State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

ORDER NO. R4-2010-00xx
(File No. 08-0101)

WASTE DISCHARGE REQUIREMENTS AND WATER RECYCLING REQUIREMENTS FOR TITLE 22 RECYCLED WATER

ISSUED TO

MALIBU LA PAZ RANCH LLC,

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

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PURPOSE OF ORDER

1. Malibu La Paz Ranch LLC. (hereafter Discharger) seeks to build about 100,000 square feet of offices, retail and restaurant facilities at 3700 La Paz Lane in the Civic Center area of Malibu (hereafter La Paz) on two to three parcels totaling 13 to 15 [1]acres (Figures 1,2 and Map 1). The facility will produce an average of 19,000 gallons per day (gpd) of effluent treated to Title 22 recycled water quality and will irrigate according to the Waste Discharge Requirements (WDR) and Water Recycling Requirements (WRR) Order R4-2010-00xx.

2. The Waste Discharge Requirements are proposed pursuant to California Water Code section 13263. They regulate the production of treated waste water and discharge to the subsurface via irrigation.

3. The Water Recycling Requirements are proposed pursuant to California Water Code section 13523. They prescribe the limits for the recycled water and the Discharger's responsibilities for the production, distribution, monitoring, and application of recycled water. The Discharger is also responsible for inspecting point-of-use facilities, and ensuring compliance with the water recycling requirements contained in this Order. The delivery of recycled water is subject to approval by the California Department of Public Health (DPH), and/or its delegated local health agency.

4. On February 4, 2010, Malibu La Paz Ranch, LLC received Waste Discharge Requirements Order No. R4-2010-022 Prohibiting Discharge to the groundwater from Malibu La Paz Ranch LLC at 3700 La Paz Lane, Malibu. The WDR states that it does not preclude the Board from issuing WDR/WRR, without prejudice, upon revision of the Report of Waste Discharge (ROWD). This tentative WDR/WRR is proposed because the ROWD has been modified to eliminate any discharge to the groundwater.

[1] The development on one of the parcels (Parcel C, APN #4458-022-025) of 2.3 acres is not included in this WDR/WRR. A development agreement was granted by the City of Malibu for municipal facilities on the parcel, but design details for the structure were not included in the ROWD.

BACKGROUND

5. The project site lies within Malibu Valley, 1,000 feet west of Malibu Creek, a half mile inland of the Pacific Ocean and a mile east of the coastal area designated by the State Water Resource Control Board (SWRCB) as Mugu Lagoon to Latigo Point Area of Special Biological Significance Number 24.

6. The site is located near Malibu Lagoon, and the Surfrider Beach. The SWRCB and the Regional Water Quality Control Board (Regional Board) designated Malibu Creek, Malibu Lagoon and Malibu Lagoon (Surfrider) Beach as impaired for coliform, nutrients (algae), scum/foam-unnatural; viruses, eutrophication, coliforms and swimming restrictions; and beach closures and coliforms, respectively, on the 2002 303(d) list[2]. The 2006 303(d) list included the same impairments, except that Malibu Creek, Malibu Lagoon and Surfrider Beach were placed on the List of Water Quality Limited Segments Being Addressed by United States Environmental Protection Agency (USEPA) Approved Total Maximum Daily Loads (TMDLs).

7. On January 24, 2002 and on December 12, 2002, the Regional Board adopted TMDLs for bacteria during dry and wet weather, respectively, into Santa Monica Bay which were amended to the Basin Plan. On December 13, 2004, the Regional Board also adopted a TMDL for bacteria in Malibu Creek and Lagoon as an amendment to the Basin Plan. On March 21, 2003, the USEPA promulgated a nutrient TMDL for Malibu Creek Watershed. This WDR/WRR considers the existing impairment of beneficial uses in these waterbodies adjacent to the site.

8. These WDR/WRRs have been written in order to preclude any changes in the elevation or quality of the groundwater. These restrictions are necessary because the Discharger reports irrigation may cause elevation of the groundwater table. Further, the water table intersects the ground surface, causing ponding, in the Malibu Civic Center on both sides of Pacific Coast Highway under critical conditions. And finally, the project is directly upgradient of existing subsurface disposal systems at Malibu Lumber, Malibu Country Marts I, II and III, Malibu Village, and the Malibu Professional Building, all of which have leachfields which require 5 feet of soil above the groundwater for additional effluent treatment and all of which have violated the requirements of their WDRs within the last five years.

9. Groundwater was consumed from Malibu Valley as recently as the 1960's and remains a potential drinking water source. The aquifer now contains nitrogen and pathogens at concentrations above drinking water limits.

10. Although other sources contribute to water quality impairments, unsuitable hydrogeologic conditions for subsurface disposal of wastewaters are a significant factor. The high water table in much of the area precludes consistent passive treatment of contaminants (in particular, pathogens and nitrogen) that are needed for successful operation of conventional septic systems. This limitation is further

[2] Federal Clean Water Act section 303(d) list of Water Quality Limited Segments.

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aggravated by the relative density of wastewater discharges in the Civic Center area, where many businesses, municipalities, and homeowners have little lateral space to spread their wastewater loads.

11. On November 5, 2009, the Regional Board adopted an Amendment to the Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties to Prohibit On-site Wastewater Disposal Systems in the Malibu Civic Center Area. Although the amendment has not yet been approved by the State Water Resource Control Board, it identifies a policy direction for this Regional Board. Malibu La Paz is within the prohibition boundaries and, along with all users, would be required to cease discharge through onsite wastewater discharge systems no later than November 5, 2019.

DESCRIPTION OF FACILITY AND TREATMENT PROCESS

12. The Discharger estimates that activities at the facilities will generate an average of 19,000 gpd of waste for application to landscaping. The site requires irrigation at a rate averaging 14,200 gallons per day (gpd) os waste and as much as 3.760 gpd of potable water. The peak flow of the plant is 24,870 gpd. If all of the discharge reaches the groundwater, it will increase liquid wastes in the Civic Center area (currently estimated to total 270,000 gpd) by about 10%. Indoor recycling (e.g. toilet recycling) may reduce the volume to be discharged through evaporation and reduce the volume of imported water required by the project. Outdoor recycling (e.g. irrigation)is expected to further reduce the discharge volume through evapotranspiration (ET).

13. The treatment system consists of grease interceptors and tanks which supply a pressurized treatment system. It also includes four filters (recirculating media filter, Nitrex denitrification filter, polishing filter, final pressure pre-filter). Storage will be with a 800,000 gallon segmented tank, with 350,000 gallons reserved for effluent which does not meet discharge requirements, 364,000 gallons for Title 22 Disinfected Tertiary Recycled Water for use and delayed recycled use and 86,000 gallons for contingency. Ozone disinfection and if necessary, ultraviolet disinfection and chlorination and dechlorination will be used during storage and building re-use and before irrigation.

14. Discharger's reclaimed water system includes storage of treated effluent, landscape irrigation on the property, toilet recycling and, possibly, delivery to recycled/reclaimed system users who have yet to be identified. In addition, during conditions where landscape and on-site recycling are not sufficient, a portion of the influent will be held in tanks for discharge to tankers that will truck the influent to a sanitary sewer. Written notice shall be given to the Executive Officer when this occurs. The areas of reuse are located within Malibu Valley Hydrologic Subunit.

15. The La Paz facility will produce tertiary treated and disinfected water containing total bacteria concentrations of 2.2 Most Probable Number (MPN)/100 milliliters (mL) as required by the California Department of Public Health (DPH). These bacteria concentrations are above the water quality objective of 1.1 MPN/100 mL in the Basin Plan for the protection of potential municipal and domestic supply beneficial use of

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groundwater in the Malibu Valley. Additional destruction of bacteria is anticipated during application of the recycled water to the landscape.

16. The filters at La Paz remove bacteria and nutrients but not salt. Without a salt management plan, irrigation with the effluent is reasonably expected to provide salt loading to the underlying groundwater. Leachate entering the groundwater may exceed the limits for Malibu Valley of 2,000 mg/L for total dissolved solids; 500 milligrams per liter(mg/L) for chloride; 500 mg/L for sulfate and 2 mg/L for Boron. Therefore, these limits shall be met before recycling. A facility-specific salt management plan shall be developed by the Discharger during their participation in the preparation of a Malibu Valley salt/nutrient management plan as required in Provision B.1.

17. The Facility design is for 100% recycling. However, if effluent cannot be discharged through irrigation or during system malfunction, storage is available. The Discharger predicts that low evapotranspiration rates will preclude irrigation for 20 days under critical conditions. In addition, the DPH requires an alternative disposal option during system malfunction including storage, discharge to the sewer and export out of the Malibu Valley groundwater basin. The storage capacity for effluent which does not meet discharge requirements is 350,000 gallons or about fourteen (14) days of maximum discharge.

APPLICABLE PLANS, POLICIES AND REGULATIONS

18. The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) on June 13, 1994, and amended by various Regional Board resolutions. This updated and consolidated plan represents the Board's master quality control planning document and regulations. 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 (existing and potential) beneficial uses and conform to the State's antidegradation policy, and (iii) includes implementation provisions, programs, and policies to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations.

19. Table 2-2 on Page 2-17 of the Basin Plan identifies the beneficial uses of the Malibu Valley Groundwater Basin are potential municipal and industrial supply, and existing agricultural supply.

20. The requirements contained in this Order are in conformance with the goals and objectives of the Basin Plan and implement the requirements of the California Water Code and Water Recycling Criteria and Policy.

21. The Discharger proposes to use recycled water for irrigation on landscape at the facility. Future uses might include disposal to parks, golf courses, freeway landscapes, school yards, cemeteries, other landscaped or agricultural areas, other industrial uses, and recreational impoundments. All these reuse applications could

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affect the health, safety, and welfare of the public; therefore requirements are necessary.

22. The Discharger had prepared an engineering report on its proposed production, distribution, and use of recycled water for irrigation as required by section 60323 of title 22, California Code of Regulations (CWC). On July 23, 2009, the DPH issued conditional approval of the engineering report and provided the Regional Board with comments and recommendations on the Discharger's recycling project.

23. Pursuant to California Water Code section 13523, the Regional Board has consulted with the DPH regarding the proposed recycling project and has incorporated their recommendations in this Order.

24. Additional criteria are codified in title 22, California Code of Regulations, Chapter 3 Water Recycling Criteria, including such requirements as Sources of Recycled Water, Uses of Recycled Water, and Use of Area Requirements. The DPH adopted revised Water Recycling Criteria that became effective on March 20, 2001. Applicable criteria are prescribed in this Order.

25. On February 3, 2009, the State Water Resource Control Board (SWRCB) adopted Resolution No. 2009-011 directing the adoption of the Recycled Water Policy, approved by the Office of Administrative Law on May 14, 2009. On July 7, 2009, the SWRCB also adopted General Waste Discharge Requirements of Landscape Irrigation of Municipal Recycled Water in Order No. 2009-0006-DWQ. In addition, the SWRCB convened an advisory panel on May 4, 2009, to evaluate Constituents of Emerging Concern and evaluate the need for future revisions of the Recycled Water Policy.

26. Executive Officer Dorothy Rice directed the Regional Boards to comply with her August 28, 2009 memo which specified the provisions to be included in landscape irrigation projects such as this WDR/WRR.

27. The Recycled Water Policy directs the dischargers to develop a salt management plan for additional loading of total dissolved solids, chloride, sulfate and boron to groundwater basins, like Malibu Valley, through recycled water use via irrigation by February 3, 2014, if the Dischargers are making substantial progress towards a watershed–wide plan, and the groups may have up to February 3, 2016. Malibu La Paz is required to participate in the development of a salt/nutrient management plan for Malibu Valley and comply with any of the monitoring and reporting requirements in that plan. A facility-specific salt management plan shall be submitted according to the requirements of the Recycled Water Policy, but no later than February 3, 2016.

28. CWC section 13523.5 on water recycling requirements states that a Regional Board may not deny issuance of water recycling requirements to a project that violates only a salinity standard in a basin plan. In 1985, soon after this provision was added to the Water Code, the State Board Office of Chief Counsel issued a legal opinion concluding that this provision does not apply to waste discharge requirements. Hence, waste discharge requirements for recycled water projects may contain

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effluent and other limitations on discharges of salts as necessary to meet water quality objectives, comply with the Antidegradation Policy, or otherwise protect beneficial uses.

CEQA AND NOTIFICATION

29. The Discharger prepared a "Final Supplemental Environmental Impact Statement/Environmental Impact Report (EIS/EIR)" approved by the City of Malibu, on November 10, 2008 (SCH No. 2003011131). No significant adverse impacts on ground water quality were identified in the EIS/EIR as a result of proposed irrigation projects.

30. The Title 22 recycled water project is the use of tertiary treated and disinfected effluent, produced by La Paz, as recycled water in conformance with DPH regulations and the Regional Board's Basin Plan. The Regional Board is a CEQA responsible agency for the project and has reviewed the EIS/EIR, made recommendations for revision, and concludes that based on substantial evidence set forth in the EIS/EIR that there will be no adverse impact on the environment that cannot be mitigated

31. Pursuant to the 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: State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95812, within 30 days of adoption.

32. The Regional Board has notified the Discharger and interested agencies and persons of its intent to issue Waste Discharge Requirements and Water Recycling Requirements Order No. R4-2010-XX for the production, distribution and use of tertiary treated and disinfected effluent used as recycled water, and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to these Waste Discharge and separate Water Recycling Requirements.

IT IS HEREBY ORDERED that the Discharger shall comply with the following:

A. PRETREATMENT REQUIREMENTS

1. Pretreatment Education: Discharger shall provide documentation that they have taken steps to prevent chemicals added to the water by activities at Malibu La Paz (such as plumbing agents, cleaning agents and cosmetic/grooming products) from interfering with biological processes in the treatment system. The Discharger and operator shall control chemical additives in the influent through the education of tenants and customers to minimize the presence of pollutants of concern in the wastewater stream and violation of the effluent limits.

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a. Occupants of the property shall be notified by the Dischargers that they are responsible for eliminating influent waste from garbage disposals, every-flush toilet bowl cleaners, grease, and cleaning products.

b. Volatile organic compounds, such as those found in gasoline, solvents, and cosmetic products (including hair, nail and skin -care and treatment products), shall not be discharged into the disposal system.

c. Paints, anti-freeze, industrial chemicals and hazardous materials shall not be discharged to the treatment plant, but sent to a local recycling or hazardous waste collection program.

d. Discharge of chlorine-treated water from pools, water features, and tanks and pharmaceuticals may cause the system to produce water quality that may not meet effluent limits and shall not be discharged.

e. Documentation of the pretreatment educational materials and/or lease provisions shall be included in a report on water conservation and recycling/recycling to be provided within 30 days of adoption of this Order.

2. Restaurant Waste Management: The Dischargers shall provide;

a. A summary of the adequacy of the capacity and design of the Best Management Practices (BMPS) to trap and manage fats, oils, and grease before entering the treatment system, and

b. Documentation of the operation and maintenance plan for all restaurants and food services establishments with a report on restaurant waste management within 30 days of adoption of this order.

3. Water Conservation: Water conservation technology and practices shall be used by tenants and customers to decrease the addition of potable water to Malibu Valley Groundwater Basin and the impact on the water balance. The reduction in water consumption shall be predicted and quantified in the Water Conservation Report, which shall include the number and flow standards of all plumbing fixtures and water usage assumptions, submitted within 30 days of adoption of this Order, and updated annually.

B. INFLUENT REQUIREMENTS

1. Monitoring Point: The influent flow to the treatment system shall be sampled by mechanical means before the waste stream enters the Malibu La Paz treatment system.

2. Potable water: The potable water supply shall be reported monthly in gallons. The potable flow used for irrigation shall be measured daily in gallons by mechanical means and reported monthly.

3. Domestic Waste: Influent waste shall be limited to domestic-commercial wastewater only. No water softener or garbage disposal discharge is allowed into the collection systems that flow to the treatment unit.

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C. EFFLUENT REQUIREMENTS

1. Monitoring Point: The effluent shall be sampled and effluent requirements shall apply (a) as effluent leaves the disinfection system and (b) before discharge to the recycled/reclaimed system if the effluent is stored for more than 72 hours.

2. Effluent daily flows shall be measured mechanically with an in-stream flow meter in gallons (a) after treatment and (b) before discharge to the recycled/reclaimed system.

3. The gallons of effluent produced, stored and recycled shall be recorded daily and reported monthly with sufficient description and graphical representation that it shall demonstrate and quantify the efficiency of the recycling system, record the quality and length of storage of effluent. Treated and untreated effluent and potable water shall not be stored in the same container.

4. The tertiary treated and disinfected effluent discharged from the disinfection system and used as recycled water shall not contain constituents with concentrations exceeding limits listed in Table P1.

5. Oxidation: The recycled water shall, at all times, be adequately oxidized. The recycled water shall be considered adequately oxidized when it meets the following characteristics:

    a. The monthly average Biochemical Oxygen Demand value (BOD_5 20^0C) does not exceed 20 mg/L. Compliance shall be determined monthly using the average of the analytical results of all 24-hour composite samples taken at least weekly during the month.

    b. The monthly average Total Suspended Solids (TSS) concentration does not exceed 15 mg/L. Compliance shall be determined monthly using the average of the analytical results of all 24-hour composite samples taken daily during the month.

    c. The Total Organic Carbon (TOC) concentration does not exceed 16 mg/L for more than two consecutive days, based on 24-hour composite samples taken daily.

Table P1 – Concentrations of Constituents in Tertiary-Treated and Disinfect Effluent				
Constituents	**Units**	**30-Day Average**	**7-Day Average**	**Daily Maximum**
Oil and grease	Mg/L	10	---	15
Total dissolved solids	Mg/L	---	---	2,000[1]
Chloride	Mg/L	---	---	500[1]
Sulfate	Mg/L	---	---	500[1]
Boron	Mg/L	---	---	2[1]
Total Nitrogen	Mg/L	---	---	10[1]
Nitrate-Nitrogen plus Nitrite-Nitrogen	Mg/L	---	---	10[1]
Nitrate	Mg/L	---	---	45[1]
Nitrite-Nitrogen	Mg/L	---	---	1[1]
Nitrate-Nitrogen	Mg/L	---	---	10[1]
Total Coliform	MPN/100 mL	---	---	2.2 [2]

Footnote:

[1]. this is a Ground Water Quality Objective in the Basin Plan.

[2]. this is a maximum total coliform limit for Title 22 Tertiary treated and disinfected water.

6. Turbidity: The turbidity of the effluent water prior to disinfection shall not exceed 0.2 NTU more than 5 percent of the time within a 24-hour period and 0.5 at NTU at any time. The turbidity shall be continuously measured with at least one reading every 4 hours and recorded. When the turbidity requirements are exceeded, delivery of recycled water shall be suspended until such time the cause of the exceedance has been identified and corrected. The Dischargers shall notify the Regional Board and submit a report according to this Order.

7. Narrative Limits: The wastewater discharged to the disposal system shall not contain salts, metals, nitrogen and phosphorous species, organic chemicals, or priority pollutants at levels that would impact groundwater or surface water that may be in hydraulic connection with groundwater.

D. GROUNDWATER REQUIREMENTS

1. No Groundwater Impact: The facility is prohibited from altering the quality or elevation of the underlying groundwater of Malibu Valley.

2. Irrigation Impact: The irrigation operation and monitoring plan, which must be approved by the Executive Officer, shall be applied at agronomic rates and shall include equipment to provide daily testing of the depth of soil moisture during irrigation to ensure no discharge to the groundwater.

3. The Discharger must demonstrate the presence of a liquid-free vadose zone during landscape watering to verify that discharge is at agronomic rates.

4. Groundwater Monitoring: Monitoring of the groundwater for water quality parameters limited in the effluent and for the elevation of the water table shall take place according to the requirements of the salt/nutrient management plan, but the facility-specific portion of the plan shall include at least one upgradient and one downgradient well with quarterly testing.

E. RECYCLED WATER REQUIREMENTS

1. Total Coliform: Recycled water shall be, at all times, adequately disinfected such that the number of total coliform bacteria shall not exceed any of the following, based on daily grab samples:

    a. A 7-day median of 2.2 MPN per 100 ml. In the event of failure to meet the 7-day median coliform requirement for two consecutive days, the Discharger shall suspend delivery of recycled water until such time the cause of the failure has been identified and corrected.
    b. 23 MPN per 100 ml in any sample prior to delivery of recycled water. In the event of failure to meet this requirement, the Discharger shall suspend delivery of recycled water until such time the cause of the failure has been identified and corrected.

2. Chlorine Disinfection: If chlorine disinfection is used, chlorine disinfection shall provide a concentration-time (CT) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on a design flow of 5 mgd. The CT is the product of total chlorine residual and modal contact time measured at the same period. The modal contact time is the amount of time that elapsed between the time that a tracer, such as salt or dye, is injected into the influent at the entrance of the chlorination chamber and the time that the highest concentration of the tracer is observed in the effluent from the chamber.

    c. For purposes of calculating and demonstrating compliance with the CT requirement, the Dischargers conducted tracer studies under flow rates of 2.5 mgd and 5.0 mgd to determine the respective modal contact time at the chlorine contact basin. The studies followed the protocol outlined in Tracer Studies in Water Treatment Facilities: A Protocol and Case Studies published by the American Water Works Association Research Foundation, 1996. The Regional Board received a final report on the tracer studies on October 18, 2002. The report indicated modal contact times of 300 and 150 minutes for flows of 2.5 and 5 mgd, respectively.

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d. In the event the treatment operation is changed to produce recycled water at flow rates other than 2.5 and 5 mgd, tracer studies shall be conducted to develop a curve for use in estimating the contact times at various flow rates.

3. pH: The pH of the recycled water shall be, at all times, within the range of 6.5 to 8.5 pH units.

4. Priority Pollutants: Priority Pollutants listed in Attachment A-1 to A-7 shall not be discharged in concentrations which exceed the more restrictive of the California Chronic Toxicity Rule or Federal Maximum Contaminant Limits or that adversely affect the beneficial uses of the receiving groundwater or exceed recycled water requirements. The chemicals shall be monitored twice yearly.

5. Constituents of Emergent Concern (CEC): CECs, listed in Attachment X, shall be monitored annually. The Executive Officer may add or delete chemicals from this list as this is an area of rapidly changing science. The Executive Officer may also make revisions to analytical methods as needed. More specific requirements are expected as an outcome of the advisory panel efforts being conducted per the Recycled Water Policy.

6. Taste or Odor: The recycled water shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect the beneficial uses of the receiving groundwater.

7. The recycled water shall not cause a measurable increase in organic chemical contaminants in the groundwater.

F. ALLOWABLE USES OF RECYCLED WATER

1. The disinfected tertiary treated recycled water may be used for surface irrigation in the following:

   a. Parks;
   b. Residential and freeway landscaping;
   c. Unrestricted access golf courses; and
   d. Other allowable irrigation applications specified in the Water Recycling Criteria, Chapter 3, Title 22, CCR, provided approval from DPH and Regional Board Executive Officer are obtained prior to delivery.
   e. Industrial or commercial cooling tower;
   f. Industrial boiler feed, and
   g. Recreational Impoundments.

2. The recycled water shall not be used other than those specified above unless an engineering report has been submitted for such other uses and/or requirements for these uses have been prescribed by this Regional Board, in accordance with section 13523 of the California Water Code.

3. Recycled water shall not be used for direct human consumption or for the processing of food or drink intended for human consumption.

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4. The delivery of recycled water to end-users shall be subject to DPH approval and/or its delegated local agency.

G. USE AREA REQUIREMENTS

Use area is an area of recycled water use with defined boundaries, which may contain one or more facilities where recycled water is used.

The Discharger shall be responsible to ensure that all users of recycled water comply with the following:

1. All use areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER – DO NOT DRINK". Each sign shall display an international symbol to alert people who do not read English.

2. No physical connection shall be made or allowed to exist between any recycled water piping and any piping conveying potable water, except as allowed under section 7604 of title 17, California Code of Regulations.

3. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibbs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.

4. Recycled water use shall not result in earth movement in geologically unstable areas.

5. No impoundment of disinfected recycled water shall occur within 100 feet of any domestic water wells, potable water reservoirs, and streams used as sources of water supply.

6. No irrigation areas with recycled water shall be located within 50 feet of any domestic water supply well unless all of the following conditions have been met:

    a. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface;

    b. The well contains an annular seal that extends from the surface into the aquitard;

    c. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities;

    d. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well; and,

    e. The owner of the well approves of the elimination of the buffer zone requirement.

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7. No irrigation shall take place within 50 feet of any reservoir or stream used as a source of domestic water.

8. Use of recycled water shall comply with the following

   a. Recycled water shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions.

   b. Special precautions must be taken to: prevent clogging of spray nozzles, prevent over-watering, and minimize the production of run-off. Pipelines shall be maintained so as to prevent leakage;

   c. Irrigation at agronomic rates shall be confirmed through the use of equipment for the measurement of soil moisture at depth, daily during the weeks when recycled water is applied, to demonstrate application is complying with the agronomic rate required by the Recycled Water Policy.

   d. Any irrigation runoff shall be confined to the recycled water use area and shall not be allowed to escape as surface flow, unless the runoff does not pose a public health threat and is authorized under a National Pollutant Discharge Elimination System (NPDES) permit issued by this Regional Board. For the purpose of this requirement, however, minor amounts of irrigation return water from peripheral areas shall not be considered a violation of this Order;

   e. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities, and shall not contact any drinking water fountain; and,

   f. Recycled water shall not be used for irrigation during periods of rainfall and/or run-off.

   g. Recycled water used for irrigation shall not be allowed to run off into any surface water body.

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H. REQUIREMENTS FOR DUAL PLUMBED SYSTEM

1. The public water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected by an air gap separation that complies with the requirements of section 7602 (a) and 7603 (a) of title 17, California Code of Regulations.

2. The Discharger shall not deliver recycled water to a facility using a dual plumbed system unless the report required under section 13522.5 of the Water Code, which meets the requirements set forth in section IV.8 and/or IV.9., has been submitted to, and approved by, the Executive Officer and DPH.

3. The Discharger shall submit to the DPH pursuant to section 13522.5 of the Water Code, information for dual plumbed systems, in addition to the information required by

section 60323 of title 22 of the California Code of Regulations: A detailed description of the intended use site shall identify the following:

a. The number, location, and type of facilities within the use area proposing to use dual plumbed systems;

b. The average number of persons estimated to be served by each facility on a daily basis;

c. The specific boundaries of the proposed use site including a map showing the location of each facility to be served;

d. The person or persons responsible for operation of the dual plumbed system at each facility; and

e. The specific use to be made of the recycled water at each facility.

f. Plans and specifications describing the following:

g. Proposed piping system to be used;

h. Pipe locations of both recycled and potable systems.

1. Type and location of the outlets and plumbing fixtures that shall be accessible to the public; and

2. The methods and devices to be used to prevent backflow of recycled water into the public water system.

3. The methods to be used by the Discharger to assure that the installation and operation of the dual plumbed system shall not result in cross connections between the recycled water piping system and the potable water piping system. These shall include a description of pressure, dye or other test methods to be used to test the system every four years.

6. Prior to the initial operation of the dual-plumbed recycled water system and annually thereafter, the dual plumbed system within each facility and use site shall be inspected for possible cross connections with the potable water system. The recycled water system shall also be tested for possible cross connections at least once every four years. The testing shall be conducted in accordance with the method described above. The inspections and the testing shall be performed by a cross connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. A written report documenting the result of the inspection and testing for the prior year shall be submitted to the DPH within 30 days following completion of the inspection or testing.

7. The Discharger shall notify the DPH of any incidence of backflow from the dual-plumbed recycled water system into the potable water system within 24 hours of discovery the incident.

8. Any backflow prevention device installed to protect the public water system serving the dual-plumbed recycled water system shall be inspected and maintained in accordance with section 7605 of title 17, California Code of Regulations.

I. PROVISIONS

1. Salt Management Plan: A facility-specific salt management plan shall be submitted according to the requirements of the Recycled Water Policy, but no later than February 3, 2016. While a basin-wide salt management plan is under development, the Discharger will actively participate in its development and may perform project specific monitoring. In addition to actively participating in the development of a basin-wide salt/nutrient management plan, the Discharger will also implement that plan including requirements for basin/sub-basin monitoring. The facility specific salt/nutrient management plan must be consistent with Groundwater Requirements D.4.

2. Title 22 Approval: Final approval of a complete Title 22 Engineering Plan, with plumbing design, shall be approved by DPH before recycled/reclaimed water use begins.

3. Irrigation Operation and Management Plan: The irrigation project shall be subject to an operations and management (O&M) plan that describes agronomic rates and describes a set of reasonably practicable measures to ensure compliance with this requirement, which may include the development of water budgets for use areas, site supervisor training, periodic inspections and the use of smart controllers or other appropriate measures. The irrigation system shall include equipment for the regular measurement of soil moisture at depth to demonstrate application is complying with the agronomic rate required by the Recycled Water Policy and consistent with the Groundwater Requirements D.4. The Irrigation O&M manual shall be submitted for approval by the Executive Officer before discharge.

4. Operation and Maintenance Manual: The Dischargers shall submit to the Regional Board an Operations and Maintenance Manual (O&M Manual) for the treatment plant and disposal facilities for approval by the Executive Officer before discharge. The Dischargers shall maintain the O&M Manual in useable condition, and available for reference and use by all personnel. The Dischargers shall regularly review, and revise or update as necessary, the O&M Manual(s) in order for the document(s) to remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary and submitted to the Regional Board on an annual basis. The O&M shall include a preventive (fail-safe) procedure and contingency plan for controlling accidental discharge and/or delivery to users of inadequately treated wastewater.

5. Disinfection Manual: The ozone, ultra-violet and chlorine disinfection system and

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filtration systems require additional operational supervision and maintenance to ensure successful operation at flow ranging from no-flow to the maximum flow. The Discharger shall submit an O&M Manual for these systems, which the Executive Officer determines is sufficiently detailed, before discharge, and kept on site. The treatment plant maintenance and operation shall comply with the National Water Research Institute/American Water Works Association Research Foundation Ultra Violet Disinfection Guidelines.

6. Water Conservation Report: The Dischargers shall provide an annual report regarding water conservation and water recycle/recycling measures implemented, describing the operation and maintenance of the water conservation equipment and variations in potable, influent and effluent water flows. The first report is due 30 days after approval of this Order, shall be updated annually and shall include documentation of pre-treatment education, the method of attaining the recycle and storage capacities, and the maintenance or operational protocol established to enforce additional water conservation or storage measures when discharge is not possible.

7. CEC Monitoring: Monitoring for CEC shall take place annually. This WDR/WRR may be reopened to allow the incorporation of appropriate monitoring requirements for CECs after State Board action under Recycled Water Policy paragraph 10 (b) (2) and as described above in Recycled Water Requirements E.9.

8. TMDL Compliance: The Regional Board has amended a Total Maximum Daily Load (TMDL) for bacteria in the Malibu Creek and Lagoon to the Basin Plan. USEPA has completed a TMDL for nutrients in Malibu Creek and Lagoon. The Dischargers shall comply with waste load allocations developed and approved pursuant to the TMDL for the area. The Regional Board may require that the Dischargers meet pathogen or nutrient limits stricter than those imposed in this Order.

9. Recycled Water Policy: The Discharger shall comply with the requirements set forth in SWRCB Executive Director Dorothy Rice's memo of August 28, 2009 requiring the Regional Board to comply with the Recycled Water Policy, including the following specific requirements;

    a. The facility shall control incidental runoff as defined in Recycled Water Policy 7(a.1-4) and as described above.

    b. A finding of unusual circumstanceshas not been made for Malibu Valley where this project is located. Should the Regional Board determine that such circumstances exist; the Regional Board may choose to revise this WDR/WRR which is based on compliance with the Recycled Water Policy.

    c. Recycled water use must Comply with CCR Title 22 Water Recycling Requirements and any recommendations by the California Department of Public Health pursuant to Water Code section 13523

    d. Irrigation water must be applied in agronomic rates. Specifically, each irrigation project shall be subject to an operations and management plan that

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describes agronomic rates and describes a set of reasonably practicable measure to ensure compliance with this requirement, which may include the development of water budgets for use areas, site supervisor training, periodic inspections and the use of smart controllers or other appropriate measures.

e. The Facility must comply with any applicable salt and nutrient management plan.

f. The Discharger must document the appropriate use of fertilizer that takes into account the nutrient levels in the recycled water.

i. Priority Pollutants (Attachment A) must be monitored twice per year.

ii. Chemicals of Emergent Concern (Attachment B) shall be monitored once per year no sooner than November 14, 2010, unless otherwise requested by the DPH, as per the requirements of the Recycled Water Policy.

10. Treatment Plant As-Builts: The Dischargers shall submit a final engineering report for the treatment plant, collection system, discharge systems, including the 'as built' engineering diagrams, to the Executive Officer within 30 days of the beginning of discharge.

11. Reduction of Impairments: The State Water Resource Control Board (SWRCB) and the Regional Board designated Malibu Creek, Malibu Lagoon and Malibu Lagoon (Surfrider) Beach as impaired for coliform, swimming restrictions; and beach closures on the 2002 303d list. The discharge from this facility, and resultant changes in discharge from adjacent facilities, shall not cause continuing impairment of beneficial uses in the waterbodies adjacent to the site.

12. Inspection: the Discharger shall cause the treatment and disposal system to be inspected once every year during the life of the permit by an inspector to be retained by the Dischargers.

13. Monitoring and Reporting Program (MRP) Precedence: This Order includes the attached MRP. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the Monitoring and Reporting Program prevail.

14. Standard Provisions: This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements". If there is any conflict between provisions stated hereinbefore and said "Standard Provisions", the WDR provisions stated hereinbefore prevail.

15. Copy: A copy of these requirements shall be maintained at the water recycling facility so as to be available at all times to operating personnel. The Discharger shall furnish each purveyor and user of recycled water a copy of these requirements and ensure that the requirements are maintained at the purveyor and user's facilities so as to be available at all times to operating personnel.

16. Proper Operation: The Discharger shall, at all times, properly operate and maintain all treatment facilities and control systems (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance includes: effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls (including appropriate quality assurance procedures).

17. Notification: For any violation of requirements in this Order, the Discharger shall notify DPH and Regional Board staffwithin 24 hours of knowledge of the violation either by telephone or electronic mail. This notification shall be followed by a written report within 5 working days of notification, unless otherwise specified in this Order. The report shall include, but is not limited to, the following information, as appropriate:

    a. Nature and extent of the violation;
    b. Date and time: when the violation started, when compliance was achieved; and, when delivery was suspended and restored, as applicable.
    c. Duration of violation;
    d. Cause/s of violation
    e. Corrective and/or remedial actions taken and/or shall be taken with time schedule for implementation; and
    f. Impact of the violation.

18. Certification: Supervisors and operators of the wastewater recycling facility shall possess a certificate of appropriate grade as specified in title 23, California Code of Regulations, section 3680 or subsequent revisions.

19. In accordance with section 13522.5 of the California Water Code, and title 22, section 60323 of the California Code of Regulations, the Discharger shall file an engineering report, prepared by a properly qualified engineer registered in California, of any material change or proposed change in character, location or volume of the recycled water or its uses to the Regional Board and to the DPH. Material change includes the failure to use the permitted discharge system for the majority of the effluent.

20. For any extension or expansion of the recycled water system or use areas, the Discharger shall submit a report detailing the extension or expansion plan for approval of the DPH. Following construction, as-built drawings shall be submitted to the DPH for approval prior to delivery of recycled water. The Executive Officer shall be furnished with as-built drawings and a copy of the DPH approval. Expansion of the recycled water system requires the existing system to be in compliance and the approval of the Executive Officer.

21. The Discharger shall notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of ownership and/or operation of the recycling facility and responsibility for complying with this Order. The notice shall include a written agreement between the existing and new recycled water producer indicating the specific date for the transfer of responsibility for compliance with this Order. The agreement shall include an acknowledgement that the Discharger is liable for any

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violations that occurred up to the transfer date and the new recycled water producer is liable from the transfer date on.

22. The Discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

    a. Enter upon the Discharger' premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order.

    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

    d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any location.

23. The Discharger must comply with all conditions of these water recycling requirements. Violations may result in enforcement actions, including Regional Board orders or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these requirements.

24. These requirements do not exempt the Discharger from compliance with any other laws, regulations, or ordinances that may be applicable; they do not legalize the recycling and use facilities; and they leave unaffected any further constraint on the use of recycled water at certain site/s that may be contained in other statutes or required by other agencies.

25. The provisions of these water recycling requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

26. In an enforcement action, it shall not be a defense by the Discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the Discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost.

27. After notice and opportunity for a hearing, this Order may be modified, revoked and reissued, or terminated for cause, which include but is not limited to: failure to comply with any condition of in this Order; endangerment of human health or environment resulting from the permitted activities in this Order; obtaining this Order

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by misrepresentation or failure to disclose all relevant facts; acquisition of new information that could have justified the application of different conditions if known at the time of Order adoption.

28. The filing of a request by the Discharger for modification, revocation and reissuance, or termination of the Order; or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

29. The Discharger shall furnish, within a reasonable time, any information the Regional Board or the DPH may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish the Regional Board, upon request, with copies of records required to be kept under this Order.

J. PROHIBITIONS

1. Sewer Connection: Effluent which cannot be stored or used for irrigation or which results from system upset must be discharged to a centralized facility to be constructed by the City of Malibu after 2015.

2. Limited Discharge: There shall be no direct or indirect discharge of wastes to groundwater or surface water, Waters of the State, at any time other than specified by this WDR/WRR.

3. Waste Characteristics: Wastes discharged shall not impart tastes, odors, color, foaming or other objectionable characteristics to the receiving groundwater.

4. Stormwater protection: Adequate facilities shall be provided to divert surface and stormwater away from the treatment plant and disposal system and form areas where any potential pollutants are stored.

5. Freeboard: Adequate freeboard and/or protection shall be maintained in the recycled water storage tanks and process tanks to ensure that direct rainfall shall not cause overtopping.

6. Sludge: 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.

7. Odors: Sewage odors shall not be detectable. The close proximity of the property to other businesses mandates mechanical filtering of fumes through filters where vacuum seals are least reliable. Sufficient technological remedies exist to prevent odor discharge from the treatment and disposal system at all times. Odor complaints, even if made by the public and not detected by the operator, are considered indicative of improper operation. Multiple odor complaints are

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considered indicative of a preventable nuisance which has not been remedied by the Dischargers.

8. Nuisance: The discharge of waste shall not create a condition of pollution, contamination, or nuisance. It shall not be considered an excuse that the property is in close proximity to other businesses as this treatment process has been selected for this site by the Dischargers.

9. Noncompliant waste: Any wastes that do not meet the foregoing requirements shall be held in impervious containers and discharged at a legal point of disposal.

10. Bypass (the intentional diversion of waste stream from any portion of a treatment facility) is prohibited. The Regional Board may take enforcement action against the Dischargers for bypass unless:

    a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that cause them to become inoperable, or substantial and permanent loss in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production);

    b. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance. This condition is not satisfied because of failure to design, permit or install a recycled/reclaimed water system for operation when discharge exceeds the groundwater assimilation capacity.

    c. The Dischargers must submit written notice at least 24 hours in advance of the need for a bypass to the Regional Board Executive Officer.

11. Pumping waste from the treatment system for purposes other than emergencies and regularly scheduled maintenance, indicates loss of system performance, and is also prohibited.

12. Term: This Order shall 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 5 years, the Discharger must file a Report of Waste Discharge with the Regional Board no later than 120 days in advance of the 5th-year anniversary date of the Order for consideration of issuance of new or revised requirements. Any discharge of waste five years after the date of adoption of this Order, without filing a Report of Waste Discharge with this Regional Board, is a violation of Water Code section 13264. The Regional Board is authorized to take appropriate enforcement action for any noncompliance with this provision including assessment of penalties.

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K. EFFECTIVE DATE OF THE ORDER

This Order takes effect upon its adoption.

I, Samuel Unger, Interim 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 July 8, 2010.

_____

Samuel Unger
Interim Executive Officer

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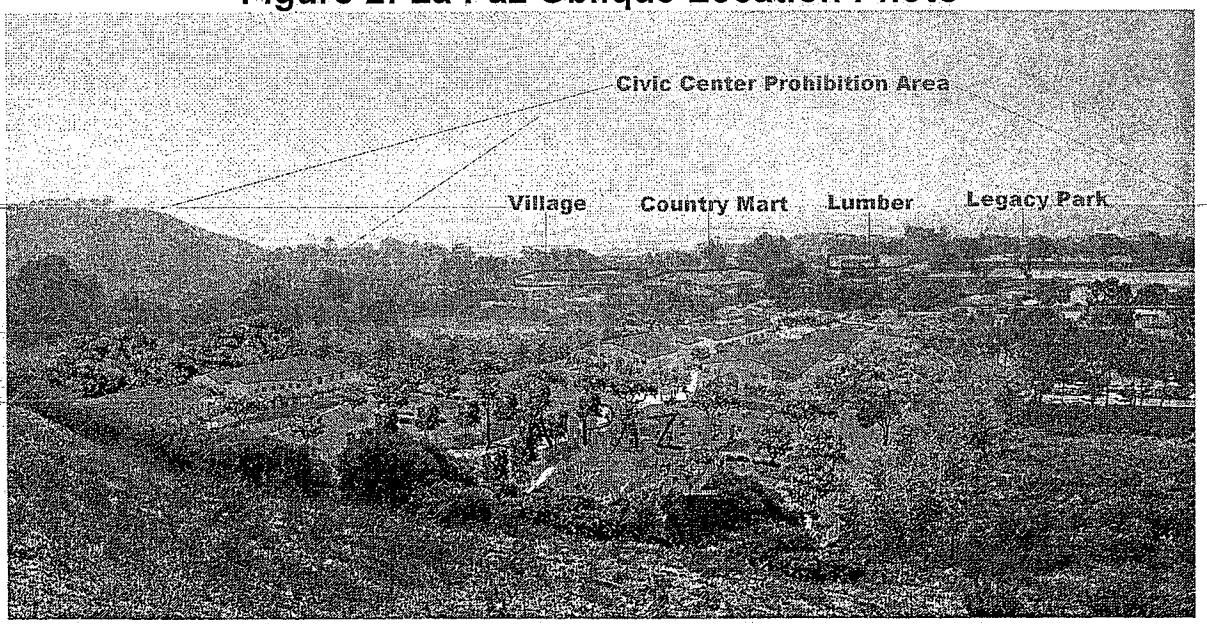
Figure 1: La Paz Location Photo

Figure 2: La Paz Oblique Location Photo



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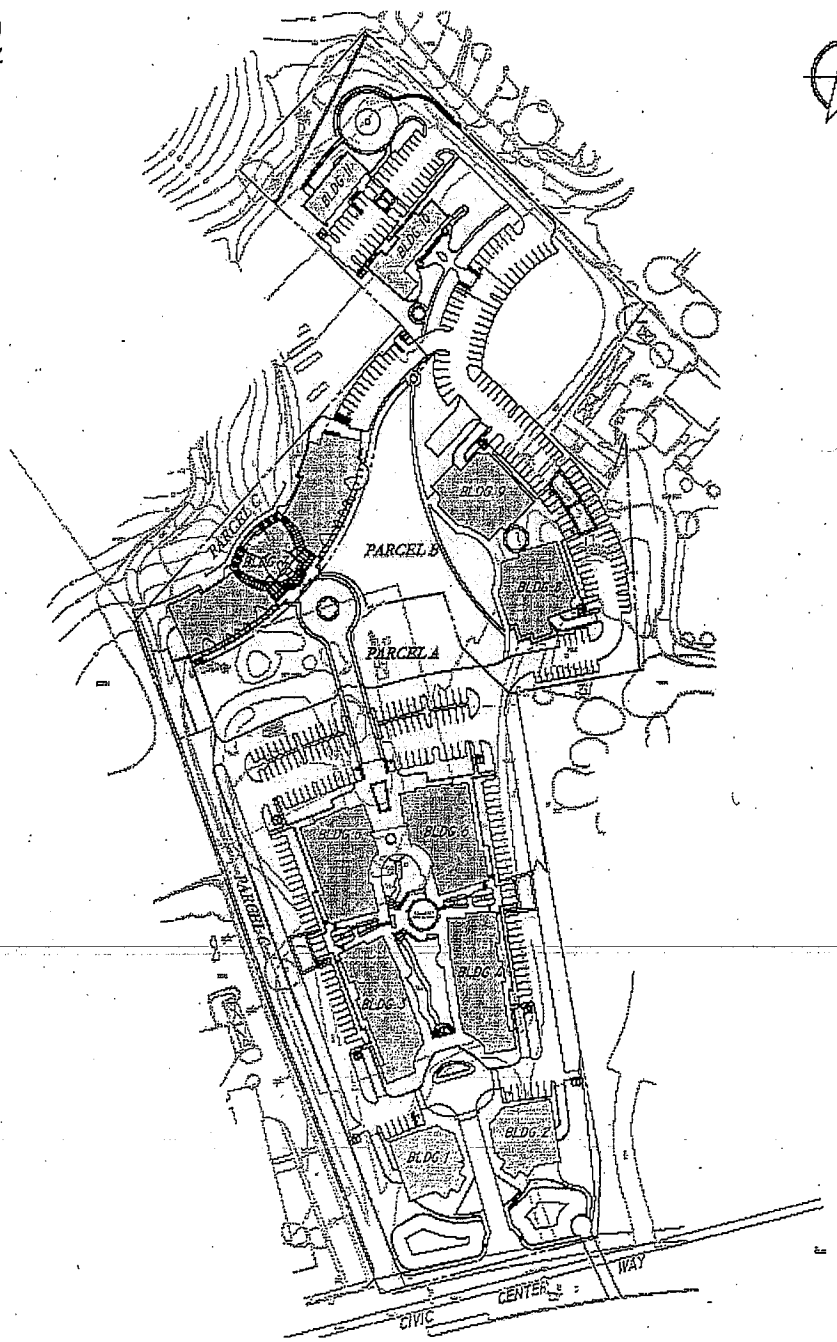
MAP 1: La Paz

FIGURE 2.1. - SITE PLAN - MALIBU LA PAZ DEVELOPMENT, MALIBU, CA - PREFERRED PLAN

MALIBU
LA PAZ



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Attachment A-1

Table 64431-A – Inorganic Chemicals*	
Chemical	**Maximum Contaminant Levels (mg/L)**
Aluminum	1
Antimony	0.006
Arsenic	0.05
Asbestos	7 MFL**
Barium	1
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.15
Mercury	0.002
Nickel	0.1
Nitrite (as nitrogen)	1
Selenium	0.05
Thallium	0.002
Fluoride	2

California Code of Regulation (CCR) Title 22, Section 64431
**MFL = million fibers per liter; MCL for fibers exceeding 10μm in length.

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Attachment A-2

Table 4 – Radioactivity*	
Chemical	**Maximum Contaminant Levels (pCi/L)**
Combined Radium-226 and Radium-228	5
Gross Alpha Particle Activity (Including Radium-226 but Excluding Radon and Uranium)	15
Tritium	20,000
Strontium-90	8
Gross Beta Particle Activity	50
Uranium	20

California Code of Regulation (CCR) Title 22, Section 64443
*Last update: September 12, 2003.

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Attachment A-3

Table 64444-A – Organic Chemicals*	
Chemical	**Maximum Contaminant Levels (mg/L)**
(a) Volatile Organic Chemicals	
Benzene	0.001
Carbon Tetrachloride (CTC)	0.0005
1,2-Dichlorobenzene	0.6
1,4-Dichlorobenzene	0.005
1,1-Dichloroethane	0.005
1,2-Dichloroethane (1,2-DCA)	0.0005
1,1-Dichloroethene (1,1-DCE)	0.006
Cis-1,2-Dichloroethylene	0.006
Trans-1,2-Dichloroethylene	0.01
Dichloromethane	0.005
1,2-Dichloropropane	0.005
1,3-Dichloropropene	0.0005
Ethylbenzene	0.3
Methyl-tert-butyl-ether (MTBE)	0.013
Monochlorobenzene	0.07
Styrene	0.1
1,1,2,2-Tetrachloroethane	0.001
Tetrachloroethylene (PCE)	0.005
Toluene	0.15
1,2,4-Trichlorobenzene	0.005
1,1,1-Trichloroethane	0.2
1,1,2-Trichloroethane	0.005
Trichloroethylene (TCE)	0.005
Trichlorofluoromethane	0.15
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2
Vinyl Chloride	0.0005
Xylenes (m,p)	1.75**
(b) Non-Volatile synthetic Organic Chemicals	
Alachlor	0.002
Atrazine	0.001
Bentazon	0.018
Benzo(a)pyrene	0.0002
Carbofuran	0.018
Chlordane	0.0001
2,4-D	0.07
Dalapon	0.2
1,2-Dibromo-3-chloropropane (DBCP)	0.0002

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Table 64444-A – Organic Chemicals*	
Chemical	**Maximum Contaminant Levels (mg/L)**
Di(2-ethylhexyl)adipate	0.4
Di(2-ethylhexyl)phthalate	0.004
Dinoseb	0.007
Diquat	0.02
Endothall	0.1
Endrin	0.002
Ethylene Dibromide (EDB)	0.00005
Glyphosate	0.7
Heptachlor	0.00001
Heptachlor Epoxide	0.00001
Hexachlorobenzene	0.001
Hexachlorocyclopentadiene	0.05
Lindane	0.0002
Methoxychlor	0.03
Molinate	0.02
Oxamyl	0.05
Pentachlorophenol	0.001
Picloram	0.5
Polychlorinated Biphenyls	0.0005
Simazine	0.004
Thiobencarb	0.07
Toxaphene	0.003
2,3,7,8-TCDD (Dioxin)	3×10^{-8}
2,4,5-TP (Silvex)	0.05

California Code of Regulation (CCR) Title 22, Section 64444
*Last update: September 12, 2003.
**MCL is for either a single isomer or the sum of the isomers.

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Attachment A-4

Table 64533-A – Primary MCLs for Disinfection Byproducts*	
Constituent	**Maximum Contaminant Levels (mg/L)**
Total Trihalomethanes (TTHM)	0.080
Bromodichloromethane	
Bromoform	
Chloroform	
Dibromochloromethane	
Haloacetic acid (five) (HAA5)	0.060
Monochloroacetic acid	
Dichloroacetic acid	
Trichloroacetic acid	
Monobromoacetic acid	
Dibromoacetic acid	
Bromate**	0.010
Chlorite***	1.0

California Code of Regulation (CCR) Title 22, Section 64533, Chapter 15.5
*Last update: January 28, 2004.
** Bromate is listed for plants using ozone disinfection only.
**** Chlorite is listed for plants using chlorine dioxide only.

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Attachment A-5

Table 64449-A – Secondary Maximum Contaminant Levels Consumer Acceptance Limits*	
Chemical	**Units**
Aluminum	0.2 mg/L
Copper	1.0 mg/L
Corrosivity	Non-corrosive
Foam Agents (MBAS)	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Methyl-tert-butyl-ether (MTBE)	0.005 mg/L
Odor – Threshold	3 units
Silver	0.1 mg/L
Thiobencarb	0.001 mg/L
Turbidity	5 units
Zinc	5.0 mg/L

California Code of Regulation (CCR) Title 22, Section 64449
*Last update: September 12, 2003.

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Attachment A-6

Monitoring for Chemicals with Notification Levels
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon disulfide
Chlorate
2-Chlorotoluene
4-Chlorotoluene
Diazinon
Dichlorodifluoromethane (Freon 12)
1,4-Dioxane
Ethylene glycol
Formaldehyde
Isopropylbenzene
Manganese
Methyl isobutyl ketone (MIBK)
Naphthalene
n-Nitrosodiethyamine (NDEA)
n-Nitrosodimethylamine (NDMA)
Perchlorate
n-Propylbenzene
Tertiary butyl alcohol (TBA)
1,2,3-Trichloropropane (1,2,3-TCP)
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vanadium

Attachment A-7

Monitoring for Remaining Priority Pollutants

Pesticides	**Base/Neutral Extractibles**	Di-n-butyl phthalate
Aldrin	Acenaphthene	Di-n-octyl phthalate
Dieldrin	Benzidine	Diethyl phthalate
4,4'-DDT	Hexachloroethane	Dimethyl phthalate
4,4'-DDE	Bis(2-chloroethyl)ether	Benzo(a)anthracene
4,4'-DDD	2-chloronaphthalene	Benzo(a)fluoranthene
Alpha-endosulfan	1,3-dichlorobenzene	Benzo(k)fluoranthene
Beta-endosulfan	3,3'-dichlorobenzidine	Chrysene
Endosulfan sulfate	2,4-dinitrotoluene	Acenaphthylene
Endrin aldehyde	2,6-dinitrotoluene	Anthracene
Alpha-BHC	1,2-diphenylhydrazine	1,12-benzoperylene
Beta-BHC	Fluoranthene	Fluorene
Delta-BHC	4-chlorophenyl phenyl ether	Phenanthrene
Acid Extractibles	4-bromophenyl phenyl ether	1,2,5,6-dibenzanthracene
2,4,6-trichlorophenol	Bis(2-chloroisopropyl)ether	Indeno(1,2,3-cd)pyrene
P-chloro-m-cresol	Bis(2-chloroethoxyl)methane	Pyrene
2-chlorophenol	Hexachlorobutadiene	**Volatile Organics**
2,4-dichlorophenol	Isophorone	Acrolein
2,4-dimethylphenol	Naphthalene	Acrylonitrile
2-nitrophenol	Nitrobenzene	Chlorobenzene
4-nitrophenol	N-nitrosodimethylamine	Chloroethane
2,4-dinitrophenol	N-nitrosodi-n-propylamine	1,1-dichloroethylene
4,6-dinitro-o-cresol	N-nitrosodiphenylamine	Methyl chloride
Phenol	Bis(2-ethylhexyl)phthalate	Methyl bromide
---	Butyl benzyl phthalate	2-chloroethyl vinyl ether

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Attachment X – Minimum Effluent Monitoring of CECs

Parameter	Units
17α-Ethinyl Estradiol	ng/L
17β-Estradiol	ng/L
Estrone	ng/L
Bisphenol A	ng/L
Nonylphenol and nonylphenol polyethoxylates	ng/L
Octylphenol and octylphenol polyethoxylates	ng/L
Polybrominated diphenyl ethers	ng/L
Acetaminophen	ng/L
Amoxicillin	ng/L
Azithromycin	ng/L
Carbamazepine	ng/L
Caffeine	ng/L
Ciprofloxacin	ng/L
DEET	ng/L
Dilantin	ng/L
Gemfibrozil	ng/L
Ibuprofen	ng/L
Lipitor	ng/L
Primidone	ng/L
Sulfamethoxazole	ng/L
Trimethoprim	ng/L
Salicylic acid	ng/L
TCEP	ng/L
Triclosan	ng/L

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