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

#### ORDER NO. R4-2002-0077

## WASTE DISCHARGE REQUIREMENTS AND WATER RECYCLING REQUIREMENTS FOR HOTUBS, INC. (PUDDINGSTONE HOT TUBS RESORT)

# (File No. 01-137)

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

- Hotubs, Inc. (hereinafter Discharger) owns and operates the Puddingstone Hot Tubs Resort (Resort) located at 1777 Campers View Road, San Dimas, California. The Resort is a hot tub rental facility located entirely within the Frank G. Bonelli Regional Park (Park) northeast of the intersection of Interstate Highway 10 to the south, and Highway 210 to the west (Figure 1).
- 2. Since 1985, the Discharger has operated 16 hot tubs (spas) at the Resort and discharged tub water which is categorized as graywater<sup>1</sup> from the 16 spas to landscape irrigation fields. On July 24, 1985, the Regional Board Executive Officer determined that no action was required regarding the discharge of the graywater because the discharge of hot tub water would not constitute a discharge of pollutants. He also indicated that any changes in the discharger in the future might be required to have a permit. In July 1998, the Discharger planned to construct additional hot tubs within the Park. On October 31, 2001, the Discharger filed a Report of Waste Discharge for discharging tub water (graywater) from 16 existing spas and 5 proposed additional spas to on-site landscape irrigation fields.
- 3. The Resort currently has 16 spas on 4.1 acres of the 14-acre site. Twelve of the existing 16 spas have a capacity of 500 gallons, three spas have a capacity of 750 gallons, and one spa has a capacity of approximately 2,000 gallons. The Discharger plans to construct 5 additional spas that each will have a capacity of approximately 750 gallons. The new spas will be located at the south end of the Resort (Figure 2).

<sup>&</sup>lt;sup>1</sup> Graywater is defined as untreated wastewater which has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and which does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. Graywater includes wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs but does not include wastewater from kitchen sinks or dishwashers (California Water Code, section 14876).

- 4. Each individual spa consists of a hot tub, a chlorinator, a heater, a flow meter, and a filter. Prior to being emptied, a tub will be taken out of service to allow solids to settle overnight. The tub water then will be discharged to the on-site landscape irrigation fields via bubbler systems. After the tub is emptied, any residual at the bottom of the tub will be wiped out using sponges and rinsed with potable water. Rinse water will also be drained out to the irrigation field. The graywater change-out is completed on a rotating basis with no more than 2 or 3 spas emptied during any particular day. The total graywater discharged from 21 spas in two weeks will be 14,000 gallons or approximately 1,000 gallons per day. The graywater will be discharged over an area of approximately 2.5 acres, or approximately 7,260 square feet per hot tub.
- 5. Both potable and reclaimed water are currently piped to the Resort. Potable water is provided to the Resort by the Southern California Water Company, and is used within the office/administration building and to fill the spas. Reclaimed water provided by the County Sanitation Districts of Los Angeles County, Pomona Water Reclamation Plant is used to irrigate the entire landscape at the Resort. The Discharger indicated that the use of graywater as supplementary irrigation water at the Resort would reduce the amount of reclaimed water needed for landscape irrigation.
- 6. Domestic wastewaters from the Resort are being discharged to a community sewer system. The spas at the Resort do not have any toilets and are not connected to the sewer system. The Discharger plans to construct a sanitary sewer system at the proposed five spa locations. However, the Discharger is unable to connect the existing 16 spas to the sanitary sewer system due to crystalline bedrock underlying the ridge top which is very difficult and expensive to excavate. Once a sewer connection is available, graywater from the five new spas will be discharged to the sewer line during rainfall. During periods of rainfall, graywater from the 16 existing spas is stored at the spas and not allowed to be discharged to irrigation field. If there is no rain, graywater from the five new spas and 16 existing spas will be discharged to the irrigation fields.
- 7. Fragrances, soaps, oils, and other additives are not allowed to be used at the spas. Analytical results for graywater and imported reclaimed water used at the Resort, and water quality objectives set forth in the Basin Plan for groundwater in Spadra Area of the Upper Santa Ana Groundwater Basin are summarized as follows:

## Table 1

Constituent	Graywater		Reclaimed water <sup>2</sup>	Basin Plan Objectives
Date	05/03/01 <sup>3</sup>	11/16/01 <sup>4</sup>	05/03/01	06/13/1994
Total Dissolved Solids (mg/L)	588	514 (spa # 6) 527 (spa # 7)	547	550
Chloride (mg/L)	95		125	120
Sulfate (mg/L)	116		67	200
Nitrate-Nitrogen (mg/L)	2.7		8.6	10
Coliform (MPN)	<1.1		<1.1	<1.1

Based on the graywater quality results shown in Table 1, the concentrations of the constituents in graywater are expected to meet water quality objectives.

- 8. The climate at the Resort is Mediterranean, with an average rainfall of approximately 17 inches and annual evapotranspiration of about 50 inches. The spa water discharge amounts to approximately 6 inches per year across the irrigation landscape. This small volume of water, as reported, has not resulted in significant surface runoff. Incidental groundwater recharge associated with landscape irrigation is not expected to have adverse impacts on the receiving groundwater quality.
- 9. The Resort is positioned on a ridgetop at an elevation of approximately 1100 feet above sea level, and overlooks the Puddingstone Reservoir located approximately 1,500 feet northwest of, and approximately 130 feet below, the Resort. The Resort, including the surface irrigation areas, is located in Section 14, Township 1S, Range 9W San Bernardino Base and Meridian at the approximate latitude and longitude of 34<sup>0</sup> 05' 07" N and 117 <sup>0</sup> 47' 34" W respectively.
- 10. The Resort overlies a thin soil veneer above the Tertiary-age Glendora Volcanic Formation. There are no wells that tap fractured bedrock in the area. The depth to groundwater in the area is expected to be greater than 75 feet.
- 11. The Resort and spray irrigation areas are located within Puddingstone Dam and Reservoir Hydrologic Area in the Spadra Area of the Upper Santa Ana Valley Groundwater Basin.

<sup>&</sup>lt;sup>2</sup> Reclaimed water provided by the County Sanitation Districts of Los Angeles County,

Pomona Water Reclamation Plant

<sup>&</sup>lt;sup>3</sup> Water sample was collected from the spa before settling process

<sup>&</sup>lt;sup>4</sup> Water samples were collected from the spa after settling process

12. The Regional Board adopted a revised *Water Quality Control Plan for the Los Angeles Region (Basin Plan) on June 13, 1994. The Basin Plan* contains beneficial uses and water quality objectives for groundwater within the Spadra Area of the Upper Santa Ana Valley Groundwater Basin.

The existing beneficial uses of the groundwater in Spadra Area are:

Existing: Municipal and domestic supply, industrial process and service supply, and agricultural supply.

- 13. The requirements contained in this Order are based on the *Basin Plan*. This Order is in conformance with the goals of the aforementioned water quality control plan(s) and will protect and maintain the beneficial use of the groundwater.
- 14. The State of California Department of Health Service (DHS) currently does not have any guidelines or regulations which relate directly to the use of graywater for surface irrigation purposes. Regional Board staff will use California Title 22 standards for the water recycling, in the absence of recycling criteria for graywater. Regional Board staff have consulted with the State DHS and the Los Angeles County DHS regarding the proposed recycling of graywater, which is to be used for parks and playgrounds irrigation, and has incorporated their recommendations. The Discharger indicated that the effluent from the Resort would comply with the limits set forth for recycled water listed in Title 22 Water Recycling Requirements.
- 15. The use of graywater for landscape irrigation could affect the public health, safety, or welfare; requirements for such use are therefore necessary in accordance with section 13523 of the California Water Code.
- 16. The Resort Expansion is included within the Frank G. Bonelli Regional Park Master Plan. An Environmental Impact Report was prepared for the adoption of that Plan, mitigation measures were made a condition of the project approval, and the Los Angeles County Board of Supervisors adopted a Statement of Overriding Considerations for the project. A Notice of Determination was duly filed on July 28, 1998 with the County Clerk.
- 17. In accordance with the Governor's Executive Order requiring any proposed activity be reviewed to determine whether such activity will cause additional energy usage, Regional Board staff have determined that implementation of these Waste Discharge Requirements will not result in a significant change in energy usage.

The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for this discharge, and provided them with an opportunity to submit their written views and recommendations for the requirements.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the requirements.

IT IS HEREBY ORDERED that Hotubs, Inc. shall comply with the following:

## A. EFFLUENT LIMITATIONS

- 1. Graywater discharged from the Resort shall be limited to hot tub water only.
- 2. Graywater shall be discharged only at the spray irrigation areas controlled by the Discharger. The discharge of wastes, whether treated or untreated, to any water course or drainage ditch is prohibited at all times.
- 3. Graywater shall at no time contain any substances or agents, which would produce offensive or unsightly conditions in the disposal area.
- 4. Graywater shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Units</u>	30-Day <u>Average</u>	Daily <u>Maximum</u>
Total dissolved solids	mg/L	550	
Sulfate	mg/L	200	
Chloride	mg/L	120	
Boron	mg/L	1.0	
Nitrate + Nitrite + Ammonia -	F		
Organic Nitrogen as Nitroger	n mg/L		10
Fecal coliform	MPN/100mL		1.1
Total coliform	MPN/100mL		1.1

- 5. Graywater shall at all times be within the range of 6.5 to 8.5 pH units.
- 6. Graywater shall not contain organic chemicals, inorganic chemicals (i.e., heavy metals, arsenic, or cyanide) in concentrations exceeding the limits contained in the current California Drinking Water Standards, title 22, sections 64431 and 64444 of the California Code of Regulations, or subsequent revisions.
- 7. Radioactivity shall not exceed the limits specified in title 22, section 64443 of the California Code of Regulations, or subsequent revisions.
- 8. Any wastes that do not meet the foregoing requirements shall be held in impervious containers, and discharged at a legal point of disposal.

## B. SPECIFICATIONS FOR USE OF GRAYWATER

- 1. Graywater shall be applied at such a rate and volume as not to exceed vegetation demand and soil moisture conditions. Special precautions must be taken to prevent clogging of bubbler nozzles, to prevent overwatering, and to exclude the production of runoff. Pipelines shall be maintained so as to prevent leaks.
- 2. There shall be no cross-connection between the potable water supply and piping containing graywater.
- 3. Graywater used for irrigation shall be retained on the areas of use and shall not be allowed to escape as surface flow, except as provided for in a National Pollutant Discharge Elimination System (NPDES) Permit.
- 4. All areas where graywater is used shall be posted with conspicuous signs that include the following wording in a size no less than 4 inches high by 8 inches wide: "ATTENTION: NON-POTABLE WATER DO NOT DRINK" or "GRAYWATER USED FOR IRRIGATION DO NOT DRINK." Perimeter warning signs indicating that the graywater is in use, shall be posted at least every 500 feet, with a minimum of at least one sign on each corner of each irrigation area at access road entrances.
- 5. The portions of the graywater 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 graywater piping system in areas subject to public access.

## C. GENERAL REQUIREMENTS

- 1. Standby or emergency power facilities, emergency bypass facilities, and/or sufficient capacity shall be provided for recycled water storage during rainfall, and at times when irrigation can not be practiced.
- 2. Drinking water fountains shall be protected against contact with graywater spray, mist, or runoff.
- 3. Adequate facilities shall be provided to protect and maintain the irrigation system from damage by storm flows and runoff.
- 4. At a minimum, maintenance personnel shall inspect the Resort and irrigation areas on a weekly basis to ensure that each individual spa is working properly, and that the effluent graywater is in compliance with this Order.

## D. PROHIBITIONS

- 1. Discharge of graywater to any point other than specifically described in this Order is prohibited and constitutes a violation thereof.
- 2. Graywater shall not be discharged during periods of extreme rainfall and/or runoff.
- 3. Graywater shall not be discharged to geologically unstable areas, and shall not result in earth movement. Spray irrigation with graywater shall not result in soil erosion.
- 4. Graywater shall not be used for landscape irrigation or stored in any impoundment within 100 feet of any domestic water supply well or mineral spring.
- 5. Graywater discharges shall not cause pollution or nuisance.
- 6. Graywater discharges shall not result in problems due to breeding of mosquitoes, gnats, midges, or other pests.
- 7. Graywater discharges shall not impart tastes, odors, color, foaming, or other objectionable characteristics to receiving groundwater.
- 8. Graywater discharges, which could affect receiving groundwater, shall at no time contain any substance in concentrations toxic to human, animal, plant, or aquatic life.
- 9. The surfacing or overflow of graywater from landscape irrigation and disposal areas at any time and at any location and the direct or indirect discharge of wastes to waters of the State (including storm drains, groundwater or surface water drainage courses) is prohibited.
- 10. There shall be no onsite disposal of sludge. Any offsite disposal of 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.

#### E. PROVISIONS

1. A copy of this Order shall be maintained at the facility so as to be available at all times to operating personnel.

- 2. In accordance with section 13260 (c) of the California Water Code, The Discharger shall file a report of any material change or proposed change in the character, location or volume of the discharge.
- 3. The Discharger shall file with the Regional Board technical reports on selfmonitoring work performed according to the detailed specifications contained in Monitoring and Reporting Program No. CI-8391, as directed by the Executive Officer. The results of any monitoring done more frequently than required at the locations and/or times specified in the Monitoring and Reporting Program shall be reported to the Regional Board.
- 4. The Discharger shall notify the Regional Board by telephone within 24 hours of any violations of discharge or graywater use conditions or any adverse conditions as a result of the use of graywater from this facility that may endanger health or the environment; written confirmation shall follow within one week.
- 5. The Discharger shall notify the Regional Board staff by telephone immediately of any confirmed coliform counts that could cause a violation of the Waste Discharge Requirements, including the date(s) thereof. This information shall be confirmed in the next monitoring report. In addition, for any actual coliform limit violations that occurred, the report shall also include the reasons for the high coliform results, the steps taken to correct the problem (including dates thereof), and steps that have been taken to prevent a recurrence.
- 6. This Order does not alleviate the responsibility of the Discharger to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency. Expansion of the facility from its current capacity shall be contingent upon issuance of all necessary permits.
- 7. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of any records required to be kept by this Order.
- 8. The Discharger shall ensure that the capacity of the disposal area is adequate and that adequate steps are taken to accommodate system failure or to deal with loss of assimilative capacity of the soils.
- 9. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
  - a) Violation of any term or condition contained in this Order;

- b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
- c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 10. In accordance with Section 13263(e) of the California Water Code, these requirements are subject to periodic review and revision by this Regional Board with a five (5) year cycle.
- 11. In accordance with Water Code section 13263 (g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into waters of the state are privileges, not rights.
- 12. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
- 13. Where the Discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge, or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or correct information.
- 14. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with conditions of this Order.
- 15. This Order includes the attached Monitoring and Reporting Program (Attachment T). 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.
- 16. This Order includes the attached Standard Provisions Applicable to Waste Discharge Requirements (Attachment W). If there is any conflict between provisions stated herein and the Standard Provisions Applicable to Waste Discharge Requirements, the provisions stated herein will prevail.
- 17. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be received by the State Water Resources Control Board, P.O. Box 100, Sacramento, California, 95812, within 30 days of adoption of the Order.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on March 28, 2002.

Dennis A. Dickerson Executive Officer