

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**ORDER NO. R4-2002-0153
WASTE DISCHARGE REQUIREMENTS
THE STATE OF CALIFORNIA, DEPARTMENT OF PARKS AND RECREATION
MALIBU PIER STATE PARK
(File No. 02-037)**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

PURPOSE OF ORDER

1. The State of California, Department of Parks and Recreation owns and operates the Malibu Pier State Park including Malibu Pier. The Malibu Pier State Park is located at 23000 Pacific Coast Highway in Malibu, California, 90265 (Figure 1).
2. On January 17, 2002, the State of California, Department of Parks and Recreation filed a Report of Waste Discharge (RoWD) for the discharge of restaurant and domestic wastewater from Malibu Pier to a 7500 gallons per day (gpd) replacement wastewater treatment system and the existing leachfields.

FACILITY AND TREATMENT PROCESS DESCRIPTION

3. The Malibu Pier State Park consists of the 753-foot wooden pier, approximately 600 feet of beach, and a .70 acre parking lot between the Pier and Pacific Coast Highway. Total area of the State Park is 1.1 acres. Malibu Pier (Pier) is a designated Historical Landmark. This wood frame pier was originally constructed in 1906, remodeled in 1934, and again in 1945. The Pier is located on a portion of Carbon Beach that is referred to as Surfrider Beach, which is just east of Malibu Point and Lagoon. Located to the west are private residences, and to the east is the Casa Malibu Inn. Directly to the north, on the opposite side of Pacific Coast Highway, is a Jack in the Box restaurant and several other businesses.
4. The Pier is located in an unsewered area of the City of Malibu (City). No public sewers have been scheduled for construction in the vicinity of the site. The City currently does not provide wastewater collection and treatment utilities; rather, the City primarily relies upon onsite subsurface disposal systems for disposal of domestic, commercial, and industrial wastewater.
5. The Pier was privately owned until the 1980s when the California State Department of Parks and Recreation (hereinafter, the Discharger) took over the Pier's operation. Due to several decades of use, and the El Nino storms of the mid-1990s, the Pier's supporting wooden frame and buildings deteriorated to the point that it was decided the Pier could no longer be safely operated. The Pier was shut down for safety reasons in 1995. In 1998, it was decided that the Pier could be renovated, and renovation was planned in three phases.
6. On October 27, 1999, the first stage of renovation, the reconstruction and reinforcement of the Pier's wooden structure, was initiated. Much of the Pier's massive wooden frame had to

be replaced. The second stage of renovation was replacement of the Pier's infrastructure, all of the plumbing and electrical services were replaced. In June 2001, during the second stage of the project, the Pier's sewage treatment facilities were replaced. The capacity of the new sewage treatment system is 7500 gpd. There will be no discharge until the third phase of renovation is complete, and the Pier is opened to the public. The original leachfields, located under the parking lot for the Pier, were surveyed on May 5, 2001 and found to be functional, and thus, were retained. The former sewage treatment facilities consisted of a standard septic disposal system with a capacity of 4500 gpd.

7. The wastewater treatment plant at the Pier is a model GEM-7.5-2. 3C manufactured by Global Environmental Machinery Corporation, Inc. The GEM-7.5-2. 3C model is an activated sludge extended aeration type system designed for treating an average daily flow and handling average daily flow fluctuating over the range of 20% to 100% of 7500 gallons. The wastewater treatment system consists of pre-cast concrete tanks that include a 500 gallon grease interceptor, aeration and clarifying chambers, sludge and scum recirculation systems, two regenerative blower motor units, a disinfection chamber with a Norweco Bio-Dynamic tablet feeder, dechlorination and effluent pump chambers.
8. Renovation of the Pier is now at the third phase, the remodeling and reconstruction of the buildings located on the Pier. Formerly there were restaurants, bait shops and snack bars located on the Pier. The goal of the third phase is to preserve and restore the Pier structure to the 1945 configuration. There will be no discharge at the site until renovation is complete and the Pier is open to the public. Currently, there are several porta-potties onsite for the Pier workers, beach users, surfers, and fishermen that use the Pier and adjacent beach.
9. The Pier extends into the Pacific Ocean, but the sewage treatment system and the leachfields are located under the parking lot adjacent to the Pier (Figure 2). The parking lot is located on a bluff constructed with dirt fill and buttressed with rip-rap. The surface elevation of the parking lot is approximately 15 to 17 feet above sea level.
10. Depending upon the tide, the wastewater treatment plant and the three leachfields under the parking lot are located from 20 feet to 50 feet from the Pacific Ocean. In coastal areas, immediately adjacent to the ocean, mean high tide is used as the depth to groundwater. A mean high tide of + 1.9 feet was extrapolated from charts of mean high tide elevation from the last two years measured by the National Oceanic and Atmospheric Administration (NOAA) at Station # 9410840 in Santa Monica. Using +1.9 feet for mean high tide, the bottom of leachfield no. 1 has 12.19 feet of separation, leachfield no. 2 has 10.22 feet of separation, and leachfield no. 3 has 9.65 feet of separation from groundwater (mean high tide).
11. The parking lot at the Pier has 96 parking spaces. Approximately, 56,000 people a year are expected to visit when the Pier reopens. There has been some talk of operating a shuttle between the Adamson House parking lot. The Adamson House is another historical landmark in Malibu that was acquired by the State of California Department of Parks and Recreation as a State Park. The Adamson House Historical State Park is adjacent to the Malibu Lagoon and located 1/2 mile west of the Pier. The State of California also acquired the Malibu Bluffs area for the Department of Parks and Recreation. This property is located along the coast about 2 miles west of the Pier. The Malibu Pier, Malibu Lagoon and Adamson House and the Malibu

Bluffs Park are not contiguous. These separate parcels each have individual identities as Parks, but they are in one maintenance unit referred to as Malibu Lagoon State Park.

12. The Malibu Pier State Park is located on the southern slopes of the Santa Monica Mountains at Surfrider Beach between Malibu Lagoon and Carbon Beach. The Pier's approximate Latitude is $34^{\circ} 2' 0''$ and its Longitude is $118^{\circ} 40' 30''$.
13. There are no water supply wells in the area. Potable water consumers receive imported water from the Los Angeles County Waterworks District No. 29. The Los Angeles County Waterworks District No. 29 has received water from the Metropolitan Water District of Southern California via the West Basin Municipal Water District, since 1961.

APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS

14. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) which was amended on January 27, 1997 by Regional Board Resolution No. 97-02. The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy (*Statement of Policy with Respect to Maintaining High Quality Waters in California*, State Water Resources Control Board (State Board) Resolution No. 68-16, October 28, 1968), and (iii) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates by reference applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Regional Board prepared the 1994 update of the Basin Plan to be consistent with previously adopted State and Regional Board plans and policies. This Order implements the plans, policies and provisions of the Regional Board's Basin Plan.
15. On November 16, 2000, the State Board adopted a revised *Water Quality Control Plan for the Ocean Waters of California* (Ocean Plan). The State of California Office of Administrative Law and the USEPA approved the revised plan on July 9, 2001 and December 3, 2001, respectively. The revised plan contains water quality objectives for coastal waters of California. This Order includes receiving water limitations, prohibitions, and provisions that implement the objectives of the Ocean Plan.
16. The Discharger submitted on June 14, 2002, the information available to its staff on the hydrogeologic conditions at the Pier. Given the elevated terrain to the North, and the proximity to the Pacific Ocean to the South, it can be assumed that groundwater flow is toward the Ocean. It is probable that there is a hydrologic connection between the low bluff and the Ocean below.
17. Malibu Pier is located within the Malibu Hydrologic Unit, and the Carbon Beach Hydrologic Sub-Area; but groundwater is present in limited amounts outside of the alluvium along the bottom of canyons and valleys, and in the fractured volcanic rocks. Basin Plan limitations for groundwater, all of which is assumed to have some potential for domestic or municipal use, do not apply to beach areas lacking significant aquifers. The potential beneficial use (municipal and domestic water supply) of any groundwater that maybe found at the Pier site is limited

because the land adjacent to the Pier is fill, a constructed artificial bluff adjacent to the beach. While the treated effluent will be discharged to land through the existing leachfields, the depth to groundwater is controlled by the tide, and at this location, the receiving water is assumed to be the Pacific Ocean.

18. Although Malibu Creek and Malibu Lagoon are located approximately ½ mile away, the Serra Retreat highlands form a drainage divide between the two areas. The Pier is located on Carbon Beach but the area of Carbon Beach in the immediate vicinity of the Pier is identified locally as Surfrider Beach. Surfrider Beach is not in the Malibu Creek Watershed, but discharges from the Malibu Lagoon that are carried east by the long-shore current are thought to be primarily responsible for the pollution at Surfrider Beach. The Basin Plan has the following beneficial use designations:

Coastal Features (Carbon Beach)

Existing: Navigation, water contact recreation, non-contact water recreation, Commercial and sport fishing, Marine habitat, wildlife habitat and shellfish harvesting.

Potential: Spawning, reproduction, and/or early development.

19. The Water Quality Assessment adopted by the Regional Board on May 18, 1998 identified beaches along the Santa Monica Bay (including the Malibu area) as impaired by pathogens and nutrients. The Discharger is not able to quantify potential impacts, if any, resulting from the discharge to groundwater and nearby surface waters, since there is no discharge at this time and neither groundwater or surface water monitoring was required when the Pier concessions were open and operating.
20. Although, the ultimate receiving water is the ocean, ocean monitoring is not proposed. It is known that Surfrider Beach is impacted by polluted outflow from the Malibu Lagoon and discharges from the adjacent private residences which have standard septic disposal systems, and are located on the beach between the mouth of Malibu Lagoon and the Pier. An effluent monitoring program is necessary to evaluate the effectiveness of the treatment system and any impacts from the discharge of treated wastewater to groundwater which in this location is connected to the Pacific Ocean. The discharged effluent must meet Ocean Plan standards.
21. In accordance with the Governor's Executive Order requiring any proposed activity to be reviewed to determine whether such activity will cause additional energy usage, Regional Board staff believe that implementation of these Wastes Discharge Requirements could cause some increase in energy usage.

CEQA and NOTIFICATION

22. The Discharger adopted a mitigated negative declaration on December 17, 1998 and filed a notice of determination on December 18, 1998.
23. The Regional Board has notified the Discharger and interested agencies and persons of the intent to issue Waste Discharge Requirements for this discharge, and has provided them with an opportunity to submit their views and recommendations for the requirements.
24. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.
25. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California, 95812, within 30 days of adoption of the Order.

IT IS HEREBY ORDERED that the State of California, Department of Parks and Recreation shall comply with the following:

A. INFLUENT LIMITATIONS

1. Waste discharged shall be limited to domestic wastewater only.
2. The maximum daily discharge to the septic disposal systems shall not exceed a flow of 7500 gpd. This flow limitation also applies to effluent discharged to the leachfield disposal system.
3. No volatile organic compounds are to be discharged into the disposal system.

B. EFFLUENT LIMITATIONS

1. The pH of wastes discharged shall at all times be between 6.5 to 8.5 pH units.
2. The treated wastewater discharged to the leachfield shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Units*</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD ₅	mg/L	30	45
Total Suspended Solids	mg/L	30	45
Oil and grease	mg/L	25	--
Fecal coliform	MPN/100mL	--	200 (a)
Enterococcus	MPN/100mL	24	104 (a)
Ammonia-N	µg/L	--	2400
Total chlorine residual	µg/L	--	8.0

* MPN/100mL: Most Probable Number per 100 milliliter, mg/L: milligrams per liter, µg/L: micrograms per liter

(a) The limit for both fecal coliform and enterococcus are based on the geometric mean of a minimum of 5 samples in for a 30 day period.

3. The wastewater discharged to the leachfield disposal system shall not contain salts, heavy metals, or organic pollutants at levels that would impact groundwater in hydraulic connection with surface waters designated for marine aquatic life or body contact recreation.
4. Any wastes that do not meet the foregoing requirements shall be held in impervious containers, and discharged at a legal point of disposal.

C. PROHIBITIONS

1. There shall be no sanitary sewer overflows or discharge of partially treated wastes to waters of the State (including storm drains) or the ocean at any time.
2. No part of the disposal system shall be closer than 150 feet to any water well.
3. No part of the treatment system and the leachfields shall extend to a depth where wastes may deleteriously affect an aquifer that is usable for domestic purposes. At all times, a minimum of 5 feet of vertical separation between the disposal system and the water table must be maintained.
4. Wastes shall not be disposed of in geologically unstable areas or so as to cause earth movement.
5. Wastes discharged shall not impart tastes, odors, color, foaming or other objectionable characteristics to the receiving water.
6. Adequate facilities shall be provided to divert surface and storm water away from the treatment plant and disposal system and from areas where any potential pollutants are stored.

7. The septic tanks, treatment system, sewer collection system and the disposal system, shall be protected from damage by storm flows or runoff generated by a 100-year storm.
8. There shall be no onsite disposal of sludge. Any offsite disposal of sewage or sludge shall be made only to a legal point of disposal. For purposes of this Order, a legal disposal site is one for which requirements have been established by a California Regional Water Quality Control Board, and which is in full compliance therewith. Any sewage or sludge handling shall be in such a manner as to prevent its reaching surface waters or watercourses.
9. The treatment system, including the collection system that is a part of the treatment system and the disposal system, shall be maintained in such a manner that at no time sewage will be permitted to surface or overflow at any location.
10. Sewage odors shall not be detectable.
11. Wastes discharged shall at no time contain any substance in concentrations toxic to human, animal, plant, or aquatic life.
12. The discharge of waste shall not create a condition of pollution, contamination, or nuisance.
13. Nutrient materials in the waste discharged shall not cause objectionable aquatic growths or degrade indigenous biota.
14. The waste discharged shall not cause the concentration of organic materials in fish, shellfish or other marine resources used for human consumption to bioaccumulate to levels that are harmful to human health.
15. The direct or indirect discharge of any wastewater to surface waters or surface water drainage courses is prohibited

D. PROVISIONS

1. The Discharger shall file with the Regional Board technical reports on self-monitoring work performed according to the detailed specifications contained in Monitoring and Reporting Program No. CI 8456 as directed by the Regional Board Executive Officer (Executive Officer). The results of any monitoring done more frequently than required at the location and/or times specified in the Monitoring and Reporting Program shall be reported to the Regional Board. Monitoring and Reporting Program No. CI 8456, which is attached hereto and incorporated herein by reference, contains requirements, among others, specifying the following:
 - a) The Discharger shall ensure that the capacity of the disposal area is adequate for the discharge and that adequate steps are taken to

accommodate system failures or to deal with loss of assimilative capacity of the soils.

- b) The Discharger shall establish baseline bacteria levels in the effluent from the treatment system by monitoring bacteria in wastewater prior to discharge into the leachfields and groundwater.
2. The Discharger shall cause the treatment system to be inspected annually during the life of the permit by an inspector to be retained and suggested by the Discharger but subject to the approval of the Executive Officer.
 3. The Discharger shall comply with all applicable requirements of chapter 4.5 (commencing with section 13290) of division 7 of the California Water Code.
 4. The Regional Board is currently developing the Total Maximum Daily Load (TMDL) for pathogens in the Santa Monica Bay Beaches including Surfrider Beach. When the study is completed, pathogen loading rates will be assigned to dischargers. The Discharger shall comply with waste load allocations developed and approved pursuant to the process for the designation of TMDL for the area. The Regional Board may require that the Discharger meet pathogen discharge limits stricter than those imposed in this Order.
 5. The Discharger shall notify the Regional Board within 24 hours, by telephone or electronically, of any bypassing or surfacing of wastes. Written confirmation shall follow within one week and shall include information relative to the location(s), estimated volume, date and time, duration, cause, and remedial measures taken to effect cleanup and measures taken to prevent any recurrence.
 6. This Order does not alleviate the responsibility of the Discharger to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
 7. Any discharge of wastewater from the treatment system (including wastewater collection system) at any point other than specifically described in this Order is prohibited, and constitutes a violation of the Order.
 8. After notice and opportunity for a hearing, this Order may be terminated or modified for causes including, but not limited, to:
 - a) Violation of any term or condition contained in this Order;
 - b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

- c) A change in any condition, or the discovery of any information, that requires either a temporary or permanent reduction or elimination of the authorized discharge.
9. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
10. Should monitoring data indicate impacts to groundwater or nearby surface water, the Discharger shall submit, within 90 days after determination of the problem, plans for measures that will be taken, or have been taken, to mitigate any long-term effects that may result from the subsurface disposal of wastes. Any water quality impact to surface and groundwater such as, but not limited to, risks to human health from pathogens, and accelerated eutrophication of surface waters from nutrients in waste waters shall be reported.
11. This Order includes the attached *Standard Provisions Applicable to Waste Discharge Requirements* (Attachment W) which are incorporated herein by reference. If there is any conflict between provisions stated herein and the *Standard Provisions Applicable to Waste Discharge Requirements*, the provisions stated herein will prevail.
12. The Discharger shall submit to the Regional Board, within 180 days of the adoption of this Order, procedures that will be, or have been, taken to ensure that no discharge or recycling of any untreated or partially treated sewage, will result from the treatment facility, in the event of equipment failure.
13. In accordance with California Water Code (CWC) section 13263(e), these requirements are subject to periodic review and revision by the Regional Board with a five (5) year cycle.
14. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into the waters of the State are privileges, not rights.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on September 26, 2002.

Dennis A. Dickerson
Executive Officer