

Water Pollution Prevention Program:

This program is designed to meet requirements of the City's Municipal Regional Stormwater Permit (MRP) and National Pollutant Discharge Elimination System (NPDES) Permits, Orders, and Amendments. Pollutants of Concern (POC's) shown below, are the primary targets of reportable outreach and enforcement efforts, which include indentifying sources, taking action to reduce sources, and measuring the success of activities.

POLLUTANTS OF CONCERN

POLLUTANTS	WATER QUALITY CONCERN
Copper	Copper is a micronutrient for both plants and animals at low concentrations; however, it tends to become toxic to aquatic life at elevated concentrations. Copper is an especially troubling water pollutant because it is persistent, bioaccumulative and does not readily break down in the environment.
Cyanide	Cyanide has a toxic effect on aquatic life. The mechanism of cyanide toxicity occurs at the cellular level. The cyanide ion is toxic to aerobic organisms because it shuts down respiration in cells, acting as an asphyxiant.
Dioxin	Dioxin is a bioaccumulative pollutant that is included in the California Toxics Rule. Studies have shown that dioxin is a hormone disruptor in humans and aquatic life.
Fats, Oils, and Grease	While the discharge of FOG to waterways is detrimental to water quality due its impact on oxygen demand, wastewater treatment plants are typically effective at removing FOG. FOG is primarily considered a collection system pollutant due its tendency to contribute to sanitary sewer overflows. FOG builds up on the walls of sewer pipelines and decreases pipe capacity, requiring pipes to be cleaned more often and/or some piping to be replaced sooner than otherwise expected.
Mercury	Mercury is a high-priority impairing pollutant because it is bioaccumulative and does not degrade in the environment. Because of the mercury pollution resulting from gold mining activities in northern California, beginning in the late 1840s, San Francisco Bay has been classified as an impaired water body. Since mercury accumulates in the fish found in the Bay, the State has issued fish consumption advisories to limit human intake of mercury.
Polychlorinated Biphenyls (PCBs)	PCBs have been demonstrated to cause a variety of adverse health effects, including causing cancer in animals. PCBs have also been shown to cause a number of serious non-cancer health effects in animals, including those to the immune, reproductive, nervous, and endocrine systems. Studies in humans provide supportive evidence for potential carcinogenic and non-carcinogenic effects of PCBs.
Pesticides	The use of pyrethroids has increased during the past decade with the declining use of organophosphate pesticides, which are more acutely toxic to birds and mammals. This change to less acutely toxic pesticides, while generally beneficial, has introduced certain new water quality issues, because of the toxic nature of all biocidal compounds.

Pharmaceuticals	Studies have shown that pharmaceuticals are present in our nation's water bodies. To date, scientists have found no evidence of adverse human health effects from pharmaceuticals and personal care products (PCPs) in the environment; however, more and more studies are demonstrating that these chemicals are disrupting the endocrine systems of many species of aquatic life.
-----------------	---

Activities that contribute to an effective Water Pollution Program:

- City staff provides regular outreach and educational materials to the public about how to keep toxics out of the sewer and storm drains, tips for “going green” and other information to help consumers make less-toxic choices.
- City Source Control staff integrates P2 into their inspection and enforcement of permitted local businesses and industries.
- City staff provides a solution for the disposal of household and commercial hazardous waste to discourage improper disposal into sewers and storm drains.
- City staff provides project management, technical support and representation at local and regional committees for collaboration on common pollution prevention campaigns, projects, and issues.
- City laboratory staff provides sampling and analysis of all of our POC's (and more) to ultimately help determine which pollutants are problematic and which P2 efforts are effective.

Maximizing investment efforts of other entities, i.e. tasks are co-sponsored by:

- San Mateo County Environmental Health Department
- Millbrae Chamber of Commerce and School District
- City Environmental Programs and other Departments
- California Coastal Commission
- Bay Area Pollution Prevention Group (BAPPG)
- San Mateo Countywide Water Pollution Prevention Program (SMCWPPP)
- Bay Area Air Quality Management District (BAAQMD)
- Department of Toxic Substances Control (DTSC)
- San Mateo County Board of Supervisors
- California Water Environment Association (CWEA)
- Bay Area Clean Water Agency (BACWA)
- California Association of Sanitation Agencies (CASA)
- National Association of Clean Water Agencies (NACWA)

Active participation in the development and maintenance of the following websites, which provide a variety of environmentally friendly resources for our community, are an important aspect of the City's Water Pollution Prevention Program and we encourage you to check them out:

www.baywise.org www.flowstobay.com www.ourwaterourworld.org