

# California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful

old Schwarzenegger

Linda S. Adams
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013 · Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Arnold Schwarzenegger

Governor

June 22, 2010

Mr. Don Schmitz Schmitz and Associates, Inc. Malibu Headquarters 29350 West Pacific Coast Highway, Suite 12 Malibu, CA 90265

REVISED TENTATIVE WASTE DISCHARGE REQUIREMENTS, WATER RECYCLING REQUIREMENTS AND MONITORING AND REPORTING REQUIREMENTS FOR MALIBU LA PAZ LLC, 3700 LA PAZ LANE, MALIBU, CALIFORNIA (FILE NO. 08-0101)

Dear Mr. Schmitz:

Enclosed are copies of revised tentative WDR/WRRs consisting of:

- a. Board Order R4-2010-XXXX specifying WDR/WRRs;
- b. Monitoring and Reporting Program (CI-XXXX); and

Written comments or testimony shall only be directed to the changes made after the May 13, 2010, versions of the tentative WDR/WRR and MRP. All written comments and testimony regarding these revised tentative WDRs must be received at the Board's Office by 5:00 PM on June 28, 2010, in order to be evaluated by Board staff and included in the Board's agenda folder. Comments received after this date will be provided, ex agenda, to Board Members for their consideration. Failure to comply with these requirements is grounds for the Board to refuse to admit the proposed written comment or exhibit into evidence. Timely submittal of written comments is encouraged to ensure that all comments are accurately and fully included in the administrative record, that Board staff is able to provide timely review, and that Board Members have sufficient time to give full consideration to the comments and issues raised. Comments received after the requested date may result in delay in consideration of your WDRs application.

If you have any questions concerning this letter, please contact Ms. Elizabeth Erickson, P.G. at (213) 620-2264 or me at (213) 620-6156.

Sincerely,

Rebecca Chou, Ph.D., P.E.

Acting Chief of Groundwater Permitting and Landfills Section

Enclosure: Revised Tentative WDR/WRRs and MRP

California Environmental Protection Agency

cc: Chi Diep, California Department of Public Health
Jim Thorson, City of Malibu, <a href="mailto:ithorson@ci.malibu.ca.us">ithorson@ci.malibu.ca.us</a>
Stacy Rice, City of Malibu, <a href="mailto:srice@ci.malibu.ca.us">srice@ci.malibu.ca.us</a>
Craig George, City of Malibu, <a href="mailto:cgeorge@ci.malibu.ca.us">cgeorge@ci.malibu.ca.us</a>
Stefanie Edmondson, City of Malibu <a href="mailto:sedmondson@ci.malibu.ca.us">sedmondson@ci.malibu.ca.us</a>
Deleau, Chris, Schmitz and Associates, <a href="mailto:cdeleau@schmitzandassociates.net">cdeleau@schmitzandassociates.net</a>
Pio Lombardo, <a href="mailto:pio@LombardoAssociates.com">pio@LombardoAssociates.com</a>

James Kreissl, Environmental Consultant 737 Meadowview Drive Villa Hills, KY 41017

Van Tran, State Assemblyman, PO Box 942849 Sacramento, CA, 94249

Cameron Smyth, State Assemblyman PO Box 942849 Sacramento, CA. 94249

Anthony Adams, State Assemblyman PO Box 942849 Sacramento, CA, 94249

Mike Villines, State Assemblyman PO Box 942849 Sacramento, CA, 94249

Rex Hime, President and CEO, California Business Properties Association, 1121 L Street Suite 809, Sacramento, CA, 95814

Mark Gold, Heal the Bay

Tamar Stein, Cox, Castle, Nicholson

Liz Crosson, Executive Director, Santa Monica Bay Keeper

Gared Larson, Executive Director, Merit Shop Roundtable, 3775 Industrial Blvd. Suite 980722 West Sacramento, CA, 95691

David Durham, Executive Director, Citizens for a Golden State, 921 11<sup>th</sup> street Suite 600. Sacramento, CA, 95814

Jenny Oropeza, State Senator 28<sup>th</sup> District, State Capitol, Room 5114, Sacramento, CA, 95814

# 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:

### **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 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 because this project has the potential to affect the quality of the waters of the State, to impact the beneficial uses of those waters, or to cause a nuisance, especially with the existing adjacent discharges. These WDRs conform with California Water Code section 13241 because they meet the need for recycled water use. In addition, past, present and probable future beneficial uses, hydrographic environmental characteristics, options for coordinated control of water quality, economic considerations, and housing needs have all been considered in the preparation of the WDR. They regulate the production of treated waste water and discharge to the subsurface via irrigation.

May 12, 2010 Revised June 21, 2010

1

R

V

I

E

D

1

E

N

 $\Gamma$ 

A

T

I

V

<sup>&</sup>lt;sup>1</sup> The third parcel (parcel C, APN#4458-022-025), of 2.3 acres, may be developed and receive discharge generated by the City of Malibu in the future. This WDR/WRR allows Parcel C to receive irrigation from the La Paz development at agronomic rates; subsurface discharge to groundwater is prohibited. Should Parcel C serve municipal uses, the WDR/WRR would be revised. 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.

R

E D

E

- 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. The Board is also terminating WDR Order No. R4-2010-022 in this Order.

### **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<sup>2</sup>. 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 of the potential that the Discharger reports irrigation may cause elevation of the

<sup>&</sup>lt;sup>2</sup> Federal Clean Water Act section 303(d) list of Water Quality Limited Segments.

 $\mathbf{E}$ 

D

E

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 <u>salts</u>, nitrogen and pathogen <u>indicators</u> at concentrations <u>approaching or exceedingabove</u> 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 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 <a href="subsurface">subsurface</a> dischargee—<a href="through-onsite-wastewater-discharge-systems-no-later than November 5, 20159. After that date, La Paz will be required to send the effluent which does not comply with the WDR/WRR to a sewer, or other centralized facility, in the event that La Paz exceeds its storage, treatment or re-use capabilities.

### **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<sub>[S1]</sub> for application to landscapingThe Discharger estimates that activities at the facilities will generate an average of 19,000 gallons per day (gpd) of Title 22 recycled water with 8,540 gpd being reused within the buildings for non-potable purposes, i.e. toilet flushing, and 11,460 gpd being used for landscape irrigation. - The site requires irrigation at a rate of up to 14,200 gallons per day (gpd) of waste and about as much as 3,07060 gpd of potable water. The peak flow of the plant is 24,870 gpd. If all of the discharge were to reaches the groundwater, it wouldill 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. The collection and treatment system consists of grease interceptors and septic tanks which supply clarified effluent to a pressurized collection system that discharges to an equalization tank that feeds the treatment system on an equal flow basis throughout the day. 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 gallosns 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 are used for disinfection. Chlorine will be used during storage prior to building re-use and before irrigation to prevent bacterial growth in the distribution system as is used in all municipal water supply systems 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 and insufficient storage capacity exists for anticipated conditions, a portion of the influent will be held in tanks for discharge to tankers that will truck the in-fluent to a sanitary sewer. , a portion of the effluent will be held in tanks for discharge to tankers that will trunk the effluent 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 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

E

predicts that low evapotranspiration rates will preclude irrigation for up to 90 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.

. **V** 

18. Parcel C, a sliver of land along the central west edge of the La Paz parcel (see Map 1), is included in a Development Agreement between the City of Malibu and La Paz as the site of a City Hall or other "municipal use." The future ownership and development plan for this parcel is not clear. These WDR/WRRs allow only irrigation of landscaping, and not subsurface disposal to groundwater, on this parcel.

S

# APPLICABLE PLANS, POLICIES AND REGULATIONS

K

48-19. 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.

<u>19-20.</u> 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.

T

<u>20.21.</u> 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.

A

<u>21.22.</u> 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 affect the health, safety, and welfare of the public; therefore requirements are necessary.

T

<u>22-23.</u> 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.

<u>23-24.</u> 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.

V

<u>24-25.</u> 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.

7

25-26. 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.

E

<u>26-27.</u> 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.

1

27.28. 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 progress towards a watershed—wide plan, and the groups may have up until 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/\_salt/nutrient management plan shall be submitted according to the requirements of the Recycled Water Policy, beforeut no later than February 3, 20116.

E

28-29. CWC section 13523.5 on water recycling requirements state 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 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.

Т

### **CEQA AND NOTIFICATION**

act

29-30. 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.

- 30.31. 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
- 31,32. 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 received by sent to: the State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95812, within 30 days of adoption of the order.
- 32,33. 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.
  - 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.

E

waste collection program.

- 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
- V
- 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 to the Executive Officer within 630 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 provided to the Executive Officer within 630 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, and submitted within 630 days to the Executive Officer 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.

Domestic[s2] 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.

E

D

T

E

N

T

A

T

I

V

E

E

4. Biological System Start-Up: The Regional Board recognizes that advanced biological systems such as the advanced OWTS proposed for the Site must undergo a "start-up" period during which the system's biological processes require seeding and stabilization. Also, there are rare cases when the biological system is compromised and reseeding is necessary to assist the recovery of the biological treatment systems quicker than would be possible by natural re-growth. In such cases, Dischargers may import a sufficient amount of fully nitrified sludge from offsite for the express purpose of seeding (or reseeding) the advanced OWTS's biological process. Discharger shall provide written notice to the Executive Officer of the intent to import at least 7 days in advance for initial seeding and 24 hours advance for reseeding that includes the quantity of sludge, its source and an analysis of the quality sufficient to demonstrate it is not expected to cause violations of the effluent limits of this WDR/WRR.

### **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<sub>5</sub> 20<sup>0</sup>C) 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.

E

E

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 <sup>[1]</sup>
Chloride	Mg/L			500 <sup>[1]</sup>
Sulfate	Mg/L			500 <sup>[1]</sup>
Boron	Mg/L			2 <sup>[1]</sup>
Total Nitrogen	Mg/L			10 <sup>[1]</sup>
Nitrate-Nitrogen plus Nitrite-Nitrogen	Mg/L			10 <sup>[1]</sup>
Nitrate	Mg/L			45 <sup>[1]</sup>
Nitrite-Nitrogen	Mg/L			1 <sup>[1]</sup>
Nitrate-Nitrogen	Mg/L			10 <sup>[1]</sup>
Total Coliform	MPN/100			2.2 [2]
	mL		,	

### 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 an average of 2 NTU within a 24-hour period or 5 NUT more than 5 percent of the time within a 24-hour period and 10 NTU at any time. 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 staff 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, and shall apply water at agronomic rates and shall include equipment to provide daily testing of the depth of soil moisture during irrigation to ensure no discharge to groundwater.
- 2.Irrigation Impact: The irrigation operation and monitoring plan, which must be approved by the Executive Officer, and shall apply water at agronomic rates and shall include equipment to provide daily testing of the depth of soil moisture during irrigation to ensure no discharge to groundwater.
- 3. 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 two downgradient wells with quarterly testing.
- 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.

- a.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.
- b.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. 4. Priority Pollutants: Priority Pollutants listed in Attachment A-7 shall not be discharged in concentrations which exceed the more restrictive of the California Chronic Toxicity Rule or Federal Maximum Contaminant Limits. The chemicals shall be monitored oncetwice yearly.
- 5. Constituents of Emergent Concern (CEC): CECs, listed in Attachment B, 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's efforts being conducted per the Recycled Water Policy.
- 6. Maximum Contaminant Limits: The recycled water shall not contain trace, toxic and other constituents in concentrations exceeding the applicable maximum contaminant or action levels for drinking water established by the DPH in sections 64431 and 64444, Chapter 15, and section 64533, Chapter 15.5 of title 22 of the California Code of Regulations, or at levels that adversely affect the beneficial uses of receiving groundwater. The Primary Pollutants are listed in Attachments A-1 and A-3 to A-6 and shall be measured yearly.
- 5.Constituents of Emergent Concern (CEC): CECs, listed in Attachment B, 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 panels efforts being conducted per the Recycled Water Policy.

E

E

E

- 6.Maximum Contaminant Limits: The recycled water shall not contain trace, toxic and other constituents in concentrations exceeding the applicable maximum contaminant or action levels for drinking water established by the DPH in sections 64431 and 64444, Chapter 15, and section 64533, Chapter 15.5 of title 22 of the California Code of Regulations, or at levels that adversely affect the beneficial uses of receiving groundwater. The Primary Pollutants are listed in Attachments A-1 and A-3 to A-6 and shall be measured twice yearly.
- 7. Radioactivity: The radioactivity of the recycled water shall not exceed the limits specified in sections 64441 and 64443, Article 5, Chapter 15, title 22 of the California Code of Regulations, or subsequent revisions. Radioactivity (Attachment A-2) shall be monitored once yearly.
- 8. 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.
- 9. 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;
  - d.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.; and

e.Industrial or commercial cooling tower;

f.Industrial boiler feed, and

- g.e. 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.
- 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 Enalish.
- 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 vlagus.
- 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 aguifer 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.
- 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:

E

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

### 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[53] and specifications describing the following:

g.f. Proposed piping system to be used;

<u>h.g.</u> 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.
- 6.4. 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.
- 7.5. 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.
- <u>8-6.</u> 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.

Malibu La Paz 3700 La Paz Lane WDR/WRR for Title 22 Recycled Water

### 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 may 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 and within 6 months of adoption.
- 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 filtration systems require additional operational supervision and maintenance to ensure successful operation at flows 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 to the Executive Officer 30 days

K

E

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 circumstances has 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 <u>c</u>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 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.
  - 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 oncetwice per year.

- ii. Chemicals of Emergent Concern (Attachment X) shall be monitored once per year, unless otherwise-requested more frequently 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 staff within 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:

E

D

F

N

A

V

- 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. <u>Material Change:</u> 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. Extension: 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 by ef-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. Ownership: 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 violations that occurred up to the transfer date and the new recycled water producer is liable from the transfer date on.
- 22. <u>Inspection:</u> 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 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.
- 30. Future Civic Center Connection: The Executive Officer may choose to re-open the WDR/WRR for a material change allowing or requiring La Paz to accept specified Civic

Center effluent when the irrigation capacity at La Paz is not met and potable water would otherwise be applied.

31. Trucking Reports: The Discharger shall provide quarterly reports of off-site trucking. The Executive Officer may review these reports and make a determination if the volume removed constitutes a material change from the ROWD and, if so, re-open the permit.

# J. PROHIBITIONS

- 1. Sewer Connection: Effluent from system upset 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 fromerm 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 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.
- 13. WDR Order No. R4-2010-022 is hereby terminated.

Order No. R4-2010-xxx File No. 08-0101

# E V I S E D

### 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

R E N

Figure 1: La Paz Location Photo

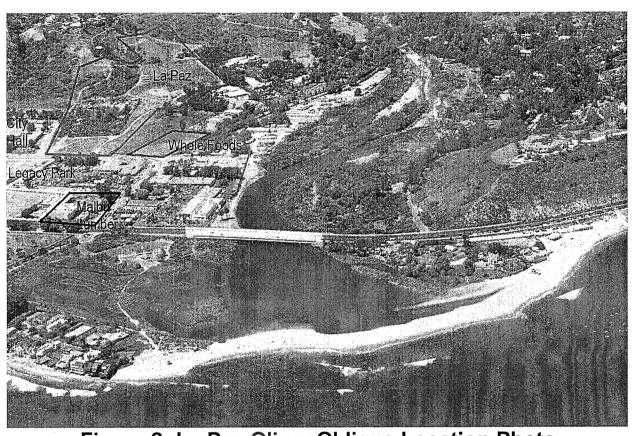
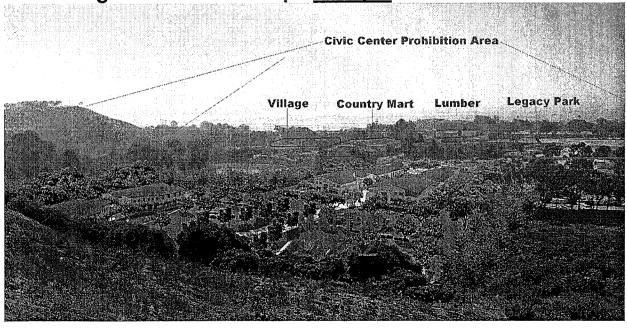
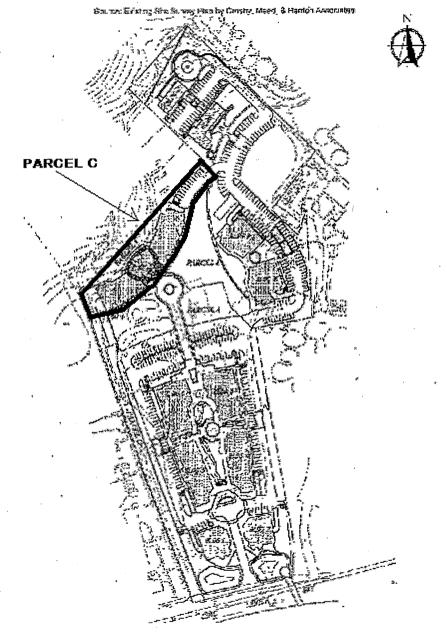


Figure 2: La Paz Olique Oblique Location Photo



# Map 1: La Paz

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



MALIBU LA PAZ DEVELOPMENT Engineering Report for the Production. Unit outlion & Use of Recycled Water May 6, 2000 Page 9 of 63 R

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

<sup>\*\*</sup>MFL = million fibers per liter; MCL for fibers exceeding 10 $\mu$ m in length.

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.

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

(Continuous to the Next Page)
(Continuous from the Previous Page)

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 <sup>-8</sup>	
2,4,5-TP (Silvex)	0.05	

California Code of Regulation (CCR) Title 22, Section 64444

R E  $\mathbf{E}$  $\mathbf{E}$ 

<sup>\*</sup>Last update: September 12, 2003.

<sup>\*\*</sup>MCL is for either a single isomer or the sum of the isomers.

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	7	
Bromate**	0.010	
Chlorite***	1.0	

California Code of Regulation (CCR) Title 22, Section 64533, Chapter 15.5 \*Last update: January 28, 2004.

<sup>\*\*</sup> Bromate is listed for plants using ozone disinfection only.

<sup>\*\*\*\*</sup> Chlorite is listed for plants using chlorine dioxide only.

R

E

E

D

E

# **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.

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

R E E E

E

V

T

S

E D

T

EN

T

T

V

E

# **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

## <u>Attachment</u>Table X – 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

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

MONITORING AND REPORTING PROGRAM CI. No. 9600 FOR MALIBU LA PAZ LLC. (File No. 08-0101)

## I. REPORTING REQUIREMENTS

Malibu La Paz LLC (hereinafter Dischargers) shall implement this monitoring program for the project on the effective date of this Order.

A. For the initial 12 weeks of operation of the advanced onsite wastewater treatment system, weekly sampling results shall be submitted monthly on the 15<sup>th</sup> of the following month with the first monthly report due August 15, 2010. After the initial 12 weeks, monthly samplings results shall be submitted quarterly. The first quarterly monitoring report under this Program, for July-September 2010, shall be received at the Regional Board by October 15, 2010. Subsequent monitoring reports shall be received by the Regional Board on a quarterly basis by 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 January 30<sup>th</sup> of each year, beginning January 30, 2011, the Dischargers 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 Dischargers 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.
- Control Board, Los Angeles Region (Regional Board) (attn. Information Technology Unit), and to the California Department of Public Health, Drinking Water Field Operations, Los Angeles Region (CADPH). Reference the reports to Compliance File No. CI-xxx to facilitate routing to the appropriate staff and file. The monitoring data shall be submitted to the Regional Board and to the CADPH in hard copy, and a CD-ROM disk. The Regional Board and the CADPH may request electronic submittal of data contained in a CD-ROM disk or other appropriate electronic medium at any time. The submittal data must be IBM compatible, preferably using Microsoft Excel software.

E

D

R

 $\mathbf{E}$ 

S

D

- <u>C.D.</u> Laboratory analyses all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Public Health Services Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal certification is obtained from ELAP.
- <u>D.E.</u> The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharge can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer. The Discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC) procedures upon request by the Executive Officer.
- Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. 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 United States Environmental Protection Agency (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.
- G.H. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall be located at the front of the report and shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.
- 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.
- The Discharger shall maintain all records of 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.
- J.K. If the Discharger perform analyses on any effluent more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the report. Those results shall also be reflected in the

R E V I S E D

Malibu La Paz Monitoring and Reporting Program No. CI xxx calculation of the average values used in demonstrating compliance with average effluent limitations.

- K.L. 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.
- 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.
- M.N. The annual report shall also include any updates or changes to documents submitted during the first year after approval of Order R4-2010-XXX.
- N.O. If there is no discharge during any reporting period, the report shall so state.

  Monitoring reports must be addressed to the Regional Board, Attention:

  Information Technology Unit.

## II. WATER QUALITY MONITORING REQUIREMENTS

#### A. Pretreatment and Start-up Monitoring

- 1. Occupants of Property: The Discharger shall provide names of all and any new dischargers that discharge into the onsite wastewater treatment system together with the flow and characteristics of the waste stream from each occupant. Evidence of pre-treatment education and/or lease language on pretreatment shall be provided for each occupant.
- 2. Title 22: Final approval of a complete title 22 Engineering plan, with plumbing design, shall be approved by DPH before recycled/reclaimed water use begins.
- 3. Disinfection Manual: The ozone, ultra-violet and chlorine disinfection system and 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.
- 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

S E

E

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. 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 and shall include documentation of pretreatment 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.
- 6. 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 WDR/WRR Groundwater Requirements D.4. The Irrigation O&M manual shall be submitted for approval by the Executive Officer before discharge.
- 7. Salt Management Plan: A facility-specific salt management plan shall be submitted according to the requirements of groundwater limits in the Basin Plan and the Recycled Water Policy, but no later than February 3, 20116. While the regional salt/nutrient –management plan is under development, the Discharger may perform project specific monitoring in addition to actively participating in the development and implementation of a salt/nutrient management plan, including basin/sub-basin monitoring. The facility specific salt/nutrient management plan must be consistent with WDR/WRR Groundwater Requirements D.4.

#### B. Influent Monitoring

- Monitoring Point: The flow influent 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. The potable flow used for irrigation shall be measured daily by mechanical means and reported monthly.

## C. Effluent Monitoring

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.

S

D

- 2. Effluent daily flows shall be measured mechanically with an in-stream flow meter (a) after treatment and (b) before discharge to the recycled/reclaimed system.
- 3. The 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.
- 4. The following shall constitute the effluent monitoring program:

Constituent	Units <sup>1</sup>	Type of Sample <sup>4</sup>	Minimum Frequency of Analysis
- Tolliania	Omto	Campic	Of Artalysis
Total Flow	gal/day	recorder	continuous
Total Organic Carbo		grab	daily <sup>5</sup>
_pH	pH units	grab	weekly
Suspended Solids	mg/L	grab	daily <sup>5</sup> weekly
BOD <sub>5</sub> 20 <sup>0</sup> C	mg/L	grab	weekly
Turbidity	NTU	recorder	continuous
	MPN/100mL	grab	daily <sup>1</sup>
Fecal Coliform	MPN/100mL	grab	weekly
Enterococcus	MPN/100mL	grab	weekly
E. Coli	MPN/100ml	grab	weekly
Oil and Grease	mg/L	grab	weekly
Total Dissolved Solids	mg/L	grab	monthly
Chloride	mg/L	grab	monthly
Residual Chlorine <sup>2</sup>	mg/L	grab	monthly
Boron	mg/L	grab	monthly
Sulfate	mg/L	grab	monthly
Nitrate-N	mg/L	grab	weekly
Nitrite-N	mg/L	grab	weekly
Ammonia-N	mg/L	grab	weekly
Total nitrogen	mg/L	grab	daily <sup>1</sup>
Chemical of Emergent Concern (CEC) <sup>3</sup>			
	various	grab	annually
Priority Pollutant Sca	n° μg/L	grab	annually

<sup>1)</sup> mg/L is milligrams per liter, gal/day is gallons per day, NTU is nephelometric turbidity units,  $\mu$ g/L is micrograms per liter, and MPN/100 mL is most probable number per 100 milliliters.

<sup>2)</sup> If chlorination is used for disinfection

<sup>3)</sup> See Attachment A for Priority Pollutants and Attachment X for CEC in WDR/WRR R4-2010-xxx. Monitoring for these constituents are viewed as a diligent way of assessing and verifying recycled water quality characteristics, which can be useful in addressing issues of public perception about the safety of recycled water. Further, should there be a positive finding, the Regional Board and the CADPH can give the result due consideration as to whether it is of concern or not. Just what such consideration might

<sup>&</sup>lt;sup>1</sup> Daily monitoring is required for the first 6 months and upon direction by the Executive Officer. After 6 months, the Discharger may provide written documentation in support of a change of monitoring frequency for approval by the Executive Officer

E

 $\mathbf{E}$ 

Malibu La Paz LLC
Malibu La Paz Monitoring and Reporting Program No. CI xxx

entail would depend on the knowns and unknowns of these constituents, including its potential health effects at the given concentration, the source of the chemical, as well as possible means of better control to limit its presence, treatment strategies if necessary, and other appropriate actions.

- 4) Grab sample is an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. When an automatic composite sampler is not used, composite sampling shall be done as follows: If the duration of the discharge is equal to or less than 24 hours but greater than eight (8) hours, at least eight (8) flow-weighted samples shall be obtained during the discharge period and composited. For discharge duration of less than eight (8) hours, individual 'grab' sample may be substituted
- 5) Daily for 12 weeks, then weekly
- 5.Monitoring Requirements: Monitoring for water quality parameters in the effluent shall take place according to the following:
  - a.Sampling protocols (specified in 40 CFR part 136 or AWWA standards where appropriate) and chain of custody procedures.
  - b.The names and addresses of the laboratory or laboratories which conducted the analyses. Include copy or copies of laboratory certifications by the California Health Services Environmental Laboratory Accreditation Program (ELAP) every year or when the Dischargers change the laboratory.
  - c.Analytical test methods used and the corresponding detection limits for reporting purposes (DLRs) unregulated and regulated chemicals. Please see the California Department of Public Health (DPH)'s website at <a href="http://www.DPH.ca.gov/certlic/drinkingwater/Pages/UCMR.aspx">http://www.DPH.ca.gov/certlic/drinkingwater/Pages/UCMR.aspx</a> and <a href="http://www.DPH.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx">http://www.DPH.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx</a> for unregulated and regulated chemicals, respectively.
  - d.Quality assurance and control measures for the monitoring program shall include the following.
    - i.The samples shall be analyzed using analytical methods described in 40 CFR part 136; or where no methods are specified for a given pollutant, by commercially available methods approved by the USEPA. The Dischargers shall select the analytical methods that provide reporting detection limits (DLRs) lower than the limits prescribed in this Order. For those constituents that have drinking water notification levels (NLs) and/or public health goals (PHGs), the DLRs shall be equal to or lower than either the NLs or the PHGs (note this is not always feasible). Every effort should be made to analyze Chemicals with NLs in Attachment A-6 using the least DLR possible.
    - ii.The Dischargers shall instruct their laboratories to establish calibration standards so that the DLRs (or its equivalent if there is a different treatment of samples relative to calibration standards) are the lowest calibration standard. At no time shall the

S

E

D

 $\mathbf{E}$ 

N

 $\mathbf{T}$ 

I

V

E

Malibu La Paz LLC City of Malibu

Malibu La Paz Monitoring and Reporting Program No. Cl xxx

Dischargers use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

iii. Upon request by the Dischargers, the Regional Board, in consultation with the USEPA and the State Board Quality Assurance Program, may establish DLRs, in any of the following situations:

- 1.When the pollutant has no established method under 40 CFR 136 (revised May14, 1999, or subsequent revision);
- 2. When the method under 40 CFR 136 for the pollutant has a RDL higher than the limit specified in this Order; or
- 3. When the Dischargers agree to use a test method that is more sensitive than those specified in 40 CFR part 136 and is commercially available.

## D. Surface Discharge/Surface Waterbody Monitoring

1. If the Executive Officer determines discharge to a Water of the State has occurred then sampling of the affected waterbody shall be conducted by the Dischargers and the sampling shall continue until the discharge is eliminated.

#### E. Groundwater Monitoring

- 1. Irrigation Impact: daily testing shall be performed to document irrigation rates
  The results shall be presented in tabular form verify that discharge is at
  agronomic rates for every day of irrigation.
- 1. Baseline Data: Irrigation and Groundwater conditions must be assessed before discharge in a Baseline study including quantitative measures of the parameters described in E2 and E4.
- 2. Irrigation Monitoring: daily testing shall be performed to document irrigation rates The results shall be presented in tabular form verify that discharge is at agronomic rates for every day of irrigation. The parameters to be tested during irrigation testing will be defined in the irrigation operation and maintenance plan to be approved by the Executive Officer 6 months after adoption. However, a minimum testing plan would collect information to identify salt, nutrient and water loading to the soil and groundwater. A sample irrigation monitoring program is as follows:

R

D

T

E

	Constituent	Units <sup>1</sup>	Type of Sample <sup>4</sup>	Minimum Frequency of Analysis
*		<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>	Sample	OI Alidiysis
	Air Temperature/l			
	<u>Tensiometer</u>	6 in depth		daily during irrigation
		2 feet dept	h	daily during irrigation
		4 feet dept	h	daily during irrigation
	<u>Chloride</u>	mg/L		
	Boron	mg/L		
	Sulfate	<u>mg/L</u>		<i>,</i>
	Total Dissolved S	olid mg/L		
	Total Nitrogen	mg/L		

2.3. 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 facility-specific salt/nutrient managementplanmanagement plan which includes at least one upgradient and two downgradient wells with quarterly testing sampled quarterly.

## 4. The following shall constitute the groundwater monitoring program

			Tuna of	Minimum Fraguency
	Constituent	Units <sup>1</sup>	Type of Sample <sup>4</sup>	Frequency of Analysis
	Total Coliform	MPN/100mL	grab	quarterly
	Fecal Coliform	MPN/100mL	grab	quarterly
	Enterococcus	MPN/100mL	grab	quarterly
	E. Coli	MPN/100ml	grab	quarterly
	Chloride	mg/L	grab	quarterly
	Boron	mg/L	grab	quarterly
	Sulfate	mg/L	grab	quarterly
	Total Dissolved Solid	mg/L	grab	quarterly
	Nitrate-N	mg/L	grab	quarterly
	Nitrite-N	mg/L	grab	quarterly
	Ammonia-N	mg/L	grab	quarterly
	Total Nitrogen	mg/L	grab	quarterly
:	Chemical of Emerger	nt Concern (CE	<u>C)<sup>3</sup></u>	
		various	grab	annually
	Priority Pollutant Sca	n³ μg/L	grab	annually

### F. Provisions Reporting

1. Bypass Events: Each pumping event must be documented in the quarterly monitoring report, accompanied by the date, time, volume and documentation of written notification of the Executive Officer.

Malibu La Paz LLC City of Malibu

Malibu La Paz Monitoring and Reporting Program No. Cl xxx

2. Odors: Odor complaints shall be reported along with documentation of the operator response. Multiple odor complaints during a quarter are considered indicative of a preventable nuisance, and should be documented in the quarterly report with the specific technical measures taken by the Dischargers to prevent a reoccurrence.

## III. GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

All chemical, bacteriological, and toxicity analysis shall be conducted at a laboratory certified for such analysis by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analysis must follow methods approved by the United States Environmental Protection Agency (USEPA), and the laboratory must meet USEPA Quality Assurance/Quality Control criteria. Analytical data reported as "less than" or below the detection limit for the purpose of reporting compliance with limitations, shall be reported as "less than" a numerical value or "below the detection limit" for that particular analytical method (also giving the numerical detection limit).

## IV. GENERAL PROVISIONS FOR REPORTING

The Dischargers shall identify all instances of non-compliance and shall submit a statement of the actions undertaken, or proposed, that will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction. The quarterly reports shall contain the following information:

- A. A statement relative to compliance with discharge specifications during the reporting period; and
- B. Results of daily observations in the disposal area for any overflow or surfacing of wastes, and/or other visible effects of the waste discharge.

### V. MONITORING AND REPORTING REQUIREMENTS FOR RECYCLING

- A. Monitoring shall be used to determine compliance with the requirements of Order R4-10-XXX and shall include locations of each irrigation area and soil moisture monitoring point shall be identified. The Discharger must include a map, at a scale of 1 inch equals 1,200 feet or less, that clearly identifies these locations.
- B. Monitoring Requirements: Monitoring for water quality parameters in the effluent shall take place according to the following:
  - 1. Sampling protocols (specified in 40 CFR part 136 or AWWA standards where appropriate) and chain of custody procedures.
  - 2. The names and addresses of the laboratory or laboratories which conducted the analyses. Include copy or copies of laboratory certifications by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) every year or when the Dischargers change the laboratory.
  - 3. Analytical test methods used and the corresponding detection limits for reporting purposes (DLRs) unregulated and regulated chemicals. Please see the California Department of Public Health (DPH)'s website at http://www.DPH.ca.gov/certlic/drinkingwater/Pages/UCMR.aspx and

T E N T A T I V

R

 $\mathbf{E}$ 

S

D

 $\mathbf{E}$ 

http://www.DPH.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx for unregulated and regulated chemicals, respectively.

- 4. Quality assurance and control measures for the monitoring program shall include the following.
  - a. The samples shall be analyzed using analytical methods described in 40 CFR part 136; or where no methods are specified for a given pollutant, by commercially available methods approved by the USEPA. The Dischargers shall select the analytical methods that provide reporting detection limits (DLRs) lower than the limits prescribed in this Order. For those constituents that have drinking water notification levels (NLs) and/or public health goals (PHGs), the DLRs shall be equal to or lower than either the NLs or the PHGs (note this is not always feasible). Every effort should be made to analyze Chemicals with NLs in Attachment A-6 using the least DLR possible.
  - b. The Dischargers shall instruct their laboratories to establish calibration standards so that the DLRs (or its equivalent if there is a different treatment of samples relative to calibration standards) are the lowest calibration standard. At no time shall the Dischargers use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 5. Upon request by the Dischargers, the Regional Board, in consultation with the USEPA and the State Board Quality Assurance Program, may establish DLRs, in any of the following situations:
  - a. When the pollutant has no established method under 40 CFR 136 (revised May14, 1999, or subsequent revision);
  - b. When the method under 40 CFR 136 for the pollutant has a RDL higher than the limit specified in this Order; or
  - c. When the Dischargers agree to use a test method that is more sensitive than those specified in 40 CFR part 136 and is commercially available.
- B.6. Quality assurance and control measures.
  - a. The samples shall be analyzed using analytical methods described in 40 CFR part 136; or where no methods are specified for a given pollutant, by commercially available methods approved by the USEPA. The Dischargers shall select the analytical methods that provide reporting detection limits (DLRs) lower than the limits prescribed in this Order. For those constituents that have drinking water notification levels (NLs) and/or public health goals (PHGs), the DLRs shall be equal to or lower than either the NLs or the PHGs (note this is not always feasible). Every effort should be made to analyze Chemicals with NLs in Attachment A using the least DLR possible.

Malibu La Paz LLC City of Malibu

Malibu La Paz Monitoring and Reporting Program No. Cl xxx

- b. The Dischargers shall instruct their laboratories to establish calibration standards so that the DLRs (or its equivalent if there is a different treatment of samples relative to calibration standards) are the lowest calibration standard. At no time shall the Dischargers uses analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 1)Upon request by the Dischargers, the Regional Board, in consultation with the USEPA and the State Board Quality Assurance Program, may establish DLRs, in any of the following situations:
- c. Upon request by the Dischargers, the Regional Board, in consultation with the USEPA and the State Board Quality Assurance Program, may establish DLRs, in any of the following situations:
  - 1) When the pollutant has no established method under 40 CFR 136 (revised May14, 1999, or subsequent revision);
  - 2)——
    When the method under 40 CFR 136 for the pollutant has a RDL higher than the limit specified in this Order; or
  - a.3) When the Dischargers agrees to use a test method that is more sensitive than those specified in 40 CFR part 136 and is commercially available.
- a.d. Samples of final effluent must be analyzed within allowable holding time limits as specified in 40 CFR section 136.3. All QA/QC analyses must be run on the same dates when samples were actually analyzed. The Dischargers shall make available for inspection and/or submit the QA/QC documentation upon request by the Executive Officer. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly report.
- b.e. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 1 to 800. The detection methods used for each analysis shall be reported with the results of the analyses.
  - 1) For unregulated chemical analyses, the Dischargers should select methods according to the following approach:
    - i.Use drinking water methods, if available
    - ii.Use DPH-recommended methods for unregulated chemicals, if available;
    - iii.If there is no DPH-recommended drinking water method for a chemical, and more than a single EPA-approved method is available, use the most sensitive of the EPA-approved methods;
    - iv.If there is no EPA-approved method for a chemical, and more than one method is available from the scientific

R E V I

D

E N

T

T

V

literature and commercial laboratory, after consultation with DPH, use the most sensitive method;

- v.If no approved method is available for a specific chemical, the Dischargers' laboratory may develop or use its own methods and should provide the analytical methods to DPH for review. Those methods may be used until DPH-recommended or EPA-approved methods are available.
- vi. If the only method available for a chemical is for wastewater analysis (e.g., a chemical listed as a priority pollutant only), sample and analyze for that chemical in the tertiary treated and disinfected effluent. immediately to increase the likelihood of detection. Use this approach until the Dischargers' laboratory develops a method for the chemical in drinking water, or until a DPH-recommended or EPA-approved drinking water method is available.
- vii. The Dischargers is required to inform the Regional Board, in event that (iv), (v), (vi) is occurring.

#### VI. WASTE HAULING REPORTING

In the event that waste 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.

#### VII. OPERATION AND MAINTENANCE REPORTING

The Dischargers shall file a technical report for approval by the Executive Officer of this Regional Board before discharge, relative to the operation and maintenance program for this facility and annually thereafter. 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. Planned maintenance pumping out of all tanks; and
- E. Planned Maintenance of irrigation systems
- F. Other material as specified in this WDR/WRR such as Operation and Maintenance reports.

#### VIII. CERTIFICATION STATEMENT

Monitoring reports shall be signed by either the principal Executive Officer or ranking elected official. A duly authorized representative of the aforementioned signatories may sign documents if:

- A. The authorization is made in writing by the signatory;
- B. The authorization specifies the representative as either an individual or position having responsibility for the overall operation of the regulated facility or activity; and

Malibu La Paz LLC City of Malibu Malibu La Paz Monitoring and Reporting Program No. Cl xxx

Each report shall contain the following completed 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 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 the day of	, 20,
at	·
	(Signature)
	(Title)"

#### IX. 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 in the 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	,		Date: July 8, 2010
-	Samuel Unger		
•	Interim Evecutive Officer	•	

R E  $\mathbf{E}$