

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

**ORDER NO. R4-2002-0198**

**WASTE DISCHARGE REQUIREMENTS  
FOR  
EQUILON ENTERPRISES, LLC  
(Malibu Shell)  
(File No. 01-143)**

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

**PURPOSE OF ORDER**

1. Equilon Enterprises, LLC (hereinafter Discharger) owns and operates Malibu Shell (formerly known as Malibu Texaco), an automotive service station (Station) located at 23387 Pacific Coast Highway in Malibu, California (Figure 1).
2. On December 22, 1999, the Discharger filed a Report of Waste Discharge (RoWD) for the discharge of domestic wastewater from the two restrooms at the Station with an average flow of 1,500 gallons per day (gpd) to an on-site wastewater disposal system.

**FACILITY AND TREATMENT PROCESS DESCRIPTION**

3. The Station is in an unsewered area in the City of Malibu (City). The City does not provide centralized wastewater collection and treatment utilities; rather, it relies upon subsurface disposal systems for domestic, commercial, and industrial wastewater.
4. The existing septic disposal system was constructed in 1997 and consists of two septic tanks – a 2,000-gallon tank and a 1,500-gallon tank – located in the northern portion of the site (Figure 2).
5. The 2,000-gallon tank discharges to a 74 feet long x 9 feet wide x 6.5 feet deep leachfield and the 1,500-gallon tank discharges to a 55 feet long x 9 feet wide x 6.5 feet deep leachfield.
6. The wastewater receives only primary treatment in the septic systems before being discharged to the leachfield. The effluent quality from the septic system is not currently monitored on a regular basis and as a result, the effluent quality from the septic tanks is not known.
7. During 1999, Regional Board staff conducted a joint field investigation with City of Malibu staff, including groundwater sampling near the Station. Based on the analytical water data collected from monitoring wells, Regional Board staff concluded that the groundwater

contains high concentrations of septic system derived pollutants such as coliform and ammonia. In addition, on July 12, 2002, groundwater quality data collected near the Station revealed the following:

Constituent	Upgradient Well No. 5* (≈35 feet away from the Property)	Down gradient Well No. 6* (≈90 feet away from the Property)	Water Quality Objectives
Total coliform (MPN/100 mL)	900	<2	1.1
Fecal coliform (MPN/100 mL)	23	<2	200
Enterococcus (MPN/100 mL)	≥ 2419	2	24
Total Nitrogen (mg/L)	12	1.4	10**

\* Data collected at Malibu Creek Plaza located 3822-3896 Cross Creek Road, Malibu, on July 12, 2002.

\*\*Nitrogen limitation as nitrate-nitrogen + nitrite-nitrogen based on Basin Plan.

The above table and the limited data collected show that any impact from the current discharge of the Station might be very localized.

8. Discharges from the existing septic tank system infiltrate groundwater through the leachfield disposal system. The minimum standard for vertical separation between the bottom of the leachfield and the historic high water table should be at least 10 feet. Data (Report of Malibu Civic Center Groundwater Elevation, prepared by Bing Yen & Associates, dated January 5, 2001) on the groundwater table in the area suggest to Regional Board staff that the Station may not have the minimum required 10-foot vertical separation between the bottom of the leachfields and the water table. Without the 10-foot separation, the Regional Board requires disinfection of the wastewater discharged (Order No. 01-031, "General Waste Discharge Requirements for Small Commercial and Multifamily Residential Subsurface Sewage Disposal Systems," adopted by the Regional Board on February 22, 2002). In addition, because the assimilative capacity of the groundwater basin is seen as stressed for nutrients and pathogens (coliform and enterococcus), this Order requires the Discharger to include supplemental disinfection treatment for the system. The Discharger may also need to include secondary treatment prior to the disinfection module in order to meet the effluent limitations for pathogens that are included herein.
9. The Discharger may not have sufficient land area reserved for possible future 100 percent replacement of the subsurface disposal area. The Discharger will be required to have a contingency plan to deal with the event of failure of the disposal system or the loss of soil assimilative capacity.
10. The Station is a former gasoline contaminated site. On September 25, 1989, the Discharger obtained National Pollutant Discharge Elimination System (NPDES) Permit Order No. 89-089 for discharges of treated groundwater generated from a groundwater treatment system

to a storm drain. On July 30, 1990, Order No. 89-089 was replaced by Order No. 90-095. Order No. 90-095 was rescinded on December 9, 1996, due to termination of the discharge.

11. On January 11, 1999 the Los Angeles County Department of Public Works reported that an unauthorized gasoline release occurred at the Station. The substances involved were benzene and Methyl Tertiary Butyl Ether (MTBE). On October 22, 2002, the Los Angeles County Department of Public Works transferred the case to the Regional Board for cleanup oversight due to possible groundwater contamination at the subject site. Currently, Board staff is evaluating technical information pertaining to the gasoline release.
12. The Discharger does not currently monitor groundwater in order to evaluate any impacts from the discharge of wastewater and possible groundwater contamination. A new groundwater monitoring and reporting program is therefore established in association with the following waste discharge requirements.
13. With regard to the use of groundwater for municipal and domestic supply, potable water consumers in the area receive only imported water from the Los Angeles County Waterworks District No. 29. The Los Angeles County Waterworks District No. 29 receives water from the Metropolitan Water District of Southern California via the West Basin Municipal Water District.
14. The Station is located in Section 15, Township 1S, Range 18W (San Bernardino Base Line & Meridian). The Station's approximate latitude is 34<sup>o</sup> 02' 30" and longitude is 118<sup>o</sup> 44' 07".
15. Septic tanks provide primary treatment for wastewater prior to discharge to the leachfield. The effluent would still contain suspended solids, biochemical oxygen demand, dissolved organic materials, high levels of total nitrogen and pathogens. Though leachfields can provide supplemental treatment, secondary treatment processes that employ biological treatment have been utilized for dischargers with small package treatment plants in the Malibu area to achieve substantial reductions in those suspended solids, biochemical oxygen demand, and total nitrogen. These package treatment plants can produce an effluent similar in quality to that produced by secondary treatment processes as required by the United States Environmental Protection Agency for publicly owned treatment works (POTWs) treating municipal wastewater. Regulations specified in Part 133.102 of 40 Code of Federal Regulations require the following minimum effluent levels for treatment for POTWs:

<u>Constituent</u>	<u>Units*</u>	<u>Monthly Average</u>	<u>7-Day Average</u>
BOD <sub>5</sub>	mg/L	30	45
Total suspended solids	mg/L	30	45

\*mg/L: milligrams per liter

Small package treatment plants can achieve these levels which have been used as the effluent limitations in Waste Discharge Requirements adopted by the Regional Board for dischargers in the Malibu area. The reported treatment could substantially reduce these levels. Subsequently, these standards have been established as effluent limits herein for any supplementary treatment technology to be employed.

16. The City issues construction permits for septic systems. On October 28, 2002, the City adopted Ordinance No. 242 that requires tertiary sewage effluent treatment<sup>1</sup> for any new or repair permits for commercial buildings and multiple family dwellings. In any event of repairing or updating the existing septic system, the Discharger may be required to use a tertiary treatment process.

#### **APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS**

17. 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 waters 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.
18. 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 United States Environmental Protection Agency approved the Ocean Plan on July 9, 2001 and December 3, 2001, respectively. The Ocean Plan contains

<sup>1</sup> Ordinance No. 242 defines tertiary treatment as, "The processing of sewage effluent by means of a treatment device which renders a sewage effluent of 30 mg/L biochemical oxygen demand or less, 30 mg/L total suspended solids or less, 15 mg/L oil and grease or less, 200 MPN/100 mL fecal coliform or less and 104 MPN/100 mL enterococcus or less."

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.

19. Based on the Malibu Beach, United States Geologic Survey 7.5-minute Quadrangle, Los Angeles County, California, 1950, revised 1982, the Station is located at the foot of the Santa Monica Mountains, approximately 1,200 feet north of the Pacific Ocean and 500 feet west of Malibu Creek.
20. The Basin Plan designated beneficial uses and water quality objectives for groundwater within the Malibu Valley Groundwater Basin which underlies the Station are as follows:

Groundwater (Malibu Valley):

Existing: agricultural supply

Potential: municipal and domestic supply, industrial service supply

21. The effluent from the Station's septic disposal system discharges in close proximity (1,200 feet) to the Pacific Ocean. Groundwater underlying the Station may be in hydraulic connection with Malibu Creek, Malibu Lagoon, and the Pacific Ocean. Beneficial uses designated for these surface waters include, among others: contact and non-contact water recreation; marine habitat; wildlife habitat; estuarine habitat; wetland habitat; migration of aquatic organisms; and shellfish harvesting.
22. The Station's leachfield disposal system fields are within 500 feet of Malibu Creek and Malibu Lagoon. Malibu Creek and Malibu Lagoon are recognized as impaired by both nutrients and bacteria, pursuant to a section 303(d) listing of the federal Clean Water Act. Such listing is pending adoption by the State Water Resources Control Board. A 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. Groundwater monitoring is being required since groundwater impacts have been documented at a site adjacent to the Station, and the groundwater is eventually discharged to Malibu Creek, Malibu Lagoon and the Pacific Ocean.
23. The Discharger is not able to comply immediately with the effluent limits in this Order for fecal coliform and enterococcus and may not be able to meet the receiving water limitations for nitrogen. In order to provide the Discharger time to come into compliance with the limits without being in immediate violation thereof, the Regional Board is including a Time Schedule Order (TSO) R4-2002-0199 that will allow the Discharger to complete all needed disposal system upgrades within a time frame specified in the TSO.

**CEQA and NOTIFICATION**

24. This project involves an existing facility and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15301.
25. 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.
26. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.
27. 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 received by the State Water Resources Control Board, P.O. Box 100, Sacramento, California 95812, within 30 days of the date of the adoption of this Order.

IT IS HEREBY ORDERED that Equilon Enterprises, LLC, shall be responsible for and shall comply with the following requirements in all operations and activities at the Station:

A. INFLUENT LIMITATIONS

1. Waste discharged shall be limited to domestic sewage only.
2. The maximum daily discharge to the septic disposal system shall not exceed a flow of 3,500 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 septic disposal system.

B. EFFLUENT LIMITATIONS

1. These limitations are not applicable to the existing septic tank, but to effluent from a secondary/tertiary wastewater treatment system with disinfection to be employed.
2. Wastewater discharged from the secondary/tertiary wastewater treatment system with disinfection to the leachfield system shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Units*</u>	<u>Monthly Average</u>
BOD <sub>5</sub>	mg/L	30
Total suspended solids	mg/L	30
Fecal coliform***	MPN/100 mL	200
<u>Enterococcus</u>	<u>MPN/100 mL</u>	<u>24</u>

\* mg/L: milligrams per liter

\*\*\* Wastewater discharged to the disposal system shall not contain fecal coliform concentrations above a log mean of 200/100 ml (based on a minimum of not less than four samples for any monthly period), nor shall more than 10 percent of total samples during any monthly period exceed 400/100 ml. If only one sample is taken in any monthly period, that value shall be considered as the log mean for the month.

3. The pH of wastes discharged shall at all times be between 6 to 9 pH units.
4. Wastewater discharged to the leachfield system shall not contain additives or residual chlorine levels such that biomat layer or the hydraulic capacity of the leachfield system is irreparably damaged.

C. RECEIVING WATER LIMITATIONS

1. The wastewater discharged shall not cause the receiving groundwater to contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Units*</u>	<u>Monthly Average ***</u>	<u>Daily Maximum</u>
Total Dissolved Solids	mg/L	2000	--
Total Nitrogen**	mg/L	10	--
Sulfate	mg/L	500	--
Chloride	mg/L	500	--
<u>Boron</u>	<u>mg/L</u>	<u>2</u>	<u>--</u>

\* mg/L: milligrams per liter; MPN/100mL: Most Probable Number per 100 milliliters

\*\* Total Nitrogen to include Nitrate nitrogen, Nitrite nitrogen, Ammonia nitrogen and Organic nitrogen.

\*\*\* For the above parameters, the Discharger may choose the compliance point for each parameter to be the wastewater treatment system end of pipe or the downgradient groundwater monitoring well.

2. The wastewater discharged to the septic disposal system shall not contain salts, heavy metals, or organic pollutants at levels that would impact groundwater that may be in hydraulic connection with surface waters designated for marine aquatic life or body contact recreation.

3. Any wastes that do not meet the foregoing requirements shall be held in impervious containers, and discharged at a legal point of disposal.
4. The discharge shall not cause the groundwater in this area used for domestic or municipal supply to have a concentration of coliform organisms over any seven day period equal to or greater than 1.1/100 mL.
5. Compliance with these receiving water requirements shall also be based upon the upgradient quality of groundwater moving under the Station to determine the net effect upon groundwater caused by the Discharger.

D. PROHIBITIONS

1. There shall be no sanitary sewer overflows or discharge of wastes to waters of the State (including storm drains) or the ocean at any time.
2. No part of the septic disposal system shall be closer than 150 feet to any water supply well.
3. No part of the septic disposal system shall be closer than 100 feet to any stream, channel or other watercourse.
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 septic 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 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 septic disposal system, shall be maintained in such a manner that prevents sewage from surfacing or overflowing at any location.
10. Sewage odors shall not be detectable.
11. Wastes discharged shall at no time contain any substance in concentration toxic to human, animal, plant, or aquatic life.
12. The discharge of waste shall not create a condition of pollution, contamination, or nuisance. No new connections may be made without approval by the Regional Board Executive Officer (Executive Officer).
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.

E. 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-8513 attached hereto and incorporated herein by reference, as directed by the 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 (MRP) shall be reported to the Regional Board. The MRP contains requirements, among others, specifying the following:
  - ❖ A monitoring program for groundwater shall be established so that the groundwater immediately downgradient and upgradient from the discharge area can be measured, sampled, and analyzed to determine if discharges from the septic disposal system have impacted, or are impacting, water quality. Submittal of a plan for monitoring groundwater, which is subject to the approval of the Executive Officer, is due by January 15, 2003.
2. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment which are installed or used by the Discharger to achieve compliance with the conditions of this Order.

3. The Discharger shall ensure that the capacity of the disposal area is adequate for the discharge volume, and that adequate steps are taken to accommodate system failures and/or the loss of soil assimilative capacity.
4. Within 60 days of the effective date of this Order, the Discharger shall submit for the Executive Officer's approval a contingency plan addressing the steps that will be taken to deal with disposal system failures.
5. The Discharger shall cause the septic disposal system to be inspected annually during the term of this Order by an inspector to be retained and suggested by the Discharger but subject to the approval of the Executive Officer.
6. The Discharger shall comply with all applicable requirements of chapter 4.5 (commencing with section 13290) of division 7 of the California Water Code.
7. The Regional Board is currently developing a Total Maximum Daily Load (TMDL) for nutrients and pathogens in the Santa Monica Bay Beaches, including Malibu Lagoon State Beach. When the study is completed, nutrient and 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 the TMDL. The Regional Board may require that the Discharger meet nutrient and pathogen discharge limits stricter than those imposed in this Order.
8. 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.
9. 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.
10. 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 this Order.
11. 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.
12. 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.
  13. Should monitoring data indicate impacts to groundwater, 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 waters 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.
  14. 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.
  15. The waste discharge requirements contained in this Order will remain in effect for a period of (5) years. Should the Discharger wish to continue discharging to groundwater for a period of time in excess of five years, the Discharger must file an updated Report of Waste Discharge with the Regional Board, no later than 180 days in advance of the expiration date of this Order, for consideration of issuance of new or revised waste discharge requirements. Any discharge of waste beyond five years from the date of issuance of this Order, without obtaining new Waste Discharge Requirements from the Regional Board is a violation of California Water Code section 13264. The Regional Board is authorized to take appropriate enforcement action for any noncompliance with this provision including assessment of penalties.
  16. In accordance with California Water Code 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.

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F. REOPENER

This WDR Order may be reopened to delete outdated requirements, or to include additional or modified requirements to address pollutant loading problems verified by monitoring data, Discharger workplans or mitigation plans, or TMDL or Basin Plan mandates.

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 December 12, 2002.

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Dennis A. Dickerson  
Executive Officer