California Regional Water Quality Control Board

Los Angeles Region

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February 4, 2003

Winston H. Hickox

Secretary for wironmental

Protection

Mr. Michael Koss and Mr. Gregory Kozak Malibu Country Mart, Ltd. 12410 Santa Monica Boulevard Los Angeles, CA 90025 CERTIFIED MAIL
RETURN RECEIPT REQUESTED
CLAIM NO. 7002 2410 0006 3316 2230

Dear Mr. Koss and Mr. Kozak:

WASTE DISCHARGE REQUIREMENTS AND TIME SCHEDULE ORDER FOR MALIBU COUNTRY MART I, 3835 CROSS CREEK ROAD, MALIBU, CALIFORNIA (FILE NO. 00-75, CI-8518)

Our letter of December 24, 2002, transmitted a tentative Waste Discharge Requirements Order (TWDRO) including Monitoring and Reporting Program (TMRP) and an accompanying tentative Time Schedule Order (TTSO) for Malibu Country Mart I. The Regional Board's follow-up letters of January 10 and January 16, 2003, included change sheets which detailed the minor revisions to these Orders.

Pursuant to Division 7 of the California Water Code, this Regional Board at a public meeting held on January 30, 2003, reviewed the tentative Waste Discharge Requirements and tentative Time Schedule Order, considered all factors in the case, and adopted WDR Order No. R4-2003-0029 and TSO Order No. R4-2003-0030 (copies enclosed) relative to this discharge. The Monitoring and Reporting Program is CI-8518. Standard Provisions, which are a part of the WDRs, are also enclosed.

If you have any questions or need additional information, please call Dr. Kwang-il Lee at (213) 620-2269 or Gary Schultz at (213) 620-2264.

Sincerely,

Paula Rasmussen, Section Chief

Enforcement and Groundwater Permitting

Enclosures:

- Board WDR Order No. R4-2003-0029
- 2. Monitoring and Reporting Program No. CI-8518
- 3. Board TSO Order No. R4-2003-0030
- 4. Standard Provisions applicable to Waste Discharge Requirements (addressee only)

cc: See Attached Mailing List

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption

For a list of simple ways to reduce demand and cut your energy costs, see the tips at: http://www.swrcb.ca.gov/news/echallenge.html

MAILING LIST

- Mr. Michael Lauffer, Office of Chief Counsel, State Water Resources Control Board
- Mr. Robert Sams, Office of Chief Counsel, State Water Resources Control Board
- Mr. Carl W. Sjoberg, County of Los Angeles, Department of Public Works, Environmental Programs Division
- Ms. Marianne Yamaguchi, Santa Monica Bay Restoration Project
- Mr. Victor Peterson, City of Malibu
- Mr. Larry Young, City of Malibu
- Dr. Mark Gold, Heal the Bay
- Dr. Mitzy Taggart, Heal the Bay
- Mr. Mark Abramson, Heal the Bay
- Mr. Steve Fleischli, Santa Monica BayKeeper

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

MONITORING AND REPORTING PROGRAM NO. CI 8518 FOR MALIBU COUNTRY MART, Ltd. (Malibu Country Mart I) (File No. 00-75)

I. REPORTING REQUIREMENTS

A. The Discharger shall implement this monitoring program on the effective date of this order (WDR Order No. R4-2003-0029). The first monitoring report under this Program is due by April 15, 2003. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.

Monitoring reports shall be received by the Regional Board by the dates in the following schedule:

Reporting Period	Report Due
January – March	April 15
April – June	July 15
July – September	October 15
October – December	January 15

- B. By March 30th of each year, beginning March 30, 2004, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements.
- C. Laboratory analyses all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal is obtained from ELAP.
- D. The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer.

E. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. All Quality Assurance/Quality Control (QA/QC) samples must be run on the same dates when samples were actually analyzed. At least once a year, the Discharger shall maintain and update a list of the analytical methods employed for each test and the associated laboratory QA/QC procedures. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.

Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services, and in accordance with current USEPA guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.

- F. For every item where the requirements are not met, the Discharger shall submit a statement of the cause(s), and actions undertaken or proposed which will bring the discharge into full compliance with waste discharge requirements at the earliest possible time, including a timetable for implementation of those actions.
- G. The Discharger shall maintain all sampling and analytical results: date; exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- H. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.
- I. Any mitigation/remedial activity including any pre-discharge treatment conducted at the site must be reported in the quarterly monitoring report. In addition, if effluent or groundwater monitoring programs have not yet been implemented, a short description of the status of both shall also be included.

II. WATER QUALITY MONITORING REQUIREMENTS

A. Influent Monitoring

The Discharger shall establish a system to measure the monthly average and maximum daily waste flow to or from the treatment systems. The Discharger shall provide influent monitoring

information with quarterly reports. The Discharger shall provide quarterly influent monitoring reports including names of any business that discharges into the septic/wastewater treatment system together with the flow and characteristics of the waste stream. Discharger shall also acknowledge if nail polishing operations are included with any beauty salon business.

B. Effluent Monitoring

An effluent monitoring program shall be designed to evaluate the effectiveness of any new treatment module(s) (such as disinfection or secondary treatment) added to the on-site system. An effluent sampling station(s) shall be established at a location(s) where representative samples of treated effluent can be obtained prior to discharge to the leachfield disposal system. The effluent monitoring program shall be initiated once the septic system has been modified with the inclusion of supplemental treatment. The following shall constitute the effluent monitoring program:

Constituent	<u>Units</u>	Type of Sample	of Analysis
Total Flow	gal/day	44	monthly
рН	pH units	grab	weekly 1/quarterly
Total Suspended			, and the second
Solids	mg/L	grab	weekly 1/quarterly
BOD ⁵ 20° C	mg/L	grab	weekly 1/quarterly
Oil and Grease	mg/L	grab	weekly 1/quarterly
Fecal coliform	MPN/100mL	grab	weekly 1/quarterly
Enterococcus	MPN/100mL	grab	weekly ¹ /quarterly
Ammonia-N	mg/L	grab	weekly 1/quarterly
Nitrate-N	mg/L	grab	weekly ¹/quarterly
Nitrite-N	mg/L	grab	weekly 1/quarterly
Organic-N	mg/L	grab	weekly ¹/quarterly
Residual Chlorine**	mg/L	grab	weekly ¹ /quarterly
Total Dissolved	DE ENCIRCION	7942747	
Solids ²	mg/L	grab	quarterly
Sulfate ²	mg/L	grab	quarterly
Chloride ²	mg/L	grab	quarterly
Boron ²	mg/L	grab	quarterly
Volatile organics	ug/L	grab	semi-annually***
(Refer to attached priority pollutants list - Attachment A)			

For the first 8 weeks after the wastewater treatment system start-up, all of the above constituents must be analyzed weekly. After the start-up period and the establishment of system operational performance and baseline, the effluent monitoring frequency shall be reduced to a quarterly interval. After the 8 week start-up period, the Discharger may choose an end of pipe or groundwater compliance point.

^{**} If chlorination is used for disinfection.

^{***}quarterly sampling if nail polishing operations (semi-annual samples in 2nd and 3rd quarters).

III. GROUNDWATER MONITORING PROGRAM

A groundwater monitoring program shall be designed to evaluate impacts of wastewater discharged through the leachfields to groundwater. A groundwater monitoring workplan must be submitted to the Regional Board for review by March 31, 2003 and is subject to approval by the Executive Officer prior to implementation. The workplan shall include, at a minimum, an evaluation of the adequacy of the proposed groundwater monitoring wells to achieve objectives of monitoring, recommendations for additional groundwater monitoring wells, if warranted and the construction and development of groundwater monitoring wells. The Discharger may propose the use of existing groundwater monitoring wells near this property for the monitoring program.

Upon obtaining Executive Officer approval of an adequate groundwater monitoring plan, construction and development of the proposed wells shall be completed within 90 days and shall be completed in accordance with the standards in Bulletins 74-81 and 74-90 of California Department of Water Resources. Within 30 days after installation of monitoring wells, the groundwater monitoring program shall be initiated and a well installation report including a scaled plot plan, soil boring logs, water quality data, well permits and as-built well construction diagrams shall be submitted to the Executive Officer.

The report must be prepared under the direction of a California Registered Geologist, or Certified Engineering Geologist, or a California Registered Civil Engineer with appropriate experience in hydrogeology.

The following shall constitute the groundwater monitoring program:

Constituent	<u>Units</u>	Type of Sample	Minimum Frequency of Analysis
Total coliform Fecal coliform Enterococcus Ammonia-N Nitrate-N Nitrite-N Organic-N Total dissolved solids Boron Chloride Sulfate	MPN/100mL MPN/100mL MPN/100mL mg/L mg/L mg/L mg/L mg/L mg/L mg/L	grab grab grab grab grab grab grab grab	quarterly
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All groundwater monitoring reports must include, at minimum, the following:

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification;
- c. Quarterly observation of groundwater levels, recorded to .01 feet mean sea level, flow direction; and
- d. Vertical separation of the water table from the bottom of the leachfields.

IV. WASTE HAULING REPORTING

In the event that waste oil and grease, sludge, septage, or other wastes are hauled offsite, the name and address of the hauler shall be reported, along with types and quantities hauled during the reporting period and the location of final point of disposal. In the event that no wastes are hauled during the reporting period, a statement to that effect shall be submitted.

V. OPERATION AND MAINTENANCE REPORT

The Discharger shall file a technical report with the Executive Officer, not later than 30 days after receipt of these Waste Discharge Requirements relative to the operation and maintenance program for the MCM-I site. The information to be contained in the report shall include, at a minimum, the following:

- a. The name and address of the person or company responsible for the operation and maintenance of the facility;
- b. Type of maintenance (preventive or corrective action performed);
- c. Frequency of maintenance, if preventive;
- d. Periodic pumping out of the septic tanks; and
- e. Maintenance record of leaching/disposal fields system.

This operations and maintenance record shall be kept current and filed with the annual report due by March 30.

VI. CERTIFICATION STATEMENT

Each report shall contain the following declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly

Malibu Country Mart, Ltd. Malibu Country Mart I Monitoring and Reporting Program No. CI-8518

File No. 00-075

Date: January 30, 2003

responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on theday of	at	·
		(Signature)
		(Title)"

VII. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted to a less frequent basis or parameters dropped by the Executive Officer if the Discharger makes a request and the Executive Officer determines that the request is adequately supported by statistical trends of monitoring data submitted.

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by: Dennis A Dickerson

Dennis A. Dickerson Executive Officer

/GS

ATTACHMENT A

PRIORITY POLLUTANTS

Metals

Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Thallium Zinc

Miscellaneous

Cyanide Asbestos (only if specifically required)

Pesticides & PCBs

Aldrin Chlordane Dieldrin 4,4'-DDT 4,4'-DDE 4.4'-DDD

Alpha-endosulfan Beta-endosulfan Endosulfan sulfate

Endrin

Endrin aldehyde Heptachlor

Heptachlor epoxide

Alpha-BHC Beta-BHC Gamma-BHC Delta-BHC Toxaphene PCB 1016 PCB 1221

PCB 1232 PCB 1242 PCB 1248

PCB 1254 PCB 1260

Base/Neutral Extractibles

Acenaphthene Benzidine

1.2.4-trichlorobenzene Hexachlorobenzene Hexachloroethane Bis(2-chloroethyl) ether 2-chloronaphthalene 1.2-dichlorobenzene 1.3-dichlorobenzene 1.4-dichlorobenzene 3.3'-dichlorobenzidine 2.4-dinitrotoluene 2.6-dinitrotoluene 1,2-diphenylhydrazine

Fluoranthene

4-chlorophenyl phenyl ether 4-bromophenyl phenyl ether Bis(2-chloroisopropyl) ether Bis(2-chloroethoxy) methane

Hexachlorobutadiene Hexachlorocyclopentadiene

Isophorone Naphthalene Nitrobenzene

N-nitrosodimethylamine N-nitrosodi-n-propylamine N-nitrosodiphenylamine Bis (2-ethylhexyl) phthalate Butyl benzyl phthalate Di-n-butyl phthalate Di-n-octyl phthalate Diethyl phthalate Dimethyl phthalate Benzo(a) anthracene Benzo(a) pyrene Benzo(b) fluoranthene

Chrysene Acenaphthylene Anthracene

1,12-benzoperylene Fluorene

Benzo(k) fluoranthene

Phenanthrene 1,2,5,6-dibenzanthracene

Indeno (1,2,3-cd) pyrene Pyrene TCDD

Acid Extractibles

2,4,6-trichlorophenol P-chloro-m-cresol 2-chlorophenol 2.4-dichlorophenol 2,4-dimethylphenol 2-nitrophenol 4-nitrophenol 2.4-dinitrophenol 4,6-dinitro-o-cresol Pentachlorophenol Phenol

Volatile Organics

Acrolein Acrylonitrile Benzene Carbon tetrachloride Chlorobenzene

1,2-dichloroethane 1,1,1-trichloroethane 1.1-dichloroethane

1,1,2-trichloroethane 1,1,2,2-tetrachloroethane

Chloroethane Chloroform

1,1-dichloroethylene

1,2-trans-dichloroethylene 1,2-dichloropropane

1,3-dichloropropylene Ethylbenzene

Methylene chloride Methyl chloride Methyl bromide Bromoform

Dichlorobromomethane Chlorodibromomethane Tetrachloroethylene

Toluene

Trichloroethylene Vinyl chloride

2-chloroethyl vinyl ether

Xylene

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

ORDER NO. R4-2003-0029
WASTE DISCHARGE REQUIREMENTS
FOR
MALIBU COUNTRY MART, LTD.
(Malibu Country Mart I)
(File No. 00-75, CI-8518)

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

REGULATION OF DISCHARGE

- 1. Malibu Country Mart, Ltd. (hereinafter Discharger) owns and operates the Malibu Country Mart I (MCM-I), a shopping center located at 3835 Cross Creek Road, Malibu, California (Figure 1 Site Location Map). MCM-I (Figure 2 Existing Facility) is comprised of 28 retail and commercial businesses including two sit-down and three fast food restaurants, and a hair salon. Businesses include Nobu, John's Garden, Tradinoi, Coffee Bean and Tea Leaf, Howdy's, and Malibu Mutt.
- 2. The MCM-I site 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.
- 3. On February 4, 2000, the Discharger submitted a report of waste discharge pursuant to a request from the Regional Board. The Discharger has never had Waste Discharge Requirements (WDRs) from the Regional Board for MCM-I.

DESCRIPTION OF FACILITY

4. The Discharger does not currently have meters for MCM-I wastewater flow, only for total water consumption. However, the Discharger has estimated that MCM-I water usage averages approximately 12,000 gallons per day (gpd) with the average maximum usage rate estimated at approximately 14,000 gpd. The Discharger has indicated that the existing septic system for MCM-I has a projected maximum capacity of approximately 18,000 gpd. Currently, the system is classified as a septic system because it consists of only primary treatment whereby wastewater is treated by grease traps and septic tanks, prior to disposal to leachfields. The septic system consists of a number of different components which form an interconnected septic system network. These components are located in parking lot areas (Figure 3):

- a) Five leachfields ranging in size from 375 square feet to 2960 square feet, for a total of 6750 square feet.
- b) Eight septic tanks ranging in capacity from 1000 gallons to 6000 gallons, having a total capacity of approximately 18,000 gallons. Biotube effluent filters are installed on the exit T of every septic tank.
- c) Six pump stations and three grease traps for restaurant facilities.
- 5. MCM-I disposes of all domestic and commercial wastewater through the septic tank/leachfield system. Wastewater from the sit-down restaurants enters grease interceptors and receives pretreatment prior to entering the main gravity line leading to the septic tank. Pretreatment consists of oil/water separation and passive filtration through a commercially sized effluent filter device.
- 6. The existing septic system has been installed and expanded over a period of 50 years. The first structure on the site was an Inn dating back to the 1940's and 1950's. The agencies involved with permitting authority in the past for this location are the County of Los Angeles, the California Coastal Commission, and since 1992, the City.
- 7. The Discharger has reportedly experienced operational problems with sewage surfacing and overflowing from the system. In addition, MCM-I has been subject to flow surges that required intervention with wastewater diverted to the adjacent Malibu Country Mart II septic system. The most recent incident relating to sewage overflowing from a manhole occurred in August 2002, when, as indicated by the Discharger, a power surge upset computer controls for the pump system. The Discharger has indicated that the problem with the computer controls has been corrected.

DESCRIPTION OF WASTE DISCHARGE

8. The wastewater from MCM-I consists of domestic and restaurant wastewater and would be classified as a commercial wastewater. As such, no industrial wastes or organic or inorganic industrial constituents are expected to be present therein. The effluent quality of wastewater discharged from the septic system is not currently monitored on a regular basis. On June 8, 2000, Regional Board staff sampled wastewater in the septic tanks. The sampling included one sample showing chloroform and the presence of toluene at levels ranging from 40 to 210 micrograms per liter (ug/L). The Discharger indicated that at the time of the sampling the previous salon operations included nail polishing, but that current salon operations do not.

WATERSHED CONCERNS AND TMDLs

- 9. The MCM-I septic disposal system is located approximately 1400 feet and 500 feet from the Pacific Ocean and Malibu Creek/Malibu Lagoon, respectively. Studies done for this area show that groundwater at the disposal site is in direct hydraulic connection with surface waters (Malibu Creek and Malibu Lagoon, and possibly the Pacific Ocean). Thus, septic system pollutants such as nutrients (nitrogen and phosphorous) and pathogens could move with groundwater to these surface waters.
- 10. Due to the contribution of nutrient and pathogen pollutants from septic systems in the Civic Center and Malibu area, Malibu Creek and Malibu Lagoon have been formally designated by the Regional Board as "impaired waterbodies," pursuant to a section 303(d) listing under the Federal Clean Water Act. Such listing is pending adoption by the State Water Resources Control Board.
- 11. Pacific Ocean beaches along the City also are designated as impaired under section 303(d) of the Clean Water Act due to the presence of harmful bacteria that pose a health hazard to humans engaged in waterborne recreation.
- 12. Though previous studies conducted for the Malibu Valley area to date have shown that the Malibu Creek Watershed is contaminated by pollutants from septic systems, additional study is needed. The City received a Proposition 12 grant through the Santa Monica Bay Restoration Project (SMBRP) to conduct a risk assessment project. The project is titled "Risk Assessment of Decentralized Wastewater Treatment Systems in High Priority Areas in the City of Malibu, California" and will include a risk assessment to evaluate the environmental impacts of current onsite wastewater management practices.

The project's study area includes the densely developed areas of the lower Malibu Creek, Malibu Lagoon and Winter Canyon watersheds, and would include the area of MCM-I. The initial phase of the project contains several tasks including: searching records for existing hydrogeological data and information; locating and inventorying commercial, multi-family, and residential parcels that utilize onsite wastewater systems; installing additional monitoring wells; characterizing the groundwater flow regime; and monitoring groundwater quality and water table elevations. A three-dimensional numerical model of the groundwater flow system will be developed as a tool to aid in risk assessment. Bacteria and nutrients are of particular concern for this study because they are constituents in septic tank effluent. Specific objectives of the modeling will be to evaluate the effects of septic waste dispersal on groundwater quality, and to delineate directions of groundwater flow from dispersal areas.

- 13. The U.S. Environmental Protection Agency (USEPA) will be establishing total maximum daily loads (TMDLs) for nutrients and pathogens for the Malibu Creek watershed in the spring of 2003. The Regional Board will consider a TMDL and companion watershed plan for implementation later in the year. The implementation plan will include a schedule to allow time for wastewater treatment facility upgrades and additional studies. Other TMDLs for metals, trash, and benthic effects in the Malibu Creek watershed currently are scheduled to be considered concurrently and presented to the Regional Board in 2011. Preliminary indications are that the nitrate standard for groundwater discharges may have to be lower than 10 milligrams per liter (mg/L) (the current groundwater standard) to address eutrophication problems in Malibu Creek and Malibu Lagoon.
- 14. The projected location for MCM-I is Section 32, Township 1S, Range 17W (San Bernardino Base & Meridian). Its approximate latitude is 34⁰ 02 08" and longitude is 118⁰ 41′ 06".

SYSTEM EVALUATIONS AND NEEDED IMPROVEMENTS

- 15. A conventional septic tank/leachfield treatment system, as employed by the Discharger, can be capable of nearly complete removal of suspended solids, biodegradable organic compounds, and fecal coliforms if the treatment system is properly designed, installed, operated and maintained. The treatment system at MCM-I includes septic tanks, the "biomat" layer that typically exists at the wastewater-soil interface below the leachfield, and the unsaturated soil zone below the biomat layer. However, wastewater constituents can pollute groundwater if treatment through the system is incomplete or if the system has not been properly designed, installed or maintained. In addition, groundwater can be polluted by well operating septic systems if too many septic systems are discharging beyond the assimilative capacity of the groundwater basin. The Discharger does not currently monitor groundwater in order to evaluate any impacts from its discharge of wastewater; however, the Regional Board is now requiring the Discharge to do so.
- 16. Discharges from the existing MCM-I septic tank system infiltrate groundwater through leachfield disposal systems. The minimum standard for the vertical separation between the bottom of the septic system leachfields and the high groundwater table should be at least 10 feet. Information at this point suggests that the groundwater table is between 6 to 8 feet deep at MCM-I and that the leachfields may be 3 feet deep. Hence, it can be concluded that there is not a 10–foot vertical separation and possible less than 5 feet at MCM-I. Regional Board staff are concerned that the existing treatment system may need additional treatment processes such as disinfection to protect groundwater quality. The

Regional Board, in Order No. 01-031 "General Waste Discharge Requirements for Small Commercial and Multifamily Residential Subsurface Sewage Disposal Systems," adopted on February 22, 2002, noted in footnote c) in Section E.3. that "in areas of shallow groundwater and coastal regions where a minimum of ten feet of vertical separation cannot be maintained between the bottom of the disposal system and the historic high or anticipated high groundwater level ... effluent shall be disinfected to levels consistent with the beneficial uses of groundwater and the nearest surface water body." Because the assimilative capacity of the groundwater basin is of concern for nutrients, and with high levels of pathogens (coliforms and enterococcus) also found in some monitoring wells in the groundwater basin, this Order requires the Discharger to include supplemental disinfection treatment for the MCM-I system and requires that receiving water objectives be established as end of pipe treatment limitations. Secondary treatment prior to the disinfection module would be essential for the Discharger in order to meet the effluent limitations for coliform and enterococcus that are included herein.

- 17. Normally, with a small septic system in an isolated area with deep groundwater, the potential impacts are minimized. However, in the City, the concerns with septic system impacts are magnified because of the demands on and the density of septic tank and leachfield use, the increased hydraulic loadings to groundwater, the shallow depth to groundwater, and the pollution currently seen in the Malibu Creek watershed. Regional Board staff are concerned with the environmental impacts of the MCM-I septic system and are concerned that the system is properly operated and maintained to reduce or eliminate human health or environmental threats. The Discharger does not currently monitor groundwater to evaluate the impacts from its MCM-I septic disposal system discharge to groundwater. The Discharger has also experienced operational and maintenance problems including the overflow and surfacing of raw sewage from manholes in parking lot areas. In addition, the reliability and effectiveness of the system is suspect because of the age of the system.
- 18. The effluent discharged to a leachfield disposal system from a septic tank receiving domestic wastewater can typically have total nitrogen levels ranging from 40 to 100 mg/L (predominately as ammonia) and total coliform levels ranging from 10⁶ to 10⁸ most probable number (MPN). In a well designed and operated septic system, the nitrogen as ammonia is nitrified to nitrates after percolating through the biomat layer in the leachfield. However, denitrification reactions (nitrate removal by conversion to nitrogen gas) may be limited and the nitrate, which is very mobile and soluble in water, percolates with the leachfield wastewater to groundwater. System failures or overstressing a groundwater basin with excessive effluent can also result in the introduction of pathogenic bacteria into groundwater and eventually into surface waters. Because of the ascribed contamination problems for the watershed for pathogens and nitrates, Regional

Board staff do not believe that the existing MCM-I on-site septic systems, in conjunction with the Malibu Valley Basin assimilative capacity, offer adequate protection to groundwater and surface waters from nitrate and pathogen contamination.

- 19. Consequently, secondary treatment and disinfection are considered supplemental measures to solving the current contamination problems for both pathogens and nitrates in the Malibu Valley Watershed. Package plants, the most practical technology available for small commercial users, can provide secondary treatment and some denitrification, but may need upgrades if future TMDL mandates require nitrate levels below 10 mg/L for the Malibu Valley.
- 20. The City has relied upon a wastewater management strategy that relies primarily on onsite septic tank disposal systems with the City issuing construction permits for commercial or multifamily septic tank disposal systems. On October 28, 2002, the City adopted Ordinance No. 242 that requires tertiary sewage effluent treatment for any new or repair permits for commercial buildings and multiple family dwellings. 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."
- 21. With regard to the use of groundwater for municipal and domestic supply, there are no known active public water supply wells downgradient of the MCM-I septic system. Groundwater in this area is also subject to saltwater intrusion. This area of Malibu is served by the Los Angeles County Waterworks District No. 29. Since 1961, 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.
- 22. Secondary treatment processes have been successfully employed by dischargers with small package plants that utilize biological aeration treatment for commercial and domestic wastewater as generated in the Malibu area. These package plants can produce an effluent similar to that produced by secondary treatment processes as required by the USEPA for publicly owned treatment works (POTWs) treating municipal wastewater. Section 301(b)(1)(B) of the Federal Clean Water Act requires publicly owned treatment works (POTWs) to meet effluent limitations based upon secondary treatment. The minimum effluent levels for treatment for POTWs as established in Part 133.102 of 40 CFR are as follows:

Constituent	<u>Units</u>	30-Day Average	7-Day <u>Average</u>
Biochemical oxygen demand(BOD ₅)	mg/L	30	45
Suspended solids	mg/L	30	45

Because such levels can be achieved by small package plants that can be utilized by dischargers in the Malibu Valley area, and because such performance would substantially reduce total nitrogen levels, these standards have been established as "end of pipe" effluent limits herein for any supplementary treatment technology that must be utilized. These effluent limits are established in the regulation, 40 CFR 125.3, which also requires secondary treatment as a technology based standard for POTWs. Because package plants normally do not denitrify the nitrates in wastewater, special upgrades may be needed.

- 23. The Discharger is required herein to develop and implement operational and maintenance improvements, including storage capabilities, and onsite and remote alarms for the septic system to preclude surfacing of raw sewage, and to have an inspector conduct an inspection and assessment of the system. In addition the Discharger must propose and implement supplemental secondary and disinfection treatment measures. The Regional Board is also requiring, as part of these WDRs, that the Discharger design and implement groundwater monitoring to assess the effectiveness of the treatment/disposal system to treat and remove biodegradable organics, nutrients, and pathogens in the wastewater. In order for the Discharger not to be in immediate violation of requirements in the WDRs, the Regional Board is including a Time Schedule Order (TSO) that will allow the Discharger to complete all needed upgrades within a timeframe specified in the TSO.
- 24. Though phosphorous removal is not mandated by this Order at this time, Regional Board staff review and response to groundwater or effluent monitoring data results, other regulatory agency actions, and future TMDL or Basin Plan mandates may require in the future that the Discharger supplement the system with phosphorous removal.
- 25. 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 disposal system failure or the loss of soil assimilative capacity.

APPLICABLE PLANS, POLICIES, AND REGULATIONS

26. On June 13, 1994, the Regional Board adopted a revised Water Quality Control Plan for the 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 groundwaters, (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. This Order implements the plans, policies, and provisions of the Basin Plan. The Basin Plan designates beneficial uses and water quality objectives for the following waterbodies as follows:

Groundwater (Malibu Valley Groundwater Basin):

Existing:

agricultural supply.

Potential:

municipal and domestic water supply, industrial service supply.

Surface water (Malibu Creek):

Existing:

water contact and non-contact water recreation; rare, threatened, or endangered species; warm and cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; wetland

habitat; and wildlife habitat.

Potential:

municipal and domestic water supply.

Surface water (Malibu Lagoon):

Existing:

water contact and non-contact water recreation; rare, threatened, or endangered species; estuarine and marine habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; wetland habitat; wildlife habitat, and navigation.

Coastal feature (Malibu Beach):

Existing:

water contact and non-contact water recreation; commercial and sport fishing; migration of aquatic organisms; spawning, reproduction, and/or early development; marine habitat; wildlife habitat; shellfish harvesting; and navigation.

- 27. 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 Ocean Plan on July 9, 2001 and December 3, 2001, respectively. The Ocean Plan contains water quality objectives for coastal waters of California. The beneficial uses of the ocean waters of the State that shall be protected include industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation, commercial and sport fishing; mariculture; rare and endangered species; marine habitat; fish migration; fish spawning; and shellfish harvesting. This Order includes receiving water limitations, prohibitions, and provisions that implement the objectives of the Ocean Plan.
- 28. Groundwater underlying MCM-I may be in hydraulic connection with the Pacific Ocean. Beneficial uses designated for this surface water in addition to contact and non-contact water recreation, include marine habitat, and shellfish harvesting. 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.
- 29. The Basin Plan lists the groundwater in the Malibu Valley Basin as having a potential municipal and domestic water supply (MUN). The Malibu Valley Basin encroaches upon the Malibu Lagoon and Malibu Beach areas that are coastal features without MUN designation. The Discharger discharges waste to the shallow unconfined aquifer in the Cross Creek area of Malibu that has not been used as MUN. Setting the MUN limitation "at end of pipe" does not acknowledge the additional treatment that is provided to subsurface wastewater discharges by soil matrix filtration and soil bacteria action. It is not seen to be practical for technology to consistently meet less than 1.1 MPN/100 mL for coliform at the end of pipe. Both USEPA and Regional Board staff acknowledge that adequate soil matrix treatment of wastewater (more than three feet vertical separation) can result in removal of more than 99% of bacteria. Since additional pathogen removal occurs in the subsurface, Regional Board staff have determined that setting the water contact recreation limitation (200 MPN/100 mL for fecal coliform) at the end of pipe is sufficiently protective of water quality in the area.

- 30. The complex hydrogeology and the discharge density in the Cross Creek area bring elements of uncertainty to the assumption that the down gradient groundwater compliance point is representative of any one discharger's representative water quality and that the groundwater basin has adequate assimilative capacity. Consequently, the Regional Board has previously adopted waste discharge requirements insuring compliance with Basin Plan groundwater limitations by setting the compliance point for critical constituents at the "end of pipe". This "end of pipe" practice for critical constituents assures that the discharge to land and eventually groundwater will not degrade the receiving water, or be the cause of receiving water limitation exceedances.
- 31. The requirements contained in this Order are based on the Basin Plan, Ocean Plan, other state plan, policies, and guidelines, and best professional judgment.

CEQA, NOTIFICATION, AND APPEALS

- 32. 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.
- 33. The Regional Board has notified the Discharger and interested agencies and persons of its intent to issue WDRs for this discharge, and has provided them with an opportunity to submit their views and recommendations for the requirements.
- 34. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the requirements.
- 35. 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 adoption of the Order.

IT IS HEREBY ORDERED that the Discharger, Malibu Country Mart, Ltd., shall comply with the following:

A. INFLUENT LIMITATIONS

1. Waste received by the MCM-I on-site septic system shall be limited to commercial wastewater only.

2. The daily flow shall not exceed the hydraulic capabilities of the on-site septic/wastewater treatment system. This flow limitation also applies to treated effluent discharged to the leachfield disposal system. Total maximum daily flow capacity is estimated by the Discharger to be 18,000 gpd.

B. EFFLUENT LIMITATIONS

- 1. These Section B effluent limitations are effective after the wastewater treatment system is installed and applicable only to effluent from a secondary/tertiary wastewater treatment system with disinfection.
- 2. The pH of wastes discharged to the leachfield shall be within the range of 6 to 9.
- 3. Wastewater discharged to the leachfield system shall not contain additives or residual chlorine levels such that the biomat layer or the hydraulic capacity of the leachfield system is irreparably damaged.
- 4. 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:

		Monthly
Constituent	Units*	Average
BOD ₅	mg/L	30
Total suspended solids	mg/L	30
Oil and Grease	mg/L	15
Total Nitrogen***	mg/L	10
Fecal coliform**	MPN/100 ml	200
Enterococcus	MPN/100 ml	24

^{*} mg/L: milligrams per liter. MPN: most probable number ml: milliliter

C. RECEIVING WATER LIMITATIONS

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

^{**} 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.

^{***} Total nitrogen to include Nitrate-N, Nitrite-N, Ammonia-N and Organic nitrogen.

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

- * MPN/100mL: Most Probable Number per 100 milliliter, mg/L: milligrams per liter.
- (a) Total nitrogen (as nitrogen) to include Nitrate-N, Nitrite-N, Ammonia-N 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 leachfield disposal system shall not contain salts, heavy metals, or organic pollutants at levels that would adversely impact groundwater that may be in hydraulic connection with surface waters designated for marine aquatic life or body contact recreation uses.
- 3. 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 1.1/100ml.
- 4. Compliance with these receiving water requirements shall also be based upon consideration of the upgradient quality of groundwater moving under the site to determine the net effect upon ground water caused by the Discharger.
- 5. The wastewater discharged shall not cause the receiving groundwater to exceed 8 micrograms per liter of total chlorine residual as the daily maximum.

D. PROHIBITIONS

1. There shall be no sanitary sewer overflows or discharge of wastes to waters of the State (including storm drains) at any time.

- 2. Wastes shall not be disposed of in geologically unstable areas or so as to cause earth movement.
- 3. Wastes discharged shall not impart tastes, odors, color, foaming or other objectionable characteristics to the receiving water.
- 4. Adequate facilities shall be provided to divert surface and storm water away from the treatment plant and leachfield disposal system and from areas where any potential pollutants are stored.
- 5. The septic tanks, treatment system, sewer collection system and the leachfield disposal system, shall be protected from damage by storm flows or runoff generated by a 100-year storm.
- 6. 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 compliance therewith. Any sewage or sludge handling shall be in such a manner as to prevent its reaching surface waters or watercourses.
- 7. The treatment system, including the collection system and the leachfield disposal system, shall be maintained in such a manner that at no time sewage will be permitted to surface or overflow at any location.
- 8. Sewage odors shall not be detectable.
- 9. The discharge of waste shall not create a condition of pollution, contamination, or nuisance.
- 10. The direct or indirect discharge of any wastewater to surface waters or surface water drainage courses is prohibited
- 11. Under no circumstances shall there be a groundwater separation of less than 3 feet.
- 12. Additional service connections shall not be made without approval of the Executive Officer.

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. 8518 attached hereto and incorporated herein by reference, 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. 8518 contains requirements, among others, specifying that 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 leachfield disposal system are impacting water quality. Submittal of a plan for monitoring groundwater, which is subject to the approval of the Executive Officer, is due by March 31, 2003.
- 2. The Discharger shall prepare a plan to upgrade the septic system to include secondary/supplementary treatment and disinfection to meet the effluent limits contained in sections B and C above in accordance with Time Schedule Order No. R4-2003-0030 adapted concurrently herewith. Upon approval of the plan by the Executive Officer, the Discharger shall construct the system upgrade.
- 3. The Discharger shall prepare a plan to deal with operational and maintenance problems experienced at the site in accordance with Time Schedule Order No. R4-2003-0030. The plan shall include measures to address storage capacity needed at the site, remote paging and response capabilities with onsite and remote alarms, and backup or auxiliary facilities/measures needed to prevent spills in the event of power failures.
- 4. The Discharger shall prepare a spill response plan with phone numbers available for complaints in accordance with Time Schedule Order No. R4-2003-0030.
- 5. The Discharger shall cause the treatment system to be inspected annually during the life of this Order by a professional inspector to be retained by the Discharger. National Sanitation Foundation standards should be applied where possible to the inspection. The inspector shall also specify the condition of the septic tanks and leachfields and corrections needed. The inspector should also assess the capacity of the septic/disposal system. The initial inspection shall be conducted pursuant to the schedule of Time Schedule Order No. R4-2003-0030. The Discharger shall

provide information regarding separation distance between groundwater and the leachfield and 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. 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 any failure of the disposal system.

- 6. The Discharger shall notify the Regional Board within 24 hours of any adverse condition resulting from the discharge of wastewater from MCM-I; written confirmation shall follow within one week. This information shall be confirmed in the next monitoring report. In addition, the report shall also include the reasons for the violations or adverse conditions, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.
- 7. The Discharger shall notify the Regional Board within 24 hours, by telephone, 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.
- 8. 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.
- 9. Any discharge of wastewater from the treatment system (including wastewater collection system) at any point other than a site with approved waste discharge requirements or specifically described in this Order is prohibited, and constitutes a violation of the Order.
- 10. After notice and opportunity for a hearing, this Order may be terminated or modified for cause 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.
- 11. 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.
- 12. The Discharger shall file a written report within 10 days with the Regional Board at such time as the average daily waste flow per month has reached or exceeded 80 percent of the recognized design flow capacity (currently 18,000 gpd) or conditions suggest that the hydraulic or treatment capacity for the septic system has been exceeded. The report shall detail proposed provisions to cope with excess flows.
- 13. The Discharger shall comply with all applicable requirements of chapter 4.5 (commencing with section 13290) of division 7 of the California Water Code.
- 14. Should monitoring data indicate contamination impacts to groundwater or discharge related violations of receiving water limitations, the Discharger shall submit, within 60 days after discovery 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.
- 15. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachement W) which are incorporated herein by reference. If there is any conflict between provisions stated herein and the "Standard Provisions," those provisions stated herein will prevail.
- 16. The WDRs 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 fifth-year anniversary date of the Order for consideration of issuance of new or revised waste discharge requirements. Any discharge of waste five years after the date of adoption of this Order, without filing an updated Report of Waste Discharge with 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.

- 17. In accordance with the Governor's Executive Order requiring any proposed activity be reviewed to determine whether such activity will cause additional energy usage, Regional Board staff have determined that implementation of these WDRs will result in increases in energy usage.
- 18. All discharges of waste into the waters of the State are privileges, not rights. In accordance with Water Code section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification.

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 January 30, 2003.

Dennis A. Dickerson

5. 1 D. K

Executive Officer





