspected and enforcements are escalated until all violations are corrected. FSEs receive subsequent inspections in future years based on the number of violations observed. In FY 13-14, 745 of the



*Event attendees engage in hands on activities.* 

1,425 FSEs inspected had one or more violation (52%, up from 33% in FY 13-14). A total of 939 discrete violations were documented, and 213 Official Warning Notices, five Compliance Meetings, and 10 Administrative Citations were issued.

Inspection staff from the FSE Inspection Program responds to reports of grease blockages in the sanitary sewer in San José and from collection system agencies throughout the Tributary area. These grease investigations involve inspecting FSEs near the grease blockages for compliance with code requirements for grease control device installation and maintenance. Corrective actions are taken as needed to bring facilities into compliance and to minimize grease discharges to the collection system. During FY 13-14, the City performed 13 grease investigations involving 18 facilities, with 40 inspections conducted in connection with these grease investigations. 18 violations were documented, four Official Warning Notices were issued, and two Compliance Meetings were held. Education is also an important component of grease investigations. During FY 13-14, 47 FOG-related educational materials were distributed in connection with grease investigations.

# FATS, OILS & GREASE PREVENTION PLAN - 2014 EVALUATION AND 2015 WORK PLAN

The City's goal to address FOG is:

• Minimize the occurrence of sanitary sewer overflows due to grease as part of a comprehensive Sewer System Management Plan.

The following table contains a summary of activities the City will continue and new planned activities to accomplish this goal.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan				
Commercial / Ind	Commercial / Industrial							
Commercial food preparation	Food Service Facility owners and operators City Inspectors Reduce amount of FOG entering sanitary sewer to prevent blockages of sewer lines. Proper disposal of FOG. What to look for when inspecting grease control devices.	Inspect restaurants and other food service facilities in San José and Tributary cities for compliance with BMPs related to stormwater discharges and grease removal device maintenance.	In FY 13-14, 636 food service facilities were inspected in San José and 789 facilities were inspected in the Tributary jurisdictions. 52% of facilities had one or more violations with a total of 939 discrete violations found for all facilities. A total of 213 warning notices and 10 administrative citations were issued, and five compliance meetings were held. The Wastewater Facility removed 558 tons of FOG, consistent with last year's 591 tons but still a noticeable decrease from the 645 tons reported for 2010.	Continue to implement the FOG inspection program to improve the FOG control programs as required in the SSMP. Percent of facilities with recorded violations. Target: Inspect 1,200 food facilities in FY 14-15, and distribute educational materials as part of inspection. Implement grease control device inspection pilot program, Monitor tonnage of FOG removed at Wastewater Facility primary treatment.				

# Table 7-2FOG Prevention Plan – 2014 Evaluation and 2015 Work Plan

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Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Distribute grease management information to inspected restaurants and other FOG generators. Fact sheets address both wastewater and stormwater issues for restaurant owners, operators, and employees. Materials include a folder with good cleaning practices information; laminated poster with information in English, Spanish, and Vietnamese; six unique fact sheets (available in five languages); and a sample cleaning documentation log.	2,676 FOG related information pieces distributed by inspectors to facilities inspected in FY 13-14. Educational materials updated to align with FOG ordinance. Translated fact sheets into two additional languages (Spanish and Vietnamese). Updated City website, complete with FOG related information. Translated Fact Sheets into multiple languages (see Attachment 1)	Ongoing Revise and/or develop educational materials as needed. Revise and update website as needed.
		Inspect restaurants in response to DOT and tributary agency reports of grease related overflows, grease blockages, or unusual build- up of grease in sewer lines.	Investigated 13 grease related complaints, involving 18 facilities and 40 inspections conducted. 4 OWNs were issued, and 2 Compliance Meetings were held. 47 educational materials distributed during investigations.	Inspect and educate owners and operators of food service facilities on BMPs for grease management. Continue to respond to and investigate grease related overflows, blockages, and spills. Continue work to reduce grease related sanitary sewer blockages.
		Conduct plan checks for all new and remodeling restaurants and other food service facilities in Wastewater Facility Tributary area to determine proper grease removal device sizing.	360 plan checks were conducted for 251 City and Tributary area food service facilities.	Ongoing Plan check sizing criteria may be updated based on staff recommendations with input from consultant.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Hold on-site training for identified restaurants where FOG problems have been observed.	Inspectors provide one-on- one training during inspections.	Continue as opportunities arise.
		Conduct staff training on grease interceptors and grease investigations.	In-house training continued in 2014. Conducted inspector training on facility and grease investigations.	Ongoing
Residential				
Residential food preparation	Residents Reduce amount of FOG entering sanitary sewer to prevent blockages of sewer lines.	Participate in developing and delivering grease related messages through BACWA and BAPPG in English and Spanish.	Delivered pollution prevention messages in the 9-county San Francisco Bay Area through 65 paid radio placements, 100 PSAs, and 55 online audio streaming ads to reach listeners. The campaign generated 1.7 million impressions between November 24, 2014 and January 1, 2014.	Ongoing Educate residents about preventing grease blockages through proper handling and disposal through BAPPG Spanish radio ad campaign and other opportunities as they arise. Track the number of Bay Area residents reached.
		Deliver FOG message to households.	During 2014, staff distributed 283 FOG brochures and 306 grease scrapers at the community events listed in Appendix B. Participated in meetings with Department of Transportation to begin discussing various approaches for addressing overflows in the residential sector.	Ongoing Track the distribution of educational materials to residential and other identified audiences. Assess risks of sanitary sewer overflows based on various asset and geographical characteristics.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
			Artists Claire Napawan and Brett Snyder held community focus groups and developed pilot artwork for education campaign about the proper management of FOG in residential areas.	Implement targeted pilot education campaign elements for reducing FOG in the collection system and assess effectiveness.
		Respond to grease related sewer overflow complaints (DOT).	For 2014, there were 101 overflows of which 14 had grease as a contributing factor. DOT distributed door hangers in neighborhoods where residential grease blockages occurred.	Ongoing Percent of reported blockages attributed to FOG. Continue to notify residents via door hangers when grease- related overflows occur in residential areas.



#### Pesticide Estimated Loading

All Wastewater Facility effluent sample results for monitored pesticides were below detection limits, making it impossible to reliably estimate loadings at this time.

#### Pesticide Sources

Pesticides can enter the Wastewater Facility through indoor use, disposal of unused products via the sanitary system, and from clean up of application equipment. Table 8-1 lists the sources of pesticides. Most pesticide applications, however, occur outdoors. Therefore, contributions of pesticides to the Bay stem primarily from urban stormwater runoff into the storm sewer system and not from sanitary sewer sources.

Pesticides in urban runoff originate from non-point sources such as outdoor applications of pesticides and herbicides by all sectors – public, residential, commercial, and industrial. Because the storm sewer does not provide treatment prior to discharge into the Bay, water quality must be ensured through multi-faceted, pollution reduction programs.

The City's current pesticide pollution prevention efforts are being implemented regionally and locally as required by the Municipal Regional Stormwater NPDES Permit (Stormwater Permit) and the City's Integrated Pest Management Policy. Pesticide pollution prevention activities are included in the Annual Stormwater Reports for the City, SCVURPPP, and BASMAA are available at: www.waterboards.ca.gov/sanfranciscobay/water\_issues/programs/stormwater/MRP/2014\_AR/Santa\_Clara.

On October 14, 2009, the San Francisco Regional Water Quality Control Board (Water Board) adopted the Stormwater Permit for the San Francisco Bay Region. Provision C.9 of the Stormwater Permit specifies program activities needed to address pesticide related toxicity. Staff is implementing work plans to comply with permit requirements at the local level, including ongoing implementation of an IPM policy, municipal employee training on IPM practices, requirement for contractors to implement IPM, and public outreach to consumers at point of purchase and to pest control operators. During FY 13-14, the Watershed Watch advertising campaign included print, online, television and radio ads in English and Spanish. The campaign placed 447 total spots on IPM topics.

Additionally, in FY 12-13, the Santa Clara County Recycling and Waste Reduction Commission (SCCRWRC) and SCVURPPP formed the Eco-Gardener Work Group to discuss the existing efforts to educate residents, landscape construction maintenance professionals, and municipal staff on sustainable landscape techniques. SCVURPPP and SCCRWRC allocated funds in FY 12-13 and FY 13-14 toward the development of the Eco-Gardener program. Program staff and general co-permitee staff participated in meetings of the Eco-Gardener Work Group. In FY 13-14, the Work Group worked with a consultant to develop the www.bayareaecogardens.org website which includes information on sustainable landscaping topics, features photographs of sustainable gardens from around the Bay Area, and provides an events calendar that includes all landscaping classes to be held in Santa Clara County. The website received a total of 7,468 visits in FY 13-14. The Work Group is currently working with the consultant to further enhance the website with a water calculator and additional sustainable gardening information.

Municipal	Commercial	Residential	Industrial
Pesticide applications at	Pesticide distributors /retailers	Structural pest control	Pesticide manufacturers
government/public facilities such as parks, golf courses, right-of-ways, and other municipal facilities and properties	Professional pesticide applications at business parks, schools, and other commercial facilities	Landscape pest control Swimming pool and spa biocides	Professional pesticide applications at industrial facilities

Table 8-1	Sources of Pesticides

#### PESTICIDES PREVENTION PLAN - 2014 EVALUATION AND 2015 WORK PLAN

The City's goals to address Pesticides are:

- Support efforts to implement pesticide reduction strategies as described in the Stormwater Permit.
- Use regional activities such as Our Water Our World to advance pollution prevention efforts related to pesticides.

The following table contains a summary of activities the City will continue and new planned activities to accomplish these goals.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
Commercial /	Industrial			
Pesticides applied by businesses /commercial operations	Business, industrial, commercial, and government operations Use less toxic pest controls. Dispose of pesticides properly. Information on regulatory framework, BMPs, and IPM resources.	Support IPM-related workshops and conferences in the Bay Area.	SCVURPPP conducted an Advanced Green Gardener Training session in FY 13-14. Students who had completed the Basic Green Gardener training were contacted and encouraged to attend. Topics included green design, advanced irrigation techniques, soil management, and using IPM to manage weeds, insects, and plant diseases. A total of 25 individuals completed the training (10 in English and 15 in Spanish). 31 Green Gardeners re-certified using other options (e.g., attending a relevant class or completing self-assessment forms.)	SCVURPPP will continue implementation of the Green Gardener program and offer the Basic Green Gardener Training. The program will work with the Santa Clara County Master Gardeners to receive their help teaching classes and promoting the use of trained Green Gardeners through their hotline and other outreach venues.
		Distribute Hiring a Company that Can Prevent Pest Problems residential fact sheet for business and commercial audiences.	The factsheet was made available on the Our Water Our World (OWOW) and SCVURPPP Watershed Watch web sites and distributed at community events. It is also available at 37 hardware stores and nurseries in Santa Clara Valley.	Distribute fact sheet at events as appropriate.

# Table 8-2Pesticide Prevention Plan – 2014 Evaluation and 2015 Work Plan

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Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
Residential				
Home use and disposal	Residents Reduce the use of pesticides. Use less toxic pest controls. Dispose of pesticides properly.	Participate in the Our Water Our World and Watershed Watch campaigns. Both deliver IPM messages to residents and area businesses.	Continued participation in the Our Water Our World and Watershed Watch campaigns. During FY 13-14, the Watershed Watch advertising campaign included, online, television, and radio ads in English and Spanish. The campaign included 446 total spots on IPM topics. See SCVURPPP's FY 13-14 Annual Report for details. 37 stores in Santa Clara Valley participated in the BASMAA IPM Store Partnership Program (also known as the OWOW Program) including retail stores and local nurseries that provides less-toxic control information to residents at the point of purchase. The program's IPM consultant, Annie Joseph, also worked with various stores to train their staff on IPM and the OWOW program.	Ongoing <ul> <li>Document the numerous outreach methods employed in order to reach a broad audience.</li> </ul>

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Participate in state-wide "Got Ants? Get Serious" campaign.	SCVURPPP staff participated on the steering committee that developed the "Got Ants? Get Serious" campaign launched in 2012 and completed in 2014. The project was implemented using grant funding to the San Francisco Estuary Partnership from the DPR. Highlights of activities include development of a website, www.gotantsgetserious.org and a Facebook page that received 84 likes over the course of the project; posts and photos received 106 likes.	Participate in the final stages of the grant cycle. Participate and implement the DPR grant "Healthy Buildings Pilot Program."
			In February 2014, BASMAA applied for a DPR grant to conduct IPM outreach to managers and residents in multi- family units. In June 2014, DPR selected the project for funding and implementation began in September 2014. The project, "Healthy Buildings Pilot Program," focuses on structural pest control and is being implemented in selected apartment buildings located in San José, East Palo Alto, Palo Alto, and San Francisco. Program staff participated in meetings to discuss and develop grant application.	

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Advertise means of safe pesticide disposal on the City's website.	The City's website and collateral material continued to offer information about the County HHW program as a means for safe disposal of pesticides. In FY 13-14, the Santa Clara County HHW Program served 2.7% of the households in San José and 3.7% of the households countywide with no wait and no refusals. A total of 269,026 pounds of poisons were collected. The participation decline is attributed to the new recycling partnerships. Partners collect batteries, fluorescent lights and various kinds of paint through the paint care program.	Continue to advertise HHW availability for disposal of waste pesticides. Continue to track: • % of household reached and adequately served. • Amount of pesticides collected.
		Maintain water awareness information on Watershed Protection web page highlighting several water issues, including pollution prevention, storm drain vs. sanitary sewer, IPM, household hazardous waste, automotive fluids, Anti- Litter Program, etc.	Information formerly water awareness page is available through audience specific links for residents, schools, and businesses on the City of San José's homepage located at www.sanjoseca.gov.	Ongoing
		Print and radio public service announcements in community newspapers and South Bay radio stations. Titles: "Watch out for Mercury Pollution" and "Watch out for Toxic Pesticides."	During FY 13-14, the Watershed Watch advertising campaign included online, television, print, and radio ads in English and Spanish. The campaign placed 446 ads on IPM topics. See SCVURPPP's FY 13-14 Annual Report for details.	Ongoing
Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
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		Watershed Watch Website. The Campaign maintains a website, www.MyWatershedWatch.org in both English and Spanish as a resource and means of communicating messages to its general and targeted audiences.	The website was promoted through the media campaign. Spanish language content continues and consistently receives traffic on the website. Messages about less-toxic pest management information, including the list of Green Gardeners, Structural IPM Certification Programs, OWOW Fact Sheets, and the list of stores selling less-toxic products were posted on the website throughout the year. The website also promotes proper disposal of pesticides and refers users to the County Household Hazardous Waste Program's website (www.hhw.org). See the FY 13-14 SCVURPPP Annual Report for details.	Ongoing Participate in the Watershed Education and Outreach Ad Hoc Task Group and provide input on website updates, as needed.
		Attend community events and distribute pesticide, HHW, and P2 information.	Watershed Watch campaign staff attended the following outreach events: Mission College Eco Fair on	Ongoing Attend community events as opportunities arise.
			<ul> <li>Pumpkins in the Park on October 13</li> </ul>	
			<ul> <li>Festival in the Park on June 7</li> </ul>	
			<ul> <li>Distributed material on a variety of P2 program areas.</li> </ul>	

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Create and provide fact sheets and materials to pesticide retailers to facilitate point-of- purchase outreach to support IPM Store Partnership Program.	37 stores participated in the IPM store partnership. This work is done at the SCVURPPP program level.	Ongoing
		Provide focused training and workshop on design and maintenance of home gardens using IPM.	The Nature's Inspiration Gardens continues to serve as an example of residential landscape designs requiring less water and harmful chemicals than conventional gardens. In partnership with the Bay Area Water Supply and Conservation Agency (BAWSCA), 39 residents attended a sustainable landscape workshop series. Residents received hands-on training on sheet mulching, and	Ongoing Continue partnership with BAWSCA by providing FREE landscaping residential workshops in the Nature's Inspiration Gardens, Nectar Garden. Workshop topics include "Garden Maintenance" and "Sheet Mulching".
			water-efficient landscape and native garden maintenance.	
Flea control	Pet Owners	Make the OWOW Fact sheet for Fleas, in both English and Spanish, available at the Animal Services Center.	The Animal Services Center displays the flea fact sheet in its literature rack in an area visible to pet owners.	Ongoing
Municipal				
Pesticides applied on City property	City employees Firms contracting with the City Follow City IPM Policy, SOPs, and BMPs. Use less-toxic pest controls.	Training of all City employees; contractors invited to attend training.	The City held a Bay-Friendly Landscape Maintenance and Qualification Training for Santa Clara County landscapers in Fall 2014. 9 City of San José municipal staff that provide services to the City of San José were among the 63 participants in the training.	Hold regular trainings on relevant IPM topics for all City employees that apply pesticides. Target: 100% of applicable employees receive training during a three year cycle.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
			In 2014, the City provided 83 San José municipal staff with training on the City's IPM Policy, Standard Operating Procedures, and Best Management Practices during its Annual Worker Safety Training.	Continue and complete IPM Pilot in approximately 65 San José parks and municipal facilities. Staff will be engaged in training opportunities and lessons learned from the pilot.
			The City's Chemical Advisory Board provided additional IPM training. Training topics included The Eliminator with CO2 (Rodent Control), Impact of Chemical Use on Soils, Compost and Mulch: Differences, Applications, and Maintenance, and Sustaining Soil Quality in Civic and Municipal Landscapes. A total of 64 municipal staff received training.	BMPs and SOPs sections of the IPM Policy.
			In April 2014, a pilot program in a Parks Maintenance District was introduced to study further reduction of pesticide use in 65 City neighborhood parks and municipal facilities. Staff has increased the use of IPM methods, including wood chip mulch as a weed deterrent, and non-toxic methods for rodent control. Staff meets monthly to discuss challenges and lessons learned.	

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
		Contracts require compliance with IPM techniques and City policies.	All new contracts where services include application of pesticides for pest control and landscape maintenance .contained standard IPM language.	Ongoing Target: 100% of new contracts include IPM language.
		Pesticide use tracking database implemented.	The City continues to use its existing database to track pesticide usage.	Ongoing



In recent years, it has become possible to detect very small amounts of trace organic substances, such as pharmaceuticals and other chemicals found in personal care products, cleaning products, and medications, which may have the potential to impact human health, aquatic life, and wildlife at extremely low concentrations in our nation's waterways. New nationwide studies are published regularly showing that these compounds have been found in receiving waters, as well as at various points in the wastewater and reclaimed water treatment processes.

In 2014, the City continued to engage in activities to increase public awareness regarding the impact of emerging contaminants on the Bay such as pharmaceuticals and other chemicals found in personal care products, cleaning products, and medications, which may have the potential to impact human health, aquatic life, and wildlife at extremely low concentrations. The City continued its efforts on promoting the message of proper disposal of pharmaceuticals through hosting four local pharmaceutical collection events in connection with National Pollution Prevention Week. Also, the City continued to make advances in implementing the Green Fleet Policy adopted by Council in 2007, resulting in additional reduction of carbon dioxide emissions from City operations.

#### SAFE MEDICINE DISPOSAL



*Staff and Kaiser Pharmacists assist residents with proper medicine disposal.* 

During National Pollution Prevention Week, September 13-20, 2014, the City coordinated four pharmaceutical drop-off events and provided education to residents about the proper disposal of unused medications. The events, held in Cupertino, Milpitas, and San José at senior centers, community centers, and a hospital, collected a total of 678 pounds of medicines from approximately 180 residents. The City anticipates partnering with local organizations to host small scale pharmaceutical collection events until a more convenient and sustainable alternatives are implemented.

In 2014, more than 1,324 pounds of used and expired medicines were collected and disposed of properly at the City of Santa Clara Police station where a pharmaceutical collection container was placed in 2009. Additionally, Santa Clara County continued to offer pharmaceutical collection at several of its baspitals and medical efficient. The City promoted the

of its hospitals and medical offices. The City promoted the County

The City continued a pilot program begun in 2011 to collect unused medications during Neighborhood Cleanups hosted by the City's Code Enforcement Department and collected 934 pounds of pharmaceuticals at 22 events. The program will continue in 2015.



Proper disposal of unwanted medicine helps prevent accidental overdose, abuse, and water pollution.

The San José Police Department participated in the Drug Enforcement Agency National Prescription Take Back Days on April 27, and September 27, 2014 and collected approximately 1,832 pounds of unused medications.

Finally, City began work in June on a three-year grant from the Santa Clara Water District (SCVWD), in partnership with the CPSC and the County Department of Environmental Health's Household Hazardous Waste Program, to install 50 pharmaceutical take back boxes at pharmacies within Santa Clara County. This grant comes just as the DEA released its regulations on the collection of controlled medicines which added pharmacies to the list of entities that can collect them. In 2014, grant work included site recruitment for new bin placement and promotion of the existing collection locations.

## GREEN FLEET POLICY

In September 2007, the San José City Council adopted a Green Fleet Policy to address how the City manages its diverse fleet of both vehicles and heavy equipment. The City has a goal of reducing vehicle emissions by 25% by the end of the 2014 as part of its overall municipal operations greenhouse gas reduction goals. The City has reduced vehicle emissions by 60% since the 2002-03 baseline measurement starting point defined in the Green Fleet Policy. In addition to greenhouse gas reduction, this policy also indirectly addresses dioxin impairment in San Francisco Bay. In order to achieve this level of emissions reduction, the City has aggressively transitioned its fleet vehicle stock from gasoline-powered vehicles to those that run on alternative, cleaner-burning fuels.

The City is currently using alternative fuels in 40% of its 2,493 fleet units. A 20% biodiesel blend (B20) is successfully being used in 25% of its motorized fleet. The use of B20 enables the City to achieve significant reductions in greenhouse gas emissions, including an estimated 32% reduction in carbon dioxide (CO2) emissions, as well as reductions in carbon monoxide, hydrocarbons, and other priority air pollutants since the introduction of alternative fuel usage in FY02-03. This makes the City of San José's diesel fleet one of the largest in the country running on B20 and

reflects the City's commitment to the Green Vision, the U.S. Mayors Climate Change Agreement, and the City of San José's aggressive greenhouse gas (GHG) reduction goals for its municipal operations which call for a 35% reduction in GHG emissions by 2020.

In the last year, the City has substantially increased its use of alternative fuel vehicles. Of the City's alternative fueled fleet 18% are electric powered, 12% are hybrid, 2% are compressed natural gas (CNG), 3% bio-fuel (unleaded gas & CNG, and 2% Liquid Propane Gas (LPG). Of the City's motorized fleet 7% are electric powered, 5% are hybrid, 1% are CNG, 1% Bi-Fuel (Unleaded gas & CNG, and 1% liquid propane gas (LPG).

Additionally, in the summer of 2012, one of the City's residential garbage haulers, GreenWaste Recovery, added twelve cleaner, more efficient yard trimming collection vehicles to its 20 vehicle wheeled loader fleet. GreenWaste utilized Bay Area Air Quality Management District grant funds to convert 12 of its vehicle engines. Their cleaner fleet contributes to a 60% reduction of emissions, including nitrous oxide and particulate matter. The other three residential haulers have upgrades planned in varying degrees from replacing light-duty vehicles with hybrids to complete conversions to CNG and installation of CNG fueling stations.

# Other Pollutants and Emerging Pollutants Prevention Plan – 2014 Evaluation and 2015 Work Plan

The City's goals to address Emerging Pollutants are:

- Increase City's knowledge of the impact of emerging contaminants on the Wastewater Facility effluent, and San Francisco Bay.
- Implement pilot programs to identify cost effective methods for handling some emerging pollutants.
- Raise resident awareness about concerns related to emerging pollutants.

The following table contains a summary of activities the City will continue and new planned activities to accomplish these goals.

# Table 9-1 Other Pollutants & Emerging Pollutants Prevention Plan – 2014 Evaluation and 2015 Work Plan

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
Commercial / Indus	strial			
Commercial cleaning products	Facility maintenance companies Apply P2 methods. Use alternative cleaning products.	Distribute Light Industrial Housekeeping, "Preventing Storm Drain Pollution" booklets during Stormwater inspections, at training events, and in permanent display at City Hall.	The Light Industrial Housekeeping booklet, "Preventing Storm Drain Pollution" is available in English, Spanish, and Vietnamese. In 2014, Inspectors distributed 408 English, 50 Spanish, and 10 Vietnamese booklets. In addition, Due to a change in software, download data was not available.	Distribute booklet online, at trainings, and other events as appropriate.
Residential				
Expired medications Other pharmaceuticals	Residents Do not flush unwanted medicine down the toilet or sink or put in trash. Bring in unwanted medicine for proper disposal.	Sponsor and support the collection of unwanted and expired pharmaceuticals.	A total of 678 pounds of unwanted medicines were collected at four events during National Pollution Prevention Week, September 13-20. Collected 934 pounds of expired and unwanted medicines at 22 Neighborhood Cleanup events. San José Police Department participated in the DEA National Prescription Take Back Days on April 26 and September 27, 2014 and collected 1,832 pounds of medications.	Implement SCVWD grant to establish permanent collection programs. Pursue partnership with retail pharmacy for collection of unwanted medicines. Track pounds of medications collected. Continue to collect unwanted pharmaceuticals at neighborhood cleanup events.

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	Audience			
Source	Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
			Promoted County's medicine drop off locations to residents. Promoted County's medicine drop off locations to residents.	
		Support Santa Clara County HHW program.	City representatives chaired standing regional HHW coordination meetings in 2014, and will continue to participate in 2015. The City continues to provide ongoing residential outreach to promote the HHW program benefits, including pharmaceutical collection, and in September 2014 opened the HHW drop-off facility in San José.	2015 outreach will continue focus on the HHW program and promotion of San José's new HHW facility. Educate residents on drop- off locations for pharmaceuticals, including County medical facilities and the Sheriff's Office drop- off locations. Implement grant received from Santa Clara Valley Water District to install pharmaceutical collection boxes at pharmacies within the tributary agency area.
Wipes	Residents Do not flush wipes down the toilet	Educate residents, hospitals, child-care centers, etc. about the consequences of flushing wipes down the toilet or drain.	The message was included in a display at Christmas in the Park's Environmental Alley. This event reaches 450,000 regional attendees annually.	Develop plan for targeted outreach to residents, hospitals, child care centers, etc. about not flushing wipes.

Source	Audience Message/Program	Implementation Tactic	2014 Evaluation	2015 Work Plan
Government Agence	ies			
Expired pharmaceuticals, and other emerging pollutants	Decision makers Producer responsibility	A City representative participates in the CPSC. A coalition of local govern- ments and associations across California, this group actively promotes producer responsibility legislation.	The City actively contributes to this organization through participation in the CPSC Local Government Policy and Education Advisory Committee.	Ongoing Continue to monitor and support progress toward any pharmaceutical legislation.
	Residents Do not flush unwanted medicine down the toilet or sink or put in trash. Bring in unwanted medicine for proper disposal.	Sponsor and support the collection of unwanted and expired pharmaceuticals.	Reviewed Alameda County Safe Drug Disposal Ordinance and King County Ordinance in preparation for discussions about similar local ordinances.	Assess opportunity for a Drug Disposal Ordinance with other Bay Area jurisdictions.



In addition to implementing activities for specific pollutants of concern, the City participates in various strategies, activities and venues to educate and encourage general pollution prevention behavior.

#### POLLUTION PREVENTION WEEK

San José recognized National Pollution Prevention (P2) Week 2014, September 13-20. Staff developed a P2 Week itinerary with events and communications activities that encouraged City residents, employees, and visitors to adopt simple pollution prevention practices.



#### **Pollution Prevention Resource Fairs**

The 2014 P2 Week activities were focused on engaging the community and City employees. A total of four resource fairs were held in San José, Cupertino, and



Natural Cleaning Products

Milpitas at community centers and a hospital. At these resource fairs about 230 Tributary area residents were able to collect resources to help them practice pollution prevention at home. Through the resource fairs, the City offered information to help ensure less-toxic homes, earth friendly gardens, litter-free creeks, and proper disposal of household hazardous waste. This information was complemented by practical tools and opportunities to practice pollution prevention on the spot. Onsite pollution prevention activities resulted in collection of more than 497 pounds of expired and unused pharmaceuticals and 208 mercury thermometers.

## Youth Education

The City's Watershed Protection youth education program develops and delivers watershed and P2 messages and curricula aligned with state standards to youth and youth educators through grants, teacher workshops, and partnership activities with other agencies, organizations, and institutions. Thirteen *Creeks Come to Class* presentations were conducted in2014, teaching 327 students and thirteen teachers about the watershed and pollution prevention. The *It's Wet, It's Wild, It's Water* curriculum was provided to teachers.

#### GO GREEN INITIATIVE

The San José Go Green Schools Program fosters environmental stewardship in a parent and community driven process based on the Go Green Initiative. San José staff connects K-12 public and private schools with green resources and encourages them to Go Green. This could entail starting a school recycling or composting program, launching environmental education, buying green, or evaluating school environmental practices that impact student health. In FY 13-14, the program worked with 24 schools, and provided 1,174 recycling containers to schools.

#### Grants

The City funded a grant to the Don Edwards National Wildlife Society to implement events and projects delivering messages on pollution prevention methods, watershed protection, water conservation, water recycling, and wastewater treatment. These messages were also incorporated in teacher training modules at the Wildlife Refuge, school field trips, in-classroom presentations, and weekend interpretive programs. In FY 13-14, 3,600 students and educators participated in these programs.

The following table details these and other general pollution prevention outreach and activities.



Black Crowned Night Herons at Artesian Slough

## Table 10-1 General Pollution Prevention Outreach for 2014

Topic/POC	Activity	2014 Activity Description / Status	Evaluation
Ρ2	Living Wetlands	Grant to Don Edwards Refuge Alviso Environmental Education Center funds 8 different types of events: education and outreach events, public interpretive programs, teacher orientations, field trips, in-class presentations, a week-long summer day camp, joint Wastewater Facility/Refuge tours and information via interpretive displays. All activities are free of cost to participants.	This program reached 3,636 students and adults in the Wastewater Facility Tributary area in 2014. This was accomplished through special events including a week-long summer camp, field trips, integrated experiences, weekend programs, offsite presentations, outreach events, workshops, and co-op programs. The program has grown to incorporate partnerships with area non-profit organizations in order to enhance and expand the breadth and reach of Living Wetlands.
P2	Water Wizards Festival	<ul> <li>On September 17, 2014, a Water Wizards festival for 3rd graders was hosted by the Friends of Guadalupe River Park and Gardens. The purpose of the festival was to increase awareness of the importance of water and promote stewardship of water as a resource. The City taught an activity booth related to water and watershed issues. The messages taught were:</li> <li>Pollution prevention</li> <li>Difference between storm and sanitary sewer systems</li> <li>Value of the treatment Wastewater Facility</li> <li>Importance of soil and the value of composting</li> </ul>	<ul> <li>300 students from three San José public schools participated. Pre- and post-tests were given to each student. Post testing showed knowledge increases in all areas.</li> <li>Up 45% – We live in a watershed (from 26% to 71%)</li> <li>Up 3% – Polluted water is not good to drink (75% to 78%)</li> <li>Up 2% – All living things need water (92% to 94%)</li> <li>Up 15% – How we use water on land affects our rivers (61% to 76%)</li> </ul>

Activity	2014 Activity Description / Status	Evaluation
Pollution Prevention Web Page	Web page highlighting pollution prevention for residents.	Due to a change in software, the number of visitors who viewed the ESD pollution prevention home page in 2014 was unavailable. It is anticipated that this will be soon resolved.
Preventing Storm Drain Pollution	This booklet contains stormwater pollution prevention information for commercial and light industrial facilities. Includes proper storage, clean-up, and pollution prevention best management practices. Booklet available in English, Spanish, and Vietnamese.	Watershed Enforcement inspectors routinely give this brochure to facilities they inspect, as it is a concise and comprehensive source of information. In 2014, Inspectors distributed 408 English, 50 Spanish, and 10 Vietnamese booklets.
City of San José Youth Watershed Education Team	Developed and delivered watershed and P2 messages to youth and youth educators through grants, curricula aligned to state standards, teacher workshops, and partnership activities with other agencies, organizations, and institutions.	City of San José Youth Watershed Education Team Distributed 23 It's Wet, Its Wild, Its Water! Kits to educators in 2014. Conducted 13 Water Awareness/Creeks Come to Class presentations to 327 students and 13 teachers.
Special Event	Acterra Business Environmental Awards Acterra is an environmental non-profit serving the Silicon Valley. They present annual business awards to companies exhibiting environmental leadership,	City employees served on the judging committee.

			home page in 2014 was unavailable. It is anticipated that this will be soon resolved
Various	Preventing Storm Drain Pollution	This booklet contains stormwater pollution prevention information for commercial and light industrial facilities. Includes proper storage, clean-up, and pollution prevention best management practices. Booklet available in English, Spanish, and Vietnamese.	Watershed Enforcement inspectors routin this brochure to facilities they inspect, as concise and comprehensive source of information. In 2014, Inspectors distributed 408 English, Spanish, and 10 Vietnamese booklets.
Household chemicals including pesticides, fertilizers, cleaning products	City of San José Youth Watershed Education Team	Developed and delivered watershed and P2 messages to youth and youth educators through grants, curricula aligned to state standards, teacher workshops, and partnership activities with other agencies, organizations, and institutions.	City of San José Youth Watershed Educa Team Distributed 23 It's Wet, Its Wild, Its W to educators in 2014. Conducted 13 Wat Awareness/Creeks Come to Class preser 327 students and 13 teachers.
Water Conservation, Santa Clara Basin Watershed Management Initiative, Green Building	Special Event	Acterra Business Environmental Awards Acterra is an environmental non-profit serving the Silicon Valley. They present annual business awards to companies exhibiting environmental leadership, significant environmental benefit, a potential model for the business community and demonstrated program commitment in the areas of sustainability and environmental innovation.	City employees served on the judging co

Topic/POC

P2

Topic/POC	Activity	2014 Activity Description / Status	Evaluation
Various	Events	Communicate and distribute information at various general public and partner events on watershed protection, wastewater paths, programs for businesses, City programs to prevent pollution, and general P2 tips. P2 messages include safe disposal of pharmaceuticals and mercury- containing products, proper disposal of FOG, and less toxic cleaning products and pest management techniques.	In 2014, the City and partner agencies participated in more than seventeen events and hosted medicine and thermometer collections at the Kaiser Santa Teresa (San José) Earth Day event, and P2 week events in San José, Milpitas and Cupertino. Pollution Prevention messages were communicated through multiple daily stage announcements at all 47 Zero Waste Events reaching 1.3 million attendees.
Various	Facilitate implementation of environmental programs in schools	The San José Go Green Schools Program connects K-12 public and private schools with green resources and encourages them to initiate environmental practices.	In 2014, the program worked with 24 schools in San José, providing them with free recycling supplies and other green resources.
Household Hazardous Waste	Event	Household Hazardous Waste education and outreach was provided to San Jose Earthquakes fans before and during the October 18, 2014 soccer game. Fans were provided HHW outreach pre-game at the City booth while a Public Service Announcement was made during the game.	50 people were provided HHW outreach pre- game and the Public Service Announcement reached 12,000 fans.
Municipal Emplo	oyee General P2 T	raining	
P2	Pollution Prevention Week	Participated in National Pollution Prevention Week 2014, September 13- September 20. Staff coordinated a P2 Week itinerary with numerous events and communications activities that encouraged residents, employees, and visitors to adopt simple pollution prevention practices. Activities included four P2 Resource Fairs at senior and community centers.	More than 230 residents attended the four Resource Fairs held in the Tributary service area.

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# Section 11 Regional Partnerships & Leadership Initiatives

Many of the current pollutants of concern are most effectively addressed from a watershed or regional perspective focusing on finding long-term solutions to Bay Area-wide watershed issues in order to effectively improve water quality. To this end, the City actively participates in various region-wide stakeholder efforts, regional workgroups, and regional outreach and pollutant monitoring efforts such as those listed below and the South Bay Salt Pond Restoration Program, the Pesticide Management Committee, the California Product Stewardship Council, and the Product Stewardship Institute.

Thus, in addition to what the City does within its own jurisdiction, the City's key P2 accomplishments are also measured through its various regional watershed activities. Accomplishments for 2014 of the City's following key partnerships and leadership initiatives are summarized in this section:

- The Regional Monitoring Program;
- Bay Area Clean Water Agencies (BACWA) and the Bay Area Pollution Prevention Group (BAPPG) BACWA Committee;
- The Watershed Management Initiative;
- Green Cities California;
- Green Business Certification;
- San José Green Vision;
- Cities Keep It Clean Partnership;
- Regional Outreach Partnerships.

#### **REGIONAL MONITORING PROGRAM**

The RMP is a collaborative effort between the San Francisco Estuary Institute (www.sfei.org), the San Francisco Bay Regional Water Quality Control Board (Water Board), and the regulated discharger community. The Water Board formed the RMP in 1993 to conduct water quality measurements and investigations to better manage environmental programs in the Estuary. The City contributes financially to the RMP, is active on the steering committee, and provides in-kind staff support for specific RMP pollutant studies.

The City plans to continue to participate in the RMP throughout 2014.

#### WATERSHED MANAGEMENT INITIATIVE

The Watershed Management Initiative (WMI) continues to implement the Watershed Action Plan through the actions of its subgroups and through collaboration with other water policy and environmental stakeholder groups. City staff actively participates in the Santa Clara County Zero Litter Initiative (ZLI). The group's mission is to eliminate litter and littering in Santa Clara County, and is focused on litter control along State-owned or maintained freeways/expressways and local streets, and preventing litter from entering creeks and waterways, In 2014, ZLI conducted two roundtable meetings on the Litter Impacts from Solid Waste Haulers and Facilities, developed a survey for staff coordinating solid waste activities in their municipalities, and completed development



Geese and shovelers in biosolid drying beds.

of a revised Trash Sources and Pathways poster. City staff also participates in the POTW Discussion Forum and Pretreatment Forum.

## GREEN CITIES CALIFORNIA

The City of San José is a member of this 14 member coalition comprised of several California cities and Marin County who work in concert to implement sustainability initiatives. The coalition supports sustainability legislative initiatives; disseminates best practices; and organizes research and support for local governments on environmentally preferable policies and programs. In 2014, the coalition continued to support the adoption of ordinances eliminating the use of single use bags, and focused on the impact of food systems on climate change. The coalition will remain focused on climate change and extended producer responsibility in 2015.

#### GREEN BUSINESS CERTIFICATION

The City continues to support the Santa Clara County Green Business Program through promotion, application review, and inspections. In 2014, the City reviewed 85 applications for businesses in the tributary area seeking certification to determine whether applicants had a history of wastewater or stormwater violations and to ensure they were in compliance. With the City's assistance and encouragement, the total number of Green Businesses in San José has grown to 249 including San José City Hall.

#### SAN JOSE'S GREEN VISION

The San José Green Vision was adopted by City Council on October 30, 2007. The Vision is an ambitious 15-year plan to promote clean tech innovation, sustainability, and green mobility.

Promoting the Green Vision goals provides opportunities to promote wastewater pollution prevention in a broader context of sustainability.

San José continues to lead by example with its "Green Fleet" policy to guide the transformation of the City's fleet. To reach its goal of ensuring 100 percent of its public fleet vehicles run on alternative fuels, the City has implemented the use of bio-diesel fuels with the existing fleet and has made positive strides towards acquiring green vehicles while providing support for alternatively fueled vehicles throughout the entire fleet inventory. Inventory of public electric vehicle (EV) plug-in stations and access to alternative fueling depots including CNG was expanded.



Purple pipes supply about 0.2 million gallons per day of recycled water.

The City continues to make progress to meet the goal of recycling or beneficially reusing 100% of our treated wastewater. South Bay Water Recycling recycles about 19.6 million gallons per day during the dry season, reaching customers through 142 miles of dedicated piping, pumps, and reservoirs. In 2014, 46 additional customers began using recycled water which increased recycled water delivery by approximately 0.2 million gallons per day or approximately 2% over 2013. Currently, South Bay Water Recycling (SBWR) provides an annual average of 14.1 million gallons per day of non-potable

recycled water annually. Overall recycled water delivery has rebounded appreciably between calendar years 2013 and 2014. The growth in 2014 recycled water delivery is attributed to new customers and additional use by a large golf course. San José staff continues to work collaboratively with the SCVWD to increase recycled water use toward the SCVWD's goal of 40 million gallons annually.

The Silicon Valley Advanced Water Purification Center (SVAWPC) is a joint effort by the City of San José and SCVWD to produce highly purified water, partially funded by grants from the U.S. Bureau of Reclamation (USBR), the American Reinvestment and Recovery Act (ARRA), and the California Department of Water Resources (DWR). Startup, testing, and commissioning activities began in December 2012 and were completed in March 2014 when SVAWPC was officially commissioned for full production. SVAWPC was able to provide up to 8-10 MGD purified product water for blending with tertiary recycled water during peak summer months when the extra water helped to reduce hourly peaks due to high irrigation demand. SVAWPC operations continue to be managed through a joint Operations and Maintenance Agreement, including water quality monitoring and facility coordination between the San José-Santa Clara Regional Wastewater Facility (RWF) and SVAWPC. The City and District continue to review opportunities for the use of the purified product water during future periods of drought and increased water supply needs.

To encourage City departments and employees to embrace their own opportunities to be more sustainable, the City has formed a Green Team with representatives from departments throughout the City. The City's Green Team encourages departments to embrace their own opportunities to be more sustainable and empowers staff to make simple behavior changes in the workplace and at home that advance the Green Vision goals and prevent pollution while reducing City expenditures on energy, water, waste, and fuel.

### CLEAN BAY PROJECT

On September 16, 2008, the San José City Council adopted the Cities Keep It Clean Resolution, now known as the Clean Bay Project, making San José the first city in the Bay Area to join Save the Bay's Cities Keep It Clean Partnership. The Clean Bay Project is a suite of the most effective pollution prevention programs developed and implemented by municipalities that Save the Bay recommends all cities adopt.

The City continues to work on a majority of the program actions originally identified in the Clean Bay Project. Recent priority actions have focused on protecting the Bay from trash, particularly reducing plastic bags, polystyrene packaging, cigarette litter, and other pollutants in creeks and the Bay.

San José continues to actively implement other program actions identified in the Clean Bay Project, including but not limited to the following: reducing oil and other vehicle pollutants in stormwater runoff, and reducing sanitary sewer overflows from reaching our creeks and the Bay.

#### **REGIONAL OUTREACH PARTNERSHIPS**

#### Watershed Watch

The City participates in Watershed Watch, a campaign produced in partnership with the WMI and the SCVURPPP, which delivers pollution prevention messages to the residents of the Santa Clara basin using media, events, and a website. City staff are part of the campaign advisory group and have been involved in the production of print, television, and radio public service announcements; the design of the website as a means of communicating messages to a general audience in both English and Spanish; and the implementation of a campaign presence on social media websites to disseminate pollution prevention messages.

In 2014, the City continued collaborating with SCVURPPP co-permittees to hold Santa Clara Valley Green Gardener trainings. The Santa Clara Valley Green Gardener training, offered in both English and Spanish, was given to dozens of area gardeners and landscapers. It trained them in IPM, water conservation, and pollution prevention techniques. SCVURPPP promoted the gardeners who successfully completed the training by listing them on the MyWatershedWatch.org website and airing radio advertisements encouraging residents to hire Santa Clara Valley Green Gardeners or gardeners who employ these green techniques.

#### San Francisco Bay Protection & Behavior Change Campaign (Regional Campaign)

During 2011, the City of San José together with the San Francisco Estuary Partnership initiated a coalition of Bay Area wastewater and stormwater dischargers to explore a regional outreach campaign concept to address pollution prevention and behavior change. City staff participated on the steering committee that developed the "Got Ants?" campaign. The project was implemented using grand funding to the San Francisco Estuary Partnership from theDPR.

#### Our Water, Our World

The Regional IPM Partnership, a joint project between BACWA and BASMAA, completed its fourteenth year of the regional promotion of less-toxic pest control. The partnership encourages less-toxic methods of pest prevention and control by means of a point-of-sale program called Our Water, Our World (OWOW). In FY 13-14, the OWOW promotions continued to run in 37 hardware stores and nurseries in Santa Clara County. In support of the OWOW campaign, city staff participated in in-store outreach events to talk to consumers about their pest control products and non-toxic alternatives.

#### **Bay Area Pollution Prevention Group**

San José actively participates in the BBAPPG. Member agencies of the BAPPG work together to 1) Improve communication, 2) Make the most effective use of public funds, 3) Coordinate regional pollution prevention projects, 4) Encourage and sponsor research and studies on topics related to pollution prevention, and 5) Develop regionally consistent public education messages and programs. Participation in this group leverages the City's efforts and resources through in-kind services and information and idea sharing, and strengthens our messaging to Bay area businesses and residents. This year BAPPG continued to coordinate Bay Areawide outreach activities including FOG radio and media advertisements and presentations at Dental Training Programs regarding mercury waste, to hospice and home care providers about proper pharmaceutical disposal, and to building code officials regarding disposal of demolition waste.

A summary of regional outreach activities in which the City participates is listed in Table 11-1.

#### **Other Significant Activities**

The City has made significant progress over the last 16 years to reduce pollutant loading to the San Francisco Bay. Some of the successes are measurable, while others are not directly measurable, but are just as significant.

The Wastewater Facility is a recognized leader in monitoring efforts in the South Bay and provides water quality data, GIS information, and technical support for Baywide TMDL efforts as well as to the Federal and State Salt Pond Restoration project. This information and technical support is crucial to understanding the Bay ecosystem and developing supportable TMDLs.

The Wastewater Facility has performed many special studies over the years to address TMDL uncertainties, shifting focus as pollutant priorities change. Examples of past studies are the South Bay Copper Water-Effect Ratio study, the nickel criteria recalculation study, the cyanide attenuation study, a treatment plant Mercury Fate and Transport Study, and a pilot study on the Fate and Transport of Emerging Contaminants. Currently, the Wastewater Facility is conducting additional nutrient monitoring in Lower South San Francisco Bay on a monthly frequency, metals and general water chemistry on a quarterly frequency, and completed a marsh vegetation mapping assessment in 2012. City representatives have lead roles on regional groups such as the San Francisco Estuary Institute (SFEI) and the San Francisco Estuary Partnership (SFEP) Implementation Committee. The Wastewater Facility is also a principal member of BACWA and as such provides resources that benefit dischargers Bay-wide.

The Wastewater Facility has maintained compliance with all its NPDES discharge limits for pollutants of concern. As shown in Attachment 2, the concentration of copper entering the Wastewater Facility has remained steady over the last five years, as have the corresponding effluent concentrations. Mercury inputs to the Wastewater Facility have remained relatively constant during the last decade. The Wastewater Facility average influent mercury concentrations remained relatively constant from 0.123 (ug/L) in 2012 to 0.123 (ug/L) in 2014.

Lead Agency /Organization	Activity	Description (Outreach conducted on a fiscal year basis is reported here for FY 12-13	Pollutants of Concern/Issues	Messages
BACWA/ BASMAA	Regional "Our Water Our World" Campaign	The City funds this project through BACWA, BASMAA, and SCVURPPP. This year the project continued setting up displays, distributing literature, and training staff at participating stores. The program is ongoing in 38 stores in Santa Clara County.	Pesticides	Safe use and disposal of pesticides and fertilizers. Use of less toxic methods for pest control, landscaping, and gardening (IPM).
BAPPG	FOG Spanish Radio Outreach	City led coordination of project to deliver pollution prevention messages to Spanish speaking audiences in the 9-county San Francisco Bay Area. In 2014, the project ran advertisements on how residents can reduce the amount of FOG entering the sewer system through proper disposal. The 220 paid radio placements, PSAs, and online audio streaming ads aired between Thanksgiving Week and New Year's Day with an estimated 1.7 million impressions.	FOG	Ways to control FOG discharged to the sewer from residences
BAPPG	Presentation to Dental Training Program Participants	Contractor Stephanie Hughes presented at a San Jose City College to 52 students.	Mercury, pharmaceuticals, and triclosan	Proper disposal of dental amalgam waste, silver fixer, and pharmaceutical. Cautions about use of triclosan-containing products.
WMI/SCVURPPP	Media advertising in the Santa Clara Basin	During FY 12-13, the Watershed Watch advertising campaign included messages related to pesticides and mercury/HHW (print, online, television, and radio) ads in English and Spanish. The campaign paid for 777 placements and received 362 placements in-kind for a total of 1,139 placements generating approximately 11,820,760, gross impressions. See SCVURPPP's FY 12-13 Annual Report for details.	Pesticides & mercury	Less-toxic alternatives to pesticides. Safe disposal of mercury containing products and HHW.

# Table 11-1 Summary of Regional Outreach Activities 2014

Lead Agency /Organization	Activity	Description (Outreach conducted on a fiscal year basis is reported here for FY 12-13	Pollutants of Concern/Issues	Messages
WMI/SCVURPPP	Zun Zun Children's P2 Play	The City co-funds up to 50 presentations annually of an interactive play, The Musical Watershed. The interactive, bilingual musical play, presented at assemblies, features musical instruments from multiple cultures, recycled materials, and a "tour" of the watershed from ridgeline to Bay designed to convey P2 and watershed messages in Spanish and English to school aged children in grades K-6 in the Santa Clara Basin. Public schools with high populations of Hispanic, Asian, Filipino, and Pacific Islander students are targeted for presentations, though no school in the Program area is turned down (as budget allows). Teachers measure pre- and post- presentation knowledge of concepts and report back to SCVURPPP with data and comments. Approximately 15,632 students were reached in FY 12-13.	Household chemicals including pesticides, fertilizers, cleaning products	P2 methods, watershed protection, water conservation, personal responsibility.
WMI/SCVURPPP	Event Coordination Watershed Watch Campaign	Watershed Watch campaign staff attended the following outreach events: Water Day at History San José on March 23, Mission College Eco Fair on April 18, NVIDIA Corp. Earth Day Event on April 19, Spring in Guadalupe Gardens on April 20, Capitol Premier Car Wash on May 29, Delta Queen Classic Car Wash on June 5, Robertsville Classic Car Wash on June 12, Festival in the Park on June 22, Pumpkins in the Park on October 13, and Haunt the Hollow on October 28. Distributed material on a variety of P2 subjects.	Household chemicals including pesticides, fertilizers, FOG, cleaning products	P2 methods, IPM, watershed protection, and personal responsibility.

Lead Agency /Organization	Activity	Description (Outreach conducted on a fiscal year basis is reported here for FY 12-13	Pollutants of Concern/Issues	Messages
WMI/SCVURPPP	Website Watershed Watch Campaign	The Campaign maintains a website (www.MyWatershedWatch.org) in both English and Spanish as a resource and means of communicating messages to its general and targeted audiences.	Mercury, pesticides, P2	Proper disposal of fluorescent bulbs, the effects of mercury on the local watershed, and less-toxic alternatives to pesticides.
WMI/SCVURPPP	Spanish and Vietnamese Language Resource Watershed Watch Campaign	The City provided Spanish and Vietnamese language translation and proofreading services as requested to support the Santa Clara basin-wide Watershed Watch outreach campaign.	Household chemicals including pesticides, fertilizers, cleaning products	P2 methods, watershed protection, water conservation, and personal responsibility.

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## APPENDIX A – LIST OF TABLE AND FIGURES

2014 Annual Pollution Prevention Report

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# APPENDIX B - 2014 PUBLIC EDUCATION EVENTS

The City and its partners provided pollution prevention information to the general public attending these 2014 events.

Event Name	Date(s)
Water Day at History San Jose	March 23
United Neighborhoods of Santa Clara County spring mixer	March 29
Mission College Eco Fair	April 18
NVIDIA Corp. Earth Day Event	April 19
Earth Day San José at San Jose State University	April 22
Capitol Premier Car Wash	May 29
Delta Queen Classic Car Wash	June 5
Robertsville Classic Car Wash	June 12
World Cup viewing events	June 16, 17, 22
Festival in the Park	June 22
Pumpkins in the Park	October 11
San Jose Earthquakes soccer game	October 18
Safe and Green Halloween	October 24
Haunt the Hollow	October 28
Christmas in the Park	November 28 through January 1, 2015

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## APPENDIX C – CITY OF SAN JOSÉ 2014 ZERO WASTE EVENTS

To participate in San José's Zero Waste Event Program, the 47 events below held in 2014 announced these three messages during each day of the event reaching a total of 1.3 million attendees.

**Message 1:** Is your medicine cabinet getting full and cluttered? "Don't rush to flush!" Flushing medicine down the toilet pollutes our Bay because they are not removed during the wastewater cleaning process. Instead, take your expired or unused medication to a free take back site near you. Visit hhw.org to make a drop-off appointment to safely dispose of old medicines.

**Message 2:** Are you ready to clean out your garage? Not everything goes in your carts at home. Properly dispose of your motor oil, paint, batteries and old pesticides at a free facility near you. Visit hhw.org or call 408-299-7300 to schedule a drop off appointment at a location near you.

**Message 3:** Help keep this event fun and clean. Pick up litter and put it in the trash. Visit sjenvironment.org to learn how you can help keep your neighborhood clean by reporting litter and graffiti or volunteering to help clean up San José's parks and trails.

Event Name	Month
Songkran Thai New Year Festival	April
Asian American Heritage Future Roots Festival	Мау
The Color Run	Мау
Dancin' on the Avenue 2014	June
Council District 10 July 4th Fun Festival 2014	July
Bacon Festival of America	July
World Cup 2014 Soccer Viewing Round 3 - 4	July
Obon Festival 2014	July
Starlight Cinemas	July
Music in the Park	July
Starlight Cinemas	July
South FIRST FRIDAY Street Market	August
Backesto Flea Market	August
Vibe Soccer + Music + Tamale Festival	August
San Jose Renaissance Faire	August
San Jose Jazz Summer Fest	August
Starlight Cinemas	August
Silicon Valley Pride Festival - 2014	August

Event Name	Month	
Music in the Park	August	
Italian Family Festa 2014	August	
Electronic Sriracha Festival	August	
Race to the End of Summer	August	
South FIRST FRIDAY Street Market	September	
FUN in the SUN	September	
El Grito/Fiestas Patrias	September	
Almaden Valley Art & Wine Festival	September	
Bark in the Park	September	
Luna Park Chalk Art Festival	September	
Silicon Valley Brain Tumor Walk	September	
Harvest Fair and Exposition 2014	October	
Rock n Roll San José Half Marathon	October	
Pumpkins in the Park	October	
San José Walk to End Alzheimer's	October	
Day in the Park	October	
South Bay Walk to Defeat ALS	October	
10th Annual Bay Area Buddy Walk	October	
SJ Music Festival	October	
Light The Night Walk	October	
Step Out Walk to Stop Diabetes 2014	October	
Run with the Zombies	October	
Dia los Muertos San Jose	October	
Making Strides Against Breast Cancer of Silicon Valley	October	
PurpleStride Silicon Valley	November	
Winter Wonderland	November 2014 - January 2015	
Silicon Valley Turkey Trot	November	
Christmas in the Park 2014	November 2014 - January 2015	
Silicon Valley Santa Run	December	
#### APPENDIX D – ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter		
ADWEF	average dry weather effluent flow		
AQMM	Almaden Quicksilver Mining Museum		
B20	20% biodiesel blend		
BACWA	Bay Area Clean Water Agencies		
BAPPG	Bay Area Pollution Prevention Group		
BASMAA	Bay Area Stormwater Management Agencies Association		
BAWSCA	Bay Area Water Supply and Conservation Agency		
ВМР	best management practice		
City			
	City of San Jose		
CW2	Bay-wide Copper Management Strategy		
CNG	compressed natural gas		
CO2	carbon dioxide		
CPSC	California Product Stewardship Council		
DEA	Drug Enforcement Agency [federal]		
DEH	Department of Environmental Health		
DOT	City of San José Department of Transportation		
DPR	California Department of Pesticide Regulation		
DWR	California Department of Water Resources		
FΡΔ	U.S. Environmental Protection Agency		
ΕΡΕΔΤ	Electronic Product Environmental Assessment Tool		
	Evended Producer Responsibility		
	City of San José Environmental Services Department		
LV			

FOG	fats, oils, and grease		
FSE	food service establishment		
FY	Fiscal Year		
GHG	greenhouse gas		
GIS	geographic information system		
gpd	gallons per day		
HHW	household hazardous waste		
HVAC	heating, ventilation, and air conditioning		
IPM	integrated pest management		
IU	industrial users		
LCR	EPA's Lead and Copper Rule		
LED	light-emitting diode		
lpg	liquid propane gas		
LSB	Lower South Bay		
kg/yr	kilograms per year		
MGD	million gallons per day		
ND	non-detect (not detectable with the available equipment)		
NPDES	National Pollutant Discharge Elimination System		
OWOW	Our Water Our World		
P2	Pollution Prevention Program		
РСВ	polychlorinated biphenyl		
Plant	San Jose/Santa Clara Water Pollution Control Plant (renamed San José-Santa Clara Regional Wastewater Facility)		
POC	pollutants of concern		

POTW	publicly owned treatment works		
ppd	pounds per day		
PSI	Product Stewardship Institute		
Regional Water Board	California Regional Water Quality Control Board, San Francisco Bay Region		
RMP	Regional Monitoring Program		
RWF	San José-Santa Clara Regional Wastewater Facility		
RWQCB	Regional Water Quality Control Board		
SBWR	South Bay Water Recycling		
SCCRWRC	Santa Clara County Recycling and Waste Reduction Commission		
SCVDS	Santa Clara Valley Dental Society		
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program		
SCVWD	Santa Clara Valley Water District		
SFEI	San Francisco Estuary Institute		
SFEP	San Francisco Estuary Partnership		
SSMP	Sewer System Management Plan		
Stormwater Permit	Municipal Regional Stormwater NPDES Permit		
SVAWPC	Silicon Valley Advanced Water Purification Center		
SWRCB	State Water Resources Control Board		
TMDL	total maximum daily load		
TTOs	total toxic organics		
USBR	U.S. Bureau of Reclamation		
VTA	Santa Clara Valley Transportation Authority		
Wastewater Facility	San José-Santa Clara Regional Wastewater Facility		
Water Board	San Francisco Regional Water Quality Control Board		

WMI	Santa Clara Basin Watershed Management Initiative
WPCP	Water Pollution Control Program
ZLI	Santa Clara Valley Zero Litter Initiative



Attachments can also be found at: www.sanjoseca.gov/regulatoryreports

#### ATTACHMENT 1 - OUTREACH MATERIAL

- Industrial User Academy Workshop flyer, April 2014
- National Pollution Prevention Week flyer and advertisement
- Partner Agency Pharmaceutical and Thermometer Collection Event flyer
- Public Artist FOG Outreach Concepts Presentation
- Acceptable Specifications for Grease Interceptors (in five languages)
- How to Clean a Grease Trap poster

#### ATTACHMENT 2 - WASTEWATER FACILITY INFLUENT AND EFFLUENT CHARTS

- Copper Influent
- Copper Effluent
- Mercury Influent
- Mercury Effluent

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#### Attachment 1 – Outreach Material

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#### **2014 Industrial User Academy**

#### A FREE One-Day Workshop for Permitted Industries

#### Wednesday, April 16, 2014

8:00 a.m. to 4:30 p.m.

#### San José-Santa Clara Regional Wastewater Facility (map on back)

#### **WORKSHOP Includes Time To:**

- MEET inspectors and permit writers
- NETWORK with other Industrial Users
- SEE how samples are collected and transported
- LEARN more about your permit requirements
- LEARN how to prevent violations
- STREAMLINE your completion of SMRs
- TOUR the Regional Wastewater Facility

#### Lunch Will Be Provided

## Space is limited. Reservations are on a first-come, first-served basis. Please RSVP by April 4<sup>th</sup> - limit 2 per company.

#### To RSVP:

- 1. Quickest. Email your name, title, phone, company to paul.prange@sanjoseca.gov
- Fax (408) 271-1930 or Mail the form below to: IU Academy, 200 East Santa Clara, 7<sup>th</sup> Floor, San José, CA 95113

<b>REGISTRATION FORM</b>	April 16, 2014	San José Industrial User Academy
Name:	Title:	
Company:	Phone: _	
E-mail:		
□ Vegetarian lunch preferred.		
Fax: (408) 271-1930	Questions	Contact Paul Prange at (408) 793-5325

#### **2014 Industrial User Academy**

A FREE One-Day Workshop for Permitted Industries

Location: Large Conference Room in the Administration Building San José-Santa Clara Regional Wastewater Facility 700 Los Esteros Road, San José, CA (408) 635-6600

**Parking**: Park in the parking lot in front of the Administration Building



- From 101 take 237 East to Zanker Road exit Proceed North on Zanker Road; the Administration Building is on your left.
- From 680/880 take 237 West to Zanker Road exit Proceed North on Zanker Road; the Administration Building is on your left.



#### You can dispose of expired and unneeded meds at the following events and locations.

\*NO sharps or needles can be accepted at collection events

Join us at one of our National Pollution Prevention Week Events September 13-20, 2014.

SATURDAY, SEPTEMBER 13, 2014 10:00 a.m. - 1:00 p.m. Barbara Lee Senior Center 40 N Milpitas Blvd., Milpitas TUESDAY, SEPTEMBER 16, 2014 9:00 a.m. - 11:30 a.m. Cupertino Senior Center 21251 Stevens Creek Blvd., Cupertino

Safely Dispose of your old Mercury Thermometers at these four events, too!

WEDNESDAY, SEPTEMBER 17, 2014 10:00 a.m. - 1:00 p.m. Rotunda San José City Hall 200 E Santa Clara St., San José SATURDAY, SEPTEMBER 20, 2014 10:00 a.m. - 1:00 p.m. Kaiser San José (Farmers Market) Camino Verde & Santa Teresa Blvd., San José

#### SATURDAY, SEPTEMBER 27, 2014

National Take-Back Initiative (pharmaceuticals only) More info at:

www.deadiversion.usdoj.gov/drug\_disposal/takeback/

If you can't make it, you can still drop off your pharmaceuticals at any of our current drop off locations. In 2015, we will be adding 50 more drop boxes for your convenience. Choose a location close to you at www.hhw.org/medicines



San José-Santa Clara

All Santa Clara County residents can make an appointment at the new Household Hazardous Waste (HHW) facility by visiting www.hhw.org or calling 408.299.7300.





#### Regional Wastewater Facility

Serving the cities of San José, Santa Clara, Milpitas, Cupertino, Campbell, Town of Los Gatos, Monte Sereno, and Saratoga.



Located at the San José Environmental Innovation Center, a building with many green features. www.sjenvironment.org/eic



#### Environmental Services

To request an accomodation under the Americans with Disabilities Act, call 408-535-3500. Spanish, Vietnamese, and Chinese-language services are available upon request. City of San José is commited to open and honest government.

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Employees may use leave or flextime, subject to supervisor approval, for attendance outside of his/her lunch break. APPROVED FOR POSTING BY THE DIRECTOR OF ENVIRONMENTAL SERVICES





MEDS In the BIN. We All WIN!

You can dispose of expired and unneeded meds at the following events and locations.

\*NO sharps or needles can be accepted at collection events

Join us at one of our National Pollution Prevention Week Events September 13-20, 2014

SATURDAY, SEPTEMBER 13, 2014 10:00 a.m. - 1:00 p.m. Barbara Lee Senior Center 40 N Milpitas Blvd., Milpitas

**DON'T** 

**RUSH TO** 

FLUSH

TUESDAY, SEPTEMBER 16, 2014 9:00 a.m. - 11:30 a.m. Cupertino Senior Center 21251 Stevens Creek Blvd., Cupertino

Safely Dispose of your old Mercury Thermometers at these four events, too!

WEDNESDAY, SEPTEMBER 17, 2014 10:00 a.m. - 1:00 p.m. Rotunda San Jose City Hall 200 E Santa Clara St., San Jose

#### SATURDAY, SEPTEMBER 27, 2014 National Take-Back Initiative (pharmaceuticals only) More info at:

www.deadiversion.usdoj.gov/drug\_disposal/takeback/

SATURDAY, SEPTEMBER 20,2014 10:00 a.m. - 1:00 p.m. Kaiser San José (Farmers Market) Camino Verde & Santa Teresa Blvd., San Jose

If you can't make it, you can still drop off your pharmaceuticals at any of our current drop off locations. In 2015, we will be adding 50 more drop boxes for your convenience. Choose a location close to you at www.hhw.org/medicines

Remember - No Drugs Down the Drain!



Co-sponsored by Los Gatos-Monte Sereno Police Dept. - CASA-Community Against Substance Abuse & West Valley Clean Water Program

# CitySink / SyncCity

A Multipronged Project to Engage Communities with their Vital Infrastructure



Through a unique collaboration between the City's Environmental Service Department (ESD), the Department of Transportation (DOT), and the Public Art Program (SJPA), the City of San Jose has provided an opportunity to address the issue of Fats, Oils, and Grease (FOG) waste through public art, designed to investigate the waste water system and the community, motivate responsible management by thecommunity, and support the community's relationship to this vital, but invisible, infrastructure.

A single project alone could not successfully address the multiple scales contributing to the physical, environmental, and social conditions impacting San Jose's waste water infrastructure. In response, our proposal takes a multi-pronged approach to achieving greater awareness. This 'kit of parts' strategy proposes artistic interventions/projects at multiple scales to address the problems associated with FOG waste in the city's waste water system. Each intervention addresses a different audience: the individual, the community, the city, and the local ecosystem.

This suite of multi-scalar projects draws better connections between each scale of the city's system, working strategically to incite community curiosity, to encourage participation in best kitchen practices, and to encourage good environmental stewardship.

## 1 Home

Door hangers distributed by DOT crews would provide community members with access to information related to the installations associated with this project, as well as to information related to FOG waste and its preferred management techniques. The graphics of of the postcard would olarfity the curious manhole markings that community members would see, "closing the loop." The hangers would include a perforated portion that becomes a postcard, inviting community members to share what they've learned by mailing the card to a friend or neighbor.

# 2 Neighborhood

Existing DOT maintenance trucks would serve as a roving installation for displaying key facts and graphics related to the larger scales of FOG waste and inciting community curiosity in learning more about the truck's role in the infrastructure and the impact to their neighborhood. In addition, DOT

Implact to their regretompoot, in addition, UCI responders would mark existing manholes in bold graphics to indicate the flow of water beneath the surface of the streets; a practice already necessary for routine cleanings.

## 3 Civic

Utilizing graphics that trace the hidden waste water infrastructure, this project is conceived as an outline of mainlines, laterals, and other components of the city's waste water infrastructure. These graphic installations could occur at existing civic locations or integrated with community events. It would employ digital social media networks to broaden the conversation between this exposed city system and the failures and successes of the system as experienced by community members.

## 4 City-Wide

Linking with city-wide resources, this project proposes the expansion of existing 'Water Wise' Curriculum developed by ESD for educating school children on water to include more information on the ourrent project and FOG waste's impact to water in the city. Targetted events could include the Go Green Conference, Earth Day, and other city-wide events. Activities might include a scavenger hunt for the waste water infrestructure components within the community, expanding the role of Civic and Neighborhood scaled projects.



For more information contact Mary Rubin, Coordinator of Public Art Projects for San Jose mary rubin@sanjoseca.gov 408.793.4340

Olaire Napawan and Brett Snyder

#### **Grease Management**



## Acceptable Specifications for Grease Interceptors

KEEP GREASE OUT OF THE SYSTEM

#### All Grease Interceptors (GIs) shall:

- Be approved by the International Association of Plumbing and Mechanical Officials (IAPMO) per the Sanitary Use Ordinance.
- Be installed to manufacturer's specifications and comply with current local, state, and federal requirements.
- Be sized by the City of San José, Environmental Services Department (ESD).

- Be 1,000 gallons minimum unless authorized by ESD.
- Include manholes over the inlet, outlet, and baffle wall(s) standpipes for purposes of access, inspection, and cleaning.
- Include 24-inch diameter round access covers.
- Include a 12-inch gap from bottom floor of Grease Interceptors to bottom of standpipes.
- Include pre-test observation by the applicable jurisdiction prior to backfilling.

- Include connections to all grease generating fixtures.
- Include a sample box (see reverse side for illustration). The preferred type is a minimum 5-gallon capacity circular sample box and is located immediately downstream from the GI. The sample box shall have a hydraulic jump of approximately six (6) inches or a tee on the influent side of the sample box (similar to tee on influent side of GI).



#### **Sample Box**



#### List of Grease Interceptor vendors

- Jensen Precast www.jensenprecast.com (707) 429-5500
- Don Chapin Company www.donchapin.com (831) 449-4273
- US Concrete Precast Group www.us-concreteprecast.com (925) 960-8740
- Greenturtle Proceptor www.greenturtletech.com (877) 428-8187
- MC Nottingham www.mcnottingham.com (800) 834-9655

It is in no way to be implied or understood that City of San José Environmental Services Department endorses these companies or their quality of work. This list is provided as a courtesy and is only a partial list of GI vendors in this area. It is the responsibility of the person who is hiring any of these companies to verify their qualifications and references as well as their compliance with regulations on handling and transport of waste. This sheet is intended for use in the greater San José area.

#### For more information:

City of San José Environmental Services Watershed Protection Division 200 E. Santa Clara Street, Floor 7 San José, CA 95113 (408) 945-3000 Fax: (408) 271-1930 www.sanjoseca.gov

If you have any questions, please call (408) 945-3000 to speak with an Environmental Inspector. This and other outreach materials are available at www.sanjoseca.gov/esd/water-pollution-prevention/fog-bmps.asp

San Jose/ Santa Clara Water Pollution Control Plant Serving the cities of San José, Santa Clara, and Milpitas, Cupertino Sanitary District, West Valley Sanitation District (including the cities of Campbell, Los Gatos, Monte Sereno, and Saratoga), County Sanitation District No. 2-3, and Burbank Sanitary District.



In accordance with the Americans with Disabilities Act, City of San José Environmental Services Department materials can be made available upon request in alternative formats, such as Braille, large print, audiotape or computer disk. Requests may be made by calling (408) 945-3000 (voice) or (800) 735-2929 (California Relay Service).

Printed on recycled paper. 0112/Q2000/JY/IX/CW/GC

#### 油脂管理



## 可接受集油器之規格說明

清除系統的油脂

#### 所有集油器應:

- •符合美國國際管道暖通機械認證 協會 (IAPMO) 衛生使用條例。
- 按照製造商生產說明安裝,並符 合當地、州與聯邦政府現行要 求。
- •符合聖荷西市環境服務部 (ESD) 規定。
- ・最低容量為1000加侖(除非獲得 ESD 批准)。

- 進口、出口與隔板牆立管應有檢 修孔以方便檢修、檢查與清潔。
- · 檢修蓋直徑為24英寸。
- 集油器底部與立管底部之間間距 為12英寸。
- •包含回填前適用司法管轄的區預 測試觀察。
- •包含所有產生油脂的固定裝置之 連接。
- •包含一個樣品箱(見插圖背面)
   。首選類型⊠至少5加侖容量的
   圓形樣品盒,並且置於集油器下
   游。樣品盒應具有一個大約六(6)
   英寸的水躍或者處於樣品盒流出
   一側有個三通(與集油器流出一
   側的三通類似)。

#### 集油器



系統内油脂引起雨水道與下水道問題並且增加生產成本。

#### 樣品箱 24" 鑄鐵框與墊圈蓋(密閉型) 變數 變數 36½" 最小 18<sup>1</sup>/2" 32 191/2" 131/2 側視圖 剖面圖 壓實的鎖頻環或者未鬆動的土壤 24″Ø 俯視圖 拆除的檢修蓋與升管 變數 32″Ø

#### 集成器供應商列表:

- Jensen Precast www.jensenprecast.com (707) 429-5500
- Don Chapin Company www.donchapin.com (831) 449-4273
- US Concrete Precast Group www.us-concreteprecast.com (925) 960-8740
- Greenturtle Proceptor www.greenturtletech.com (877) 428-8187
- MC Nottingham www.mcnottingham.com (800) 834-9655

這並不暗示或不應被理解為聖荷西 市環境服務部擔保這些公司或其工 作品質。提供此列表目的在於方便 需要,並非是改區域全部的集油器 供應商的名單列表。聘用上述公司 的人員承擔驗證其資格、參考文獻 以及在處理與運輸垃圾時是否遵守 規定的責任。此表可在範圍更大的 聖荷西地區使用。

#### 更多資訊:

City of San José Environmental Services Watershed Protection Division 200 E. Santa Clara Street, Floor 7 San José, CA 95113 電話: (408) 945-3000 傳真: (408) 271 -1930 www.sjenvironment.org

#### 若任何疑問,請致電 (408) 945-3000 與環境督察員聯絡。 該資訊與其他宣傳資料可在網站 www.sjenvironment.org/restaurants 查詢。



為聖荷西、聖塔克拉拉、米爾皮塔斯、庫柏蒂諾衛生管理區域、西谷衛生管理區域 (包含坎貝爾市、洛斯加托斯,蒙德瑟雷洛與薩拉托加)、郡衛生管理區域2-3號與伯班 克衛生管理區域提供服務。



根據《美國殘疾人法案》,可視需求提供不同格式的聖荷西市環境環境服務部資料, 如點字、大字版本、錄音帶或電腦磁片。可透過撥打 (408) 945-3000 (語音)或 (800) 735-2929 (加州電話轉接服務)

♪提出要求。再生紙印製 0614/Q100/32.60/JY/IX/aa Acceptable Specifications for Grease Interceptors – Chinese

#### 기름 처리



## 시설들에 대한 허용 지침서

하수도에서 기름을 차단하세요

#### 모든기름 처리시설들은:

- 위생 사용 법령 따라 국제 배관 및 기계 전문가협회 (IAPMO) 에 승인 되어야 합니다.
- 제조자 지침을 준수하여 설치 되어 야 하며 현 지역, 주 또 연방 요구 사항을 준수해야 합니다.
- 산호세시 환경청 (ESD) 에의해 크기가 정해 집니다.
- ESD 에 의해 승인되지 않는 한 최 저한 1,000 갤런 이어야 합니다.

- 접근, 점검과 청소를 해야하기 위해 서 유입, 유출과 차단벽 수직관 위 에 맨홀이 포함 되어야 합니다.
- 원지름 24 inch 인접근 커버들이 포함되어야 합니다.
- 기름 처리시설 바닥에서 수직관 하 단까지 12 inch 공간이 있어야 합니 다.
- 다시 메우기 전에 해당 관할기관이 예비 테스트 관찰을 해야 합니다.

- 모든기름 발생 장비들에게 연결 되 어야 합니다.
- 샘플 박스 (뒷면 그림 참조)를 포함 해야 합니다. 보통 최소 5 갤런 용 량 원형 샘플 박스를 많이 사용하 며기름 처리 시설로 부터 바로 아래 끝 부분에 위치해야 합니다. 그 샘 플 박스는 유압 점프가 6 inch 정도 이던지 샘플 박스 (기름 처리시설 유입측 T와 비슷)의 유입측 T 에 도수가 있어야 합니다



기름은 빗물 배수관 및 하수관에 문제를 초래하며 귀하의 운영비를 증가 시킵니다.



#### 기름 처리시설 업체 목록

- Jensen Precast www.jensenprecast.com (707) 429-5500
- Don Chapin Company www.donchapin.com (831) 449-4273
- US Concrete Precast Group www.us-concreteprecast.com (925) 960-8740
- Greenturtle Proceptor www.greenturtletech.com (877) 428-8187
- MC Nottingham www.mcnottingham.com (800) 834-9655

산호세시 환경청은 이 업체들이나 이 회사 작업 품질을 추천하지 않는 것 을 아십시요. 이 목록은 배려차원에 서 제공되었고 단지 이 지역 내에기름 처리시설 업체들의 일부 목록일 뿐입 니다. 폐기물을 처리 운반하는 규정 을 준수하는 것과 이들의 자격요건과 실적들을 조회하는 것은 이 회사를 고 용하는 사람에게 책임이 있습니다. 이 서류는 산호세 지역 대부분에 사용을 의미합니다.

#### 추가 정보: 산호세 시 환경청

City of San José Environmental Services Watershed Protection Division 200 E. Santa Clara Street, Floor 7 San José, CA 95113 (408) 945-3000 Fax: (408) 271-1930 www.sjenvironment.org

질문이 있거나, 환경 조사관과 대화를 하시려면 (408) 945-3000 에 전화해 주십시요. 이와 그리고 그 외 자료들은 www.sjenvironment.org/restaurants 에서 이용 가능합니다.



San José 시들, Santa Clara, and Milpitas, Cupertino위생지역, West Valley 위생지역 (Campbell, Los Gatos, Monte Sereno, Saratoga 시를 포함), 카운티 위생지역 No. 2-3 와 Burbank 위생지역 제공.



미국 장애인 법에 따라 산호세 시 환경청 자료들은 요구시 대체 가능한 구성 방식들 즉 점자 식, 큰 활자 인쇄, 음성 녹음 테이프 또는 컴퓨터 디스크가 사용 가능합니다. 요구사항은 (408) 945-3000 (음성) 또는 (800) 735-2929 (켈리포니아 릴레이 서비스)로 전화 하실수 있습니다.

◇재활용 인쇄 용지에 프린트 했음. 0614/Q100/32.60/JY/IX/aa

Acceptable Specifications for Grease Interceptors – Korean

#### Manejo de la grasa



### Especificaciones aceptables para interceptores de grasa

Mantenga la grasa fuera del sistema

#### Todos los interceptores de grasa (GI, por sus siglas en inglés) deben:

- Estar aprobados por la Asociación Internacional de Oficiales Plomeros y Mecánicos (IAPMO, por sus siglas en inglés), conforme a la Ordenanza de uso sanitario.
- Estar instaladas según las especificaciones de su fabricante y cumplir con los requisitos vigentes a nivel local, estatal y federal.
- Estar inspeccionados por el Departamento de servicios ambientales (ESD, por sus siglas en inglés) de la City of San José.

- Tener como mínimo 1000 galones de capacidad, salvo que el ESD autorice otra cosa.
- Incluir registros sobre la entrada, la salida y la(s) pared(es) de desvío, y tubos verticales reguladores para acceso, inspección y limpieza.
- Incluir tapas de acceso redondas de 24 pulgadas de diámetro.
- Incluir un espacio de 12 pulgadas desde el piso de los interceptores de grasa hasta la base de los tubos verticales.
- Incluir una observación previa a la prueba de parte de la jurisdicción correspondiente antes del rellenado.

- Incluir conexiones a todos los artefactos que generan grasa.
- Incluir una caja de muestra (ver la ilustración al dorso). El tipo preferido es una caja de muestra circular, de 5 galones de capacidad, y se encuentra justo corriente abajo del GI. La caja de muestra tendrá un resalto hidráulico de unas 6 (seis) pulgadas, o una T sobre el lado de entrada de líquido de la caja de muestra (similar a la T del lado de entrada de líquido del GI).



La grasa en el sistema causa problemas en bocas de tormenta y alcantarillas sanitarias, y aumenta sus costos de operación.



#### Lista de proveedores de interceptores de grasa

- Jensen Precast www.jensenprecast.com (707) 429-5500
- Don Chapin Company www.donchapin.com (831) 449-4273
- US Concrete Precast Group www.us-concreteprecast.com (925) 960-8740
- Greenturtle Proceptor www.greenturtletech.com (877) 428-8187
- MC Nottingham www.mcnottingham.com (800) 834-9655

De ninguna manera quede implícito ni se entienda que el Departamento de servicios ambientales de la City of San José acredita a estas empresas o a la calidad de su trabajo. Esta lista se ofrece como cortesía y es sólo una lista parcial de los proveedores de GI en esta área. Es responsabilidad de la persona que contrata a cualquiera de estas empresas verificar sus calificaciones y referencias, así como también su cumplimiento con la normativa de manipulación y traslado de desperdicios. Esta hoja fue creada para su uso en el área ampliada de San José.

#### Para obtener más información:

City of San José Environmental Services Watershed Protection Division 200 E. Santa Clara Street, Floor 7 San José, CA 95113 (408) 945-3000 Fax: (408) 271-1930 www.sjenvironment.org

Si tiene alguna pregunta, llame al (408) 945-3000 para hablar con un Inspector ambiental. Este y otros materiales de extensión están disponibles en www.sjenvironment.org/restaurants.

San José-Santa Clara Regional Wastewater Facility

Atendiendo a las ciudades de San José, Santa Clara y Milpitas, el Distrito sanitario de Cupertino, el Distrito sanitario de West Valley (que incluye a las ciudades de Campbell, Los Gatos, Monte Sereno y Saratoga), los Distritos N.º 2 y 3 del condado y el Distrito sanitario de Burbank.



De acuerdo con la Ley de Estadounidenses con Discapacidades, los materiales del Departamento de Servicios Ambientales de la City of San José pueden ponerse a disposición, si se solicitan, en formatos alternativos como Braille, letra grande, cinta de audio y disco para computadora. Pueden solicitarse llamando al (408) 945-3000 (voz) o al (800) 735-2929 (CRS, servicio de repetición telefónica de California).

S Impreso en papel reciclado. 0614/Q100/32.60/JY/IX/aa Acceptable Specifications for Grease Interceptors – Spanish

#### Quản Lý Dầu Mỡ



### Các Chỉ Tiêu Kỹ Thuật Có Thể Chấp Nhận Được cho Thiết Bị Tách Dầu Mỡ

Giữ Cho Dầu Mỡ ở Ngoài Hệ Thống

#### Mọi Thiết Bị Tách Dầu Mỡ (Grease Interceptors – GIs) sẽ:

- Phải được Hiệp Hội Quốc Tế Các Viên Chức về Đường Ông Nước và Cơ Khí (International Association of Plumbing and Mechanical Officials – IAPMO) chấp thuận chiếu theo Pháp Lệnh Sử Dụng Hợp Vệ Sinh.
- Được lắp đặt theo các chỉ tiêu kỹ thuật của nhà chế tạo và tuân thủ theo các đòi hỏi hiện hành của địa phương, tiểu bang, và liên bang.
- Được ấn định kích cõ bởi Thành Phố San José, Ban Dịch Vụ Môi Sinh (Environmental Services Department – ESD).

- Tối thiểu là 1,000 ga lông trừ khi được ESD cho phép.
- Bao gồm các cửa cống đậy trên các lỗ vào, lỗ thoát, và (các) tường tiêu năng, các ống nước đứng nhằm các mục đích tiếp cận, kiểm tra, và dọn dẹp.
- Bao gồm các miếng đậy chỗ tiếp cận hình tròn có đường kính 24 inch.
- Bao gồm khoảng hở 12 inch từ đáy sàn của các Thiết Bị Tách Dầu Mõ tới đáy của các ống nước đứng.
- Thiết Bị Tách Dầu Mỡ

- Bao gồm sự quan sát trước khi làm thử theo quyền hạn hiện hành trước khi lấp hố.
- Bao gồm các nối kết với tất cả thiết bị tạo ra dầu mõ.
- Bao gồm một hộp mẫu (xem hình minh họa ở mặt bên kia). Loại được ưa chuộng là hộp mẫu hình tròn có dung lượng 5 ga lông và tọa lạc ngay dưới dòng từ GI. Hộp mẫu sẽ có một cầu trượt thủy động khoảng sáu (6) inch hoặc hình chữ T trên mặt chảy vào của hộp mẫu (giống như hình chữ T ở mặt chảy vào của GI).



Dầu mỡ trong hệ thống gây trở ngại cho các cống thoát nước mưa và các cống vệ sinh và làm tăng chi phí vận hành.



#### Danh sách các công ty bán Thiết Bị Tách Dầu Mỡ

- Jensen Precast www.jensenprecast.com (707) 429-5500
- Don Chapin Company www.donchapin.com (831) 449-4273
- US Concrete Precast Group www.us-concreteprecast.com (925) 960-8740
- Greenturtle Proceptor www.greenturtletech.com (877) 428-8187
- MC Nottingham www.mcnottingham.com (800) 834-9655

Không có ngụ ý hoặc hiểu rằng Ban Dịch Vụ Môi Sinh của Thành Phố San José phê chuẩn các công ty này hoặc chất lượng công việc của họ. Do lịch sự mà danh sách này được phổ biến và đó chỉ là một phần danh sách các công ty bán GI tại vùng này. Người thuê mướn bất cứ công ty nào nêu trên có trách nhiệm xác minh về khả năng chuyên môn của họ và các tham khảo cũng như sự tuân thủ của họ với các thể lệ về xử lý và vận chuyển chất thải. Bản này nhằm mục đích sử dụng tại vùng greater San José.

#### Để biết thêm chi tiết:

City of San José Environmental Services Watershed Protection Division 200 E. Santa Clara Street, Floor 7 San José, CA 95113 (408) 945-3000 Fax: (408) 271-1930 www.sjenvironment.org

Nếu quý vị có bất cứ câu hỏi nào, xin gọi số (408) 945-3000 để nói chuyện với một Kiểm Tra Viên về Môi Sinh. Tài liệu này và các tài liệu tiếp ngoại khác hiện có tại www.sjenvironment.org/restaurants.



Phục vụ cho các thành phố San José, Santa Clara, và Milpitas, Cupertino Sanitary District, West Valley Sanitation District (bao gồm các thành phố Campbell, Los Gatos, Monte Sereno, và Saratoga), County Sanitation District Số 2-3, và Burbank Sanitary District.



Chiếu theo Đạo Luật Người Mỹ bị Khuyết Tật, các tài liệu về Dịch Vụ Môi Sinh của Thành Phố San José có thể có sẵn khi có yêu cầu dưới các dạng thức khác, như chữ nổi Braille, chữ in khổ lớn, băng ghi âm hoặc đĩa vi tính. Có thể thực hiện yêu cầu bằng cách gọi số (408) 945-3000 (Tiếng Nói) hoặc (800) 735-2929 (Dịch Vụ Tiếp Vận California – CRS).

In trên giấy tái chế 0614/Q100/32.60/JY/IX/aa
Acceptable Specifications for Grease Interceptors – Vietnamese

#### HOW TO CLEAN YOUR GREASE TRAP

Keep grease out of the sanitary sewer by following these simple steps:

#### CÓMO LIMPIAR LAS TRAMPAS DE GRASA

¡Mantenga la grasa fuera del alcantarillado, y proteja nuestros arroyos y la Bahía siguiendo estos pasos sencillos:

#### CÁCH THỨC LÀM SẠCH BẫY DẦU Mỡ CỦA BẠN

Giữ dầu mỡ ra khỏi cống rãnh bằng cách làm theo các bước đơn giản này:

#### Scoop top grease Saque la grasa acumulada en la parte superior con una pala / Vớt váng dầu

Let grease trap cool down. Scoop out oil and grease. Place waste in a plastic bag.

Deje que se enfríe la trampa de grasa. Saque el aceite y grasa y pongala en una bolsa de plastico.

Hãy để cho cái bẫy nguội. Vớt ra phần dầu và mỡ nổi trên mặt. Bỏ vào túi nhựa.



#### Make waste solid Solidifique los desechos Làm đăc

Pour cat litter into bag(s) of waste and mix until dry. Double-bag the waste.

Vierta arena para gatos en las bolsas con la grasa y residuos, y mezcle hasta que la grasa se solidifique o hasta que la grasa se seque. Después ponga los residuos con la arena de gato en bolsa doble.

Bỏ cát mèo (cat litter) vào trong các túi nhựa chất thải rồi trộn cho đến khi khô. Để túi vào trong một túi nhựa khác.

Dispose

Deseche

Securely tie up bags of waste. Dispose in a trash can or dumpster. Close lid over trash.

contenedor de basura. Cierre la tapa sobre la basura. Cột chặt túi lại. Bỏ vào thùng rác. Đậy nắp thùng rác.

Ate las bolsas de residuos de manera segura. Deshágase de las bolsas en un basurero o





#### Remove water Saque el agua Đổ nước đi

Scoop out water. Leave solids and sludge behind. Pour water into a sanitary sewer (indoor) drain.

Saque el agua de la trampa. Deje detrás los sólidos y residuos. Tire el agua en un drenaje sanitario.

Múc nước ra. Chừa lại chất rắn và bùn. Đổ nước xuống hệ thống cống thoát nước vệ sinh (trong nhà).



#### Remove solids and sludge Remueva los sólidos y residuos Đổ đi chất rắn và bùn

Scrape waste from all sides and bottom of the grease trap. Place in a plastic bag.

Raspe los sólidos y residuos de las superficies de las paredes y del fondo de la grasa y pongala en una bolsa de plastico.

Cạo ra chất thải ở mặt trên, mặt dưới và xung quanh của cái bẫy dầu mỡ. Bỏ hết chất thải vào túi nhựa.

#### Clean all parts Limpie todas las partes Làm sạch các bộ phận

Check and clean all removable parts, baffles, and/or screens. Place waste in a plastic bag.

Inspeccione y limpie las partes y/o pantallas y pongala en una bolsa de plastico.

Kiểm tra và làm sạch các bộ phận rời, vách ngăn, và/hoặc màn lưới. Bỏ hết chất thải vào túi nhựa.



#### Reassemble and record Vuelva a ensamblar, rellene y registre Lắp ráp lại và ghi chép

Reassemble trap. Tighten lid. Record cleaning on maintenance log sheet.

Vuelva a ensamblar la trampa, apriete la tapa y anote en la hoja de registro de mantenimiento.

Ráp lại cái bẫy. Đậy nắp cho chặt. Ghi vào hồ sơ bảo trì mọi chi tiết làm sạch bẩy dầu mỡ.





COMPLIANCE WARNING: You are required by your sewer use ordinance to keep the grease trap in efficient operating condition. Failure to do so can result in fines or other penalties.

Advertencia: Usted esta obligado por la ordenanza del uso del alcantarillado sanitario a mantener la trampa de grasa operando en condiciones eficientes. Falta de mantener la trampa de grasa en condición eficiente puede resultar en multas o otros penales.

KHUYẾN CÁO: Về việc phải tuân giữ hợp lê. Luật lệ về việc bảo trì cái bẫy dấu mỡ đòi hỏi bạn luôn luôn giữ gìn cái bẫy dấu mỡ trong điều kiện tốt và điều hành hiệu quả. Mọi khiếm khuyết trong việc tuân hành luật lệ này có thể đem lại việc bị phạt tiền và các hình phạt khác.



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#### **CÓMO LIMPIAR** LAS TRAMPAS **DE GRASA**

¡Mantenga la grasa fuera del alcantarillado, y proteja nuestros arroyos y la Bahía siguiendo estos pasos sencillos:

#### 如何清理 你的隔油池

不讓油進入下水道, 可由以下的簡單驟做到:

## 름트랩

다음과 같은 절차로 하수도를 폐식용유와 고기기름으로부터 보호 합시다:

#### Saque la grasa acumulada en la parte superior con una pala / 舀出最上層的油 윗면에 있는 폐식용유와 고기기름을 떠낼것

Deje que se enfríe la trampa de grasa. Saque el aceite y grasa y pongala en una bolsa de plastico.

讓隔油池冷卻,舀出液態與固態的油, 裝進一個塑膠袋裡。

기름트랩을 식히고, 폐식용유와 고기기름을 떠낸 후 그것을 플라스틱 봉지에 담으십시오.

Saque el agua 除去水 물을 제거할것

Sague el agua de la trampa. Deje detrás los sólidos y residuos. Tire el agua en un drenaje sanitario. 舀出水,留下固體沉澱和污泥。把水倒

고체와 침전물을 남기고 물을 하수도(건물안 의)에 부으십시오.

**Remueva los sólidos y residuos** 除去固體沉澱和污泥

進室內的下水道入口。

고체와

una bolsa de plastico.

塑膠袋



#### Solidifique los desechos 把廢物固體化 쓰레기를 응고 시킬것

Vierta arena para gatos en las bolsas con la grasa y residuos, y mezcle hasta que la grasa se solidifique o hasta que la grasa se seque. Después ponga los residuos con la arena de gato en bolsa doble.

把貓砂倒進裝廢物的袋子,攪拌 到乾為止。加一層塑膠袋,用雙 層裝廢物。

고양이 배설물 제거제를 쓰레기가 담긴 봉지에 넣어\_마를때까지 잘 섞은 후 그 봉지를 한 겹 더 씌 우십시오.





## Deseche

Ate las bolsas de residuos de manera segura. Deshá-gase de las bolsas en un basurero o contenedor de basura. Cierre la tapa sobre la basura.

紮緊廢物袋子,丢進垃圾桶或垃圾堆,蓋緊垃圾 上面的蓋子。

쓰레기 봉지를 단단히 묶은 후 쓰레기통이나 대형 쓰레기통에 넣고 뚜껑을 덮으십시오.



#### Vuelva a ensamblar, rellene y registre 重組與記錄 <u>재조립과 기록할것</u>

Vuelva a ensamblar la trampa, apriete la tapa y anote en la hoja de registro de mantenimiento.

重新組裝隔油池<sup>,</sup>蓋緊蓋子。在保養維修的記錄 表上登記清潔。

기름트랩을 재조립한 후 뚜껑을 꼭 조이고 유 지 기록본에 기록하십시오.



檢查並清潔可取下的零件,擋板,濾 網。把廢物放進塑膠袋。

pongala en una bolsa de plastico.

Inspeccione y limpie las partes y/o pantallas y

이동식 부품과 방지재와 망을 점검 하고 청소하시고 쓰레기를 플라스틱 봉지에 담으십시오.



Advertencia: Usted esta obligado por la ordenanza del uso del alcantarillado sanitario a mantener la trampa de grasa operando en condiciones eficientes. Falta de mantener la trampa de grasa en condición eficiente puede resultar en multas o otros penales.

遵守規定的警告:你必須依照你的下水道使用規則保持隔油池在有效率 運作的狀態。不做到可能導致罰款或其他處罰。

경고: 하수도 사용 규정에 의해 당신은 기름트랩이 잘 작동될 수 있는 상태를 유지해야할 의무가 있습니다. 불이행시 벌금이나 다른 처벌을 받을 수도 있습니다.



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침전물을 제거할것 Raspe los sólidos y residuos de las superficies de las paredes y del fondo de la grasa y pongala en

기름트랩의 각 옆면과 바닥에서 쓰레기를 긁어서 플라스틱 봉지에 담으십시오.

清潔所有的零件



#### ATTACHMENT 2 – WASTEWATER FACILITY INFLUENT AND EFFLUENT CHARTS

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