ENVIRONMENTAL MONITORING

THE WASTEWATER RECLAMATION PLANTS

LA Sanitation (LASAN) oversees the City's Clean Water Program, which is responsible for operating and maintaining one of the world's largest wastewater collection, treatment, and reclamation systems, treating wastewater from residential, commercial, and industrial sources in the City of Los Angeles and 29 surrounding communities. Extensive testing at wastewater treatment and water reclamation plants ensure their optimal performance and abidance with all federal, state, and local regulations.

LASAN conducts tests in the fields of chemistry, microbiology, and marine, estuarine, and freshwater biology. Our laboratories perform critical analyses for the City's industrial waste pretreatment program.

All of our laboratories are Environmental Laboratory Accreditation Program (ELAP) - certified by the State of California's Department of Public Health. Monitoring the environment for specific pollutants and pathogens is a mandate that the City complies with to help protect public health and the health of local marine and freshwater bodies. More about the California Department of Public Health

Daily monitoring of treatment plant processes is provided at each treatment facility to ensure compliance with waste discharge and water recycling permits. Laboratory services provided include testing biological oxygen demand, fecal indicator bacteria, solids, oil and grease, heavy metals, organic priority pollutants, as well as toxicity testing, among others. The treatment plants are regulated by the United States Environmental Protection Agency (US EPA) and the Los Angeles Regional Water Quality Control Board (LARWQCB).

LA Sanitation monitors the impacts of treated wastewater on the water quality and general health of the Santa Monica Bay, Los Angeles Harbor, and Los Angeles River. LASAN also tests recycled water to ensure the City of LA is meeting Title 22 Recycled Water regulations. This recycled water is used to irrigate parks, golf courses, and greenways and to act as a barrier to preventing salt water intrusion into groundwater in the harbor area of Los Angeles. Test results are submitted to LARWQCB and US EPA. These data are available to the public through web portals, such as the California Integrated Water Quality System (CIWQS) and the California Environmental Data Exchange Network (CEDEN).

More about water quality at Los Angeles Regional Water Quality Control Board

More about the Environmental Protection Agency

More about the California Integrated Water Quality System Project

More about the California Environmental Data Exchange

More about LA's Treatment Plants

THE RIVERS AND LAKES

Recycled water flows from the water reclamation plants in Van Nuys to the Japanese Garden pond, the Balboa Wildlife Lake, and the Los Angeles River. Recycled water from the Glendale plant flows into the Los Angeles River. These bodies of water are monitored for chemical pollutants, *E. coli*, fecal coliforms, and toxicity.

LA Sanitation runs a variety of tests on water samples and sediments from the lake bottom and river bed including dissolved oxygen, residual chlorine, turbidity, biological and chemical oxygen demand, dissolved solids, inorganic salt composition, ammonia, nitrate, nitrite, phosphate, surfactants, oil and grease, hardness, total organic carbon, perchlorate, dioxin, cadmium, copper, lead, mercury, selenium, zinc, cyanide, pesticides, PCBs, herbicides, volatile organic compounds, chronic toxicity and acute toxicity, and other priority pollutants. More about the Japanese Garden.

Recycled water from the Advanced Water Purification Facility (AWPF) located at the Terminal Island Water Reclamation Plant is injected into the Dominguez Gap Seawater Intrusion Barrier. Recycled water from the AWPF undergoes extensive analysis. More about Advanced Water Purification

More about recycled water testing requirements and the quality at Los Angeles Regional Water Quality Control Board.

THE COASTAL WATERS

Water quality surveys test for constituents such as temperature, dissolved oxygen, salinity, pH, chlorophyll-a, fecal indicator bacteria, ammonia, and priority pollutants to determine if there are any impacts to water quality objectives and bathing water standards. Benthic surveys collect sediment samples for chemical and biological analyses. Trawl surveys sample fish and invertebrates using trawl nets and seines to monitor ecosystem health and also collect fish for bioaccumulation and seafood safety.

The Microbiology Unit monitors the Santa Monica Bay, the Marina del Rey Harbor, the Ballona Creek, the Los Angeles Harbor, and Cabrillo Beach shorelines for fecal indicator bacteria levels. Shoreline results are sent daily to the Los Angeles County of Public Health. If levels go above USEPA and State water contact standards, monitoring is accelerated until a return to compliance

water contact standards, monitoring is accelerated until a return to compliance is observed. The Los Angeles County of Public Health notifies the County lifeguards who then post the beaches with warning signs if levels exceed state water quality standards.

TESTING AT THE WATER RECLAMATION PLANTS

LA Sanitation operates four water reclamation facilities:

1. Hyperion
2. Donald C. Tillman
3. Los Angeles-Glendale
4. Terminal Island

LA Sanitation technician using Imhoff cones to determine settleable solids in wastewater samples at the Hyperion Process Control laboratory.

Biochemical oxygen demand testing performed by the Hyperion Process Control laboratory.

More about plants

THE SEWERS

LA Sanitation regulates, monitors, and controls the industrial wastewater discharges of more than 16,000 industrial users into the city's sewer system. Discharge permits are issued to businesses that dispose of their nonhazardous waste into the sewer. Commonly tested industrial waste components include heavy metals, volatile organics, semivolatile organics (such as pesticides and PCBs), cyanide dissolved sulfide, chloride, oil, and grease. Each permit is specifically written to match the waste produced by the industrial user. Hazardous materials such as gasoline are never permitted to be discharged into sewer. The Sewers Monitoring Program allows the City to prosecute illegal dischargers which in turn helps to prevent illicit discharges from occurring.

Preventing objectionable sewer odors is important to LA Sanitation. We regularly test for volatile organics, sulfur compounds, and total organic carbon at air scrubbers located at or adjacent to sewer stations. The routine air testing sites are NCOS, ECIS, NORS, NOTF, Mission/Richmond, Woodbridge/Radford, MLK/Rodeo, Humbolt, Ballona Pumping Plant, Dacotah Pumping Plant, Mission/Jesse, Fairfax/Venice, and Sierra Bonita. In the rare event of a sewage overflow, LA Sanitation performs monitoring and testing to ensure the public and environmental health are protected. More about air quality at South Coast Air Quality Management District

TESTING THE SEWERS AND RECEIVING WATERS

Collecting Ocean Samples

LA Sanitation laboratory technician collecting Santa Monica Bay samples for fecal indicator bacteria testing.

Lake Monitoring

LA Sanitation chemists and biologists analyze water and sediments samples collected from Balboa Wildlife Lake near the Donald C. Tillman Water Reclamation Plant.

Ocean Monitoring Boat

LA Sanitation operates two environmental monitoring boats: The Marine Surveyor (above) and the La Mer. These boats are used to collect fish, sediment, and water samples from the Santa Monica Bay and Los Angeles Harbor coastal zones.

Related Links

Los Angeles Regional Water Quality Control Board

Environmental Protection Agency

California Integrated Water Quality System Project

California Environmental Data Exchange

LA's Treatment Plants

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Downloads

2018-2019 Los Angeles Harbor Biennial Assessment Report — Download

2017-2018 Santa Monica Bay Biennial Assessment Report — Download

2015 HTP 1-Mile Outfall Diversion Final Report — Download

2016-2017 Los Angeles Harbor Biennial Assessment Report — Download

Fact Sheet 2015 POST-Diversion — Download

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FAQs

Q: Is it safe to swim in the water?

A: Visit Heal the Bay for current conditions.

Q: Will I get sick if I swim at the beach near the Hyperion plant?

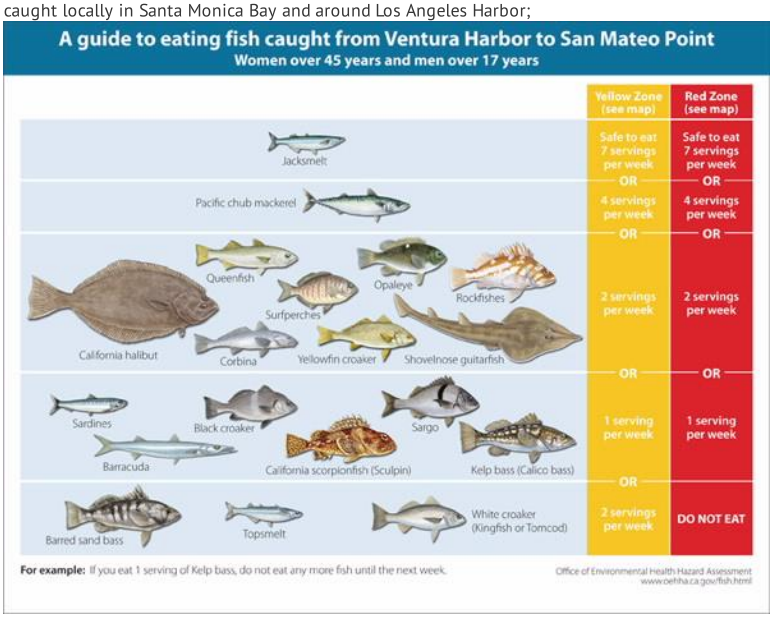
A:
Past and current data have shown that discharge from the treatment plant has little to no impact on the Santa Monica Bay shoreline; rather, the largest sources of bacterial pollution are flows from storm drains and urban runoff. The Department of Health Services advises not to swim within 100 feet of a flowing storm drain.
While the location of the Hyperion wastewater plume shifts depending on currents and water temperatures, it has never reached area beaches (based on over 40 years of monitoring). Additionally, bacteriological surveys of water samples collected at the area of Hyperion's 5-mile outfall indicate very low levels of indicator bacteria. Due to numerous factors that have been published, it is unlikely that anyone would get sick by swimming at the beach near Hyperion from treated effluent discharged five miles out and 180 feet deep.

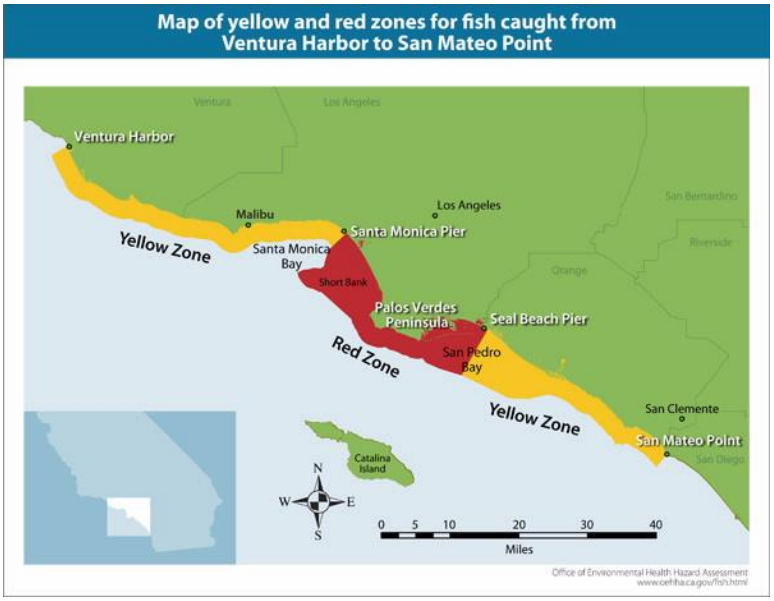
Q: Is the treated sewage (effluent) discharged from the Hyperion Treatment Plant causing the bacterial contamination of our beaches in Santa Monica Bay?

A:
Years of monitoring indicate the wastewater "plume" does not reach the shore. Bacterial contamination of the beaches is almost always caused by storm drain discharges, which occur during dry weather as well as during and after a storm. Dry-weather flows originate as runoff from rooftops, residential yards, parking lots, freeways, industrial and commercial facilities, construction sites, golf courses, parks, and many other surfaces.

Q: Is it safe to eat the fish caught in Santa Monica Bay?

A:
Most species of locally caught fish contain low levels of pollutants of concern and are safe to eat. However, a few species exceed the safe levels set by the State of California. The State of California Office of Environmental Health Hazard Assessment (OEHHA) makes the following recommendations for fish caught locally in Santa Monica Bay and around Los Angeles Harbor;





These recommendations by the State should be followed. EMD's tissue assessment data continues to support the findings of OEHHA.

Q: Are environmental conditions getting better in Santa Monica Bay?

A:
The overall health of the Santa Monica Bay is good and it is improving. Species have been observed in increasingly greater numbers over the past few years with improved Bay water quality. The improved conditions are due, in large part, to the exceptional wastewater processing standards of full secondary treatment at the Hyperion Treatment Plant. The cessation of sludge disposal to the Bay in 1987 and the discharge of full secondary effluent at Hyperion Treatment Plant in 1998 resulted in a dramatic reduction in the discharge of solids to the Bay. This coincided with an immediate increase in the number and diversity of species near the 5-mile discharge outfall. Today, the area around the outfall has the greatest species diversity of any equivalent site in the Bay.

Q: Are there toxic chemicals in the Hyperion's plant discharge? If they are present, are the levels of pollutants a concern to human health or to the health of the animals living in the Bay?

A:
Sewage treated through the plant's processes is tested to ensure that systems are operating properly to effectively remove pollutants. The sewage is analyzed for a variety of chemicals, many of which can be toxic or carcinogenic at certain levels. During 2014 through 2015, the presence of toxic or carcinogenic chemicals was rarely detected. With few exceptions in thousands of tests, these chemicals were either not present at all or were at such low levels that they could not be detected by the most sensitive instrumentation. In cases where they were detected, most were within the concentrations below the limits specified in Hyperion's NPDES permit and the objectives of the California Ocean Plan. Therefore, when detected, the pollutants were at levels that are considered protective of human health and the animals inhabiting the Bay.

Q: What can I do to make a difference? Does one person's efforts matter?

A:
Of course it matters and individuals should try to make a difference. Just remember, for every person, there are many more thinking just like you. Be aware of the trash reduction and recycling measures recommended by your city of residence. Practice them. Picking up after your pets and proper disposal of wastes are a great start. Help your neighbors become informed and participate in beach clean-ups and other volunteer events. Do your best to conserve water. These are significant ways to help the Bay and to help you have control over your environment. The City can offer people solutions to produce less waste. and use environmentally friendly alternatives to accomplish things in your daily life. This always results in a favorable outcome. Information on "green LA," solutions for LA residents, can be found here.

Q: Is my drinking water being tested? Is it safe?

A:
The Los Angeles Department of Water and Power tests all drinking water ensuring that it meets and/or surpasses the highest Federal and State drinking water standards set by the U.S. Environmental Protection Agency (US EPA) and the State of California, State Water Resources Control Board--Division of Drinking Water (SWRCB-DDW). More about L.A. DWP Drinking Water Quality Report