CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER R7-2014-0031

WASTE DISCHARGE REQUIREMENTS
FOR
RIVERSIDE COUNTY, OWNER/OPERATOR
SERVICE AREA 51, TAMARISK PARK
DOMESTIC WASTEWATER TREATMENT
AND
DRINKING WATER TREATMENT
DISPOSAL PONDS

Northeast of Desert Center - Riverside County

The California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board), finds that:

- 1. Riverside County (Discharger) owns and operates Service Area 51, Tamarisk Park Domestic Wastewater Treatment and Drinking Water Treatment and Disposal Ponds, (WWTF) 26251 Parkview Drive, Desert Center, CA 92239.
- 2. This Discharger is subject to Waste Discharge Requirements (WDRs) Board Order 95-048 adopted by the Colorado River Basin Water Board on June 28, 1995. The Facility was previously regulated by Board Orders 78-002, 85-029 and 90-034.
- 3. This Board Order updates the WDRs to comply with current laws and regulations as set forth in the California Water Code and the California Code of Regulations and regulates the domestic wastewater and the drinking water treatment and disposal processes. The Facility's waste discharge identification (WDID) number is 7A 33 0118 022.
- 4. The Discharger is discharging a maximum of 36,000 gallons-per-day (gpd) of domestic wastewater from a residential development consisting of seventy-six houses, 150 mobile home spaces, two swimming pools, one hot pool, one church, one library and a fire station. The average daily flow is about 25,000 gpd. The design capacity of the facility is 44,000 gpd.
- 5. Wastewater is treated at two mechanically aerated ponds and two settling ponds in succession. From the settling ponds wastewater flows to four percolation/evaporation basins used in rotation. The discharge ponds are located in the North ½ of the Northeast ¼ of Section 14, Township 15 South, Range 15 East, San Bernardino Base & Meridian (SBB&M), as indicated in the attached site map, incorporated herein and made a part of this Board Order.
- 6. Drinking water for the development is pumped from two wells and treated for excess fluoride. Defluoridation is done at an on-site plant using two activated alumina adsorption columns. These columns are regenerated once every one to four-months to restore the adsorption capacity.

- 7. During the once every one to four-month regeneration cycle of the drinking water plant, a maximum flow of 155,000 gallons per month with fluoride concentrations over 7.6 mg/L is discharged into three 10-mil lined basins located in the Southwest ¼ of the Northeast ¼ of Section 14, Township 5 South, Range 15 East, SBB&M. About 6,000 gallons per month of backwash water from the activated alumina adsorption columns with fluoride concentrations below 7.6 mg/l is discharged to percolate on lands located in the Southwest ¼ of the Northeast ¼ of Section 14, Township 5 South, Range 15 East, SBB&M.
- 8. The Discharger has reported that there are no domestic wells within 500 feet of the discharge facility. Depth of the ground water table is 266 feet below ground surface. Fluoride concentration in the ground water is 7.6 mg/l.
- 9. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), which was adopted on November 17, 1993, and amended on November 16, 2012, designates the beneficial uses of ground and surface waters in this Region.
- 10. The WWTF is located in the Chuckwalla Hydrologic Unit. The beneficial uses of ground waters in the Chuckwalla Hydrologic Unit are:
 - a. Municipal supply (MUN)
 - b. Industrial supply (IND)
 - c. Agricultural supply (AGRI)
- 11. State Water Resources Control Board (State Water Board) Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State"), hereinafter Resolution 68-16 states:

"Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies."

Resolution 68-16 further states:

"Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

- 12. Some degradation of groundwater from the discharge to the evaporation ponds is consistent with Resolution 68-16, provided that the degradation:
 - a. Is confined to a reasonable area;

- b. Is minimized by means of full implementation, regular maintenance, and optimal operation of best practicable treatment and control (BPTC) measures;
- c. Is limited to waste constituents typically encountered in domestic wastewater; and.
- d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.
- 13. The discharge of wastewater from the WWTF, as permitted herein, reflects BPTC. The controls assure the discharge does not create a condition of pollution or nuisance, and that water quality will be maintained which is consistent with the anti-degradation provisions of Resolution 68-16. The WRP incorporates:
 - a. Technology for secondary or tertiary treated disinfected domestic wastewater;
 - b. Solids handling facilities
 - c. An operation and maintenance manual;
 - d. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.
- 14. Constituents in domestic wastewater effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts (TDS). The WRP provides substantial removal of soluble organic matter, solids, and nitrogen.
- 15. Effluent limits that are protective of water quality objectives for indicator waste constituents are appropriate to meet the requirements of Resolution 68-16. The WWTF provides a valuable service to the community that helps protect the environment and human health. The agency's services also contribute to economic development in the area. These factors and the associated increase in nitrates are consistent with maximum benefit to the people of the State. Accordingly, the discharge as authorized is consistent with the anti-degradation provisions of Resolution 68-16.
- 16. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seg.).
- 17. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Board Order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
- 18. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.

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19. The Colorado River Basin Water Board in a public meeting heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Order 95-048 is rescinded, except for enforcement purposes, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Effluent Limitations

- 1. The pH of the effluent into the wastewater treatment ponds shall be maintained between 6.0 and 9.0.
- 2. Domestic wastewater flow to the evaporation/percolation ponds shall not exceed a maximum daily flow of 44,000 gallons per day.
- 3. Wastewater discharged from the regeneration cycle of the drinking water plant to the polyethylene-lined evaporation basins shall not exceed 155,000 gallons per month.
- 4. Backwash water from the activated alumina adsorption columns discharged to land shall not exceed 7.6 mg/L of fluoride.

B. Discharge Prohibitions

- 1. The direct discharge of any waste to any surface waters or surface drainage courses is prohibited.
- 2. Bypass or overflow of untreated or partially treated waste is prohibited.
- 3. Discharge of treated wastewater at a location or in a manner different from that described in the Report of Waste Discharge and as stated in the Findings in this Board Order is prohibited.
- 4. The Discharger shall not accept waste in excess of the design treatment capacity of the disposal system.
- 5. The discharge of waste to land not owned or controlled by the Discharger is prohibited.
- 6. No wastewater other than the wastewater generated from the facility shall be discharged into the evaporation/percolation ponds.

C. Discharge Specifications

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(I) and 13050(m) of Division 7 of the California Water Code.

- 2. The facility shall be protected from any washout or erosion of wastes or covering material, and from any inundation which could occur as a result of floods having a predicted frequency of once in 100 years.
- 3. There shall be no surface flow of wastewater away from the discharge facility.
- 4. A minimum depth of freeboard of two (2) feet shall be maintained at all times in the evaporation/percolation ponds.
- 5. Solids and settled materials shall be disposed of in a manner that will not result in pollution or nuisance as defined by the California Water Code.
- 6. Adequate measures shall be taken to maintain aerobic conditions at the ponds.
- 7. Ponds shall be managed to prevent breeding of mosquitoes. Specific requirements include:
 - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
- 8. Public contact with undisinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.

D. Provisions

- 1. The Discharger shall comply with Monitoring and Reporting Program R7-2014-0031, which is incorporated herein and made a part of this Board Order by this reference, and future revisions thereto, as specified by the Colorado River Basin Water Board's Executive Officer.
- Prior to any modifications in this facility, which would result in material change in the
 quality or quantity of wastewater treated or discharged, or any material change in the
 location of discharge, the Discharger shall report all pertinent information in writing to the
 Colorado River Basin Water Board and obtain revised requirements before any
 modifications are implemented.
- 3. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Colorado River Basin Water Board.
- 4. Wastewater effluent discharged to the seepage pits shall not contain nitrate or hazardous substances including Volatile Organic Compounds (VOCs) in concentrations that can cause degradation of the underlying ground water.
- 5. If sample analyses indicate that the concentration of nitrate as Nitrogen or hazardous substances, including VOCs, exceed the maximum contaminant level (MCL) established

for drinking water, the Discharger is required to resample the wastewater within 30 days of the date of the initial sampling results. If the resampling results also exceed the MCL of nitrate as Nitrogen or any hazardous substances, including VOCs, the Discharger is required to perform a subsurface investigation to determine any impacts to the ground water and/or soils, if necessary. If a subsurface investigation is necessary, the Discharger is required to submit a workplan to perform the investigation. The workplan must be prepared by a qualified professional who is acceptable to the Colorado River Basin Water Board's Executive Officer and is familiar with performing this type of work. The workplan should be submitted to the Colorado River Basin Water Board's Executive Officer for approval within 90 days of the date of the resampling results.

- 6. The Discharger shall ensure that all site operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
- 7. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 8. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
- 9. The Discharger shall allow the Colorado River Basin Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
 - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
- 10. The Discharger shall comply with all of the conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act, Water Code section 13000 et seq., and is grounds for enforcement action.
- 11. The Colorado River Basin Water Board will review this Board Order periodically and may revise requirements when necessary.
- 12. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with this Board Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary

facilities or similar systems, which are installed by a Discharger only when necessary to achieve compliance with the conditions of this Board Order.

- 13. The Discharger shall comply with the following:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Colorado River Basin Water Board's Executive Officer at any time.
 - c. Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements.
 - 2. The individual(s) who performed the sampling or measurements.
 - 3. The date(s) analyses were performed.
 - 4. The individual(s) who performed the analyses.
 - 5. The results of such analyses.
- 14. Unless otherwise approved by the Colorado River Basin Water Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants," promulgated by the United States Environmental Protection Agency
- 15. All regulated disposal systems shall be readily accessible for sampling and inspection.
- 16. The Discharger is the responsible party for the WDRs and the monitoring and reporting program for the facility. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement actions, including Colorado River Basin Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these WDRs by the Colorado River Basin Water Board.
- 17. All maintenance performed shall be reported with the monitoring reports as required.
- 18. The Discharger may be required to submit technical reports as directed by the Colorado River Basin Water Board's Executive Officer.
- I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of the Board Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on March 20, 2014.

Originally signed by Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2014-0031
FOR
RIVERSIDE COUNTY, OWNER/OPERATOR
SERVICE AREA 51, TAMARISK PARK
DOMESTIC WASTEWATER TREATMENT
AND
DRINKING WATER TREATMENT
DISPOSAL PONDS

Northeast of Desert Center - Riverside County

Location of Discharge: Infiltration Basins - N 1/2, NE 1/4, of Section 14, T5S, R15, SBB&M Impervious Basins - SW 1/4, NE 1/4 of Section 14, T5S, R15E, SBB&M Discharge to Land - SW 1/4, NE 1/4 of Section 14, T5S, R15, SBB&M

MONITORING

- This Monitoring and Reporting Program (MRP) describes requirements for monitoring a
 wastewater system and groundwater quality (when needed). This MRP is issued
 pursuant to California Water Code section 13267. The Discharger shall not implement
 any changes to this MRP unless and until a revised MRP is issued by the Executive
 Officer.
- 2. Water Code section 13267 states, in part:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

- 3. Water Code section 13268 states, in part:
 - "(a) (1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of § 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in accordance with subdivision (b). (b) (1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5

(commencing with § 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs."

- 4. The Discharger owns and operates the wastewater system that is subject to Board Order R7-2014-0031. The reports are necessary to ensure that the Discharger complies with the Board Order. Pursuant to Water Code section 13267, the Discharger shall implement the MRP and shall submit the monitoring reports described herein.
- 5. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Colorado River Basin Water Board staff.
- 6. Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
 - a. The user is trained in proper use and maintenance of the instruments;
 - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
 - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
 - d. Field calibration reports are submitted as described in the "Reporting" section of this MRP.
- 7. The collection, preservation and holding times of all samples shall be in accordance with U. S. Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Colorado River Basin Water Board Executive Officer, all analyses shall be conducted by a laboratory certified by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of the "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136), promulgated by the USEPA.
- 8. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least five (5) years from the date of the sample, measurement, report or application. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurement(s);
 - b. The individual(s) who performed the sampling or measurement(s);
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;

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- e. The analytical techniques or method used; and
- f. The results of such analyses.
- 9. Compliance with the effluent limitations shall be determined at the end of the discharge pipe prior to ponding.
- 10. If the facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Colorado River Basin Water Board indicating that there has been no activity during the required reporting period.
- 11. The Discharger shall submit the following information in an annual status report:
 - a. Estimate of maximum daily flow (gpd) of discharge to ponds.
 - b. Number of house(s), units and restroom(s) connected to the sewerage system.
 - c. List proposed changes in the sewage disposal facilities during the coming year.
 - d. Explain any problem(s) in the sewage treatment and disposal system during the preceding year.

DOMESTIC WASTEWATER EFFLUENT MONITORING

A sampling station shall be established at the point of discharge and shall be located where representative samples of effluent can be obtained. Wastewater discharged into infiltration basins shall be monitored for the following constituents:

<u>Constituents</u>	<u>Unit</u>	Type of Sample	Sampling Frequency
Total Dissolved Solids	mg/L	Grab	Quarterly
Fluoride	mg/L	Grab	Quarterly
20°C BOD₅	mg/L ¹	24h Composite	Annually
Suspended Solids	mg/L	24h Composite	Annually
Settleable Matter	ml/L ²	Grab at Peak	Annually
		Flow	
Hydrogen Ion	pH Units	Grab	Annually
Volatile Organics	μg/L³	Grab	Annually
Nitrate as NO3-N	mg/L	Grab	Annually
Total Nitrogen	mg/L	Grab	Annually

¹ mg/L – milligrams per Liter

² ml/L – milliliters per Liter

³ µg/L – micrograms per Liter

<u>DEFLUORIDATION PROCESS WASTEWATER DISCHARGED TO LAND</u>

- The wastewater discharged on land during each regeneration cycle shall be sampled for fluoride prior to the discharge to determine compliance with the fluoride effluent limits of this Board Order.
- 2. The volume of wastewater discharged on land during each regeneration cycle shall be recorded.
- 3. This monitoring data shall be submitted quarterly.

REPORTING

- 1. The Discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with WDRs.
- 2. Records of monitoring information shalt include:
 - a. The date, exact place, and time of sampling or measurement(s);
 - b. The individual(s) who performed the sampling or measurement(s);
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or method used; and
 - f. The results of such analyses.
- 3. Each report shall contain the following statement:
 - "I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- 4. A duly authorized representative of the Discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Colorado River Basin Water Board's Executive Officer.

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- 5. Report immediately any failure in the waste disposal system to the Colorado River Basin Water Board and the Director of the County Environmental Health Department by telephone with follow-up by letter.
- 6. Note any changes in the operating procedure for the season.
- 7. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring report.
- 8. Annual monitoring reports shall be submitted to the Colorado River Basin Water Board by January 15 of each year.
- 9. Quarterly monitoring reports shall be submitted to the Colorado River Basin Water Board by January 15, April 15, July 15, and October 1 5 of each year.
- 10. Submit monitoring reports to:

California Regional Water Quality Control Board Colorado River Basin Region 73720 Fred Waring, Suite 100 Palm Desert, CA 92260

Order	ed by: <u>originally signed by</u>
	Executive Officer
	Date

Order R7-2014-0031



SITE MAP

RIVERSIDE COUNTY SERVICE AREA 51, OWNER/OPERATOR DOMESTIC/PROCESS WASTEWATER DISPOSAL PONDS

Northeast of Desert Center – Riverside County Infiltration Basins – N ½ NE ½ of Section 14, TS5, R15E, SBB&M Impervious Basin – SW ¼, NE ¼ of Section 14, T5S, R15E, SBB&M