CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER R7-2018-0013

WASTE DISCHARGE REQUIREMENTS FOR SALTON COMMUNITY SERVICES DISTRICT, OWNER/OPERATOR THOMAS R. CANNELL WASTEWATER TREATMENT FACILITY Salton City - Imperial County

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

- Salton Community Services District (Discharger or SCSD) owns and operates a wastewater collection system and the Thomas R. Cannell Wastewater Treatment Facility (Facility or TRC WWTF), which provide sewerage service to the residents and businesses in Salton City. The Facility is assigned the California Integrated Water Quality System (CIWQS) No. CW-647900, Waste Discharge Identification (WDID) No. 7A130117001, and GeoTracker Global Identification No. WDR100035569.
- 2. The Facility is located on approximately 40 acres near Salton City at the northwest ¼ of the southeast ¼ of Section 26, Township 10 South, Range 10 East, San Bernardino Baseline and Meridian. A depiction of the location of the Facility is shown in **Attachment A**, which is herein made part of this Order by reference.
- The Facility went into operation in October 2008 and was built to supplement treatment and disposal capacity for Salton City, which is also served by the Lansing Avenue Wastewater Treatment Facility (Lansing Avenue WWTF), located at 2170 Lansing Avenue in Salton City and regulated under Waste Discharge Requirements (WDRs) Order R7-2012-0035.
- 4. The Discharger has proposed to implement a project to reduce the amount of treated wastewater discharged into the WWTF's evaporation/percolation ponds, which would help safeguard against peak flows and reduce short-term growth in the volume of discharge. The Discharger proposes to plant non-fruit bearing trees and other plants inside the Facility and to irrigate them with WWTF effluent. The Discharger estimates that approximately 1,425 trees and 1,425 other plants will be planted. When mature, the trees will require approximately 45,600 gallons of treated wastewater per day, and the other plants will require 7,125 gallons of treated wastewater per day.
- The Facility is currently regulated by WDRs Order R7-2012-0034, adopted on June 21, 2012. The wastewater collection system serving the Facility is regulated under State Water Resources Control Board's (State Water Board) Statewide General WDRs for Sanitary Sewer Systems, Order No. 2006-0003-DWQ.
- This Order incorporates the Discharger's proposed discharge modifications at the WWTF and implements the most current laws and regulations applicable to the discharge. Accordingly, this Order supersedes WDRs Order R7-2012-0034 upon the effective date of this Order, except for enforcement purposes.

Wastewater Treatment Facility, Current and Proposed Discharges

- 7. The Discharger conveys excess wastewater approximately 9000 feet from the Lansing Avenue WWTF to the TRC WWTF through a 12-inch force main. The TRC WWTF consists of: headworks, including an inline comminutor and a magnetic flow meter with bypass provided in a below ground precast concrete vault, two aeration ponds, two polishing ponds, and four evaporation/percolation ponds, shown in **Attachment B**, herein made part of this Order by reference.
- 8. Overflow weirs with adjustable telescoping valves between the two aeration ponds and two clarifier ponds to allow the depth of wastewater to be adjusted from four to six feet. The maximum operating depth of the four evaporation/percolation ponds is five feet with two (2) feet of freeboard.
- 9. **Attachment B** also shows the location of the trees and other plants that the Discharger proposes to plant and irrigate with undisinfected secondary recycled water. The trees and other plants that the Discharger plans to plant and irrigate are as follows:
 - a. Mesquite Trees;
 - b. Brittlebush;
 - c. Turtleback;
 - d. Dye-Weed;
 - e. Loco-Weed; and
 - f. Burrow-Weed.
- 10. After the TRC WWTF went into operation in 2008, the average monthly discharge rate has been steadily increased from about 0.141 million gallons per day (mgd) in October 2008 to approximately 0.166 mgd in December 2017. The disposal capacity of the facility is rated at 0.185 mgd.
- 11. The Discharger's Self-Monitoring Reports (SMRs) for the period from January 2012 through December 2017 characterize the WWTF influent as follows:

| <u>Constituent</u> | <u>Units</u> | <u>Average</u> | <u>Maximum</u> | <u>Minimum</u> |
|---------------------------------|--------------|----------------|----------------|----------------|
| Daily Flow | mgd | 0.156 | 0.346 | 0 |
| BOD ₅ | mg/L | 59.1 | 168 | 2 |
| Total Suspended Solids (TSS) | mg/L | 56.6 | 728 | 14 |

12. The Discharger's SMRs for the period from January 2012 through December 2017 characterize the TRC WWTF effluent as follows:

| <u>Constituent</u> | <u>Units</u> | <u>Average</u> | <u>Maximum</u> | <u>Minimum</u> |
|---------------------------------|--------------|----------------|----------------|----------------|
| рН | pH Units | 8.23 | 9.7 | 6.7 |
| BOD ₅ | mg/L | 36.1 | 141 | 2 |
| Total Suspended Solids (TSS) | mg/L | 103.8 | 293 | 8 |
| Total Dissolved Solids | mg/L | 1604 | 3165 | 662 |
| Dissolved Oxygen | mg/L | 6.15 | 15.6 | 0.3 |

13. The Discharger monitors a network of groundwater monitoring wells at the TRC WWTF (Wells 1 through 5). The SMRs for the period from January 2012 through December 2017 characterize the depth to groundwater in the area of the disposal ponds as follows:

| Well Number | <u>Units</u> | <u>Average</u> | <u>Maximum</u> | <u>Minimum</u> |
|-------------|--------------|----------------|----------------|----------------|
| Well 1 | ft. | 8.0 | 8.7 | 7.17 |
| Well 2 | ft. | 6.3 | 7.8 | 4.21 |
| Well 3 | ft. | 8.9 | 9.7 | 6.75 |
| Well 4 | ft. | 5.7 | 7.0 | 3.13 |
| Well 5 | ft. | 5.5 | 6.7 | 3.44 |

- 14. The Discharger reports that there is currently no significant industrial wastewater being discharged to the TRC WWTF.
- 15. The Discharger has contracted the service of a private contractor to haul away the treated pond sludge. The pond sludge is then further processed by the private contractor to remove pathogens and subsequently sold as a soil amendment.

Hydrogeologic Conditions

- 16. Annual average precipitation in Salton City is about 3 inches and annual evapotranspiration is approximately 72 inches.
- 17. There are no streams in the vicinity of the TRC WWTF. The Salton Sea is located approximately one mile to the northeast.
- 18. Water supply to Salton City has an average TDS concentration of about 930 mg/L.
- 19. SCSD reports that the groundwater in the vicinity of the TRC WWTF has a Total Dissolved Solids (TDS) concentration ranging between 29,200 and 34,500 mg/L. There are no domestic wells within 500 feet of the TRC WWTF.

20. Soils in the area of TRC WWTF disposal ponds consist generally of sand with silt and silty sand for the top seven (7) to fifteen (15) feet, underlain with silt and clay.

Basin Plan, Beneficial Uses, and Related Regulatory Considerations

- 21. The Water Quality Control Plan for the Colorado River Basin (Basin Plan), which was adopted on November 17, 1993 and amended on March 7, 2017, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Pursuant to section 13263, subdivision (a) of the Water Code, waste discharge requirements must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.
- 22. The TRC WWTF is located within the West Salton Sea Hydrologic Unit, which has the following beneficial uses for ground water:
 - a. Municipal supply (MUN),
 - b. Agricultural supply (AGR)

However, first-encountered groundwater beneath the site is not currently used for municipal supply purposes because of its high salt concentrations, as discussed further below.

- 23. State Water Board Resolution 88-63 (as revised by Resolution 2006-0008), also known as the "Sources of Drinking Water" Policy, recognizes that Basin Plans do not always provide sufficient detail in waterbodies designated for "Municipal" use to judge clearly what is, or is not, a source of drinking water for various purposes. Accordingly, it exempts a waterbody from such designation if the TDS in the waterbody exceeds 3,000 mg/L and the waterbody is not reasonably expected by the regional water board to supply a public water system. The Basin Plan incorporates the Sources of Drinking Water Policy by reference.
- 24. Groundwater in the area of the TRC WWTF has TDS ranging from 289,200 to 34,500 mg/L, and therefore cannot be reasonably expected to supply a public water system or used for agricultural purposes. Consequently, effluent limitations that would be protective of a municipal beneficial use as prescribed in title 22 of the California Code of Regulations for nitrogen and TDS are not necessary for this discharge.
- 25. This Order establishes waste discharge requirements (WDRs) pursuant to division 7, chapter 4, article 4 of the Water Code (for discharges that are not subject to regulation under Clean Water Act section 402 (33 U.S.C. § 1342)).
- 26. These WDRs implement numeric and narrative water quality objectives for ground and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply are the maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22, section 64421 et seq. and bacteriological limits set in section 64426.1 of title 22 of the California Code of Regulations. Groundwater for use as domestic or municipal water supply (MUN) must not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.

- 27. The discharge as authorized by this Order, and treatment and storage facilities associated with discharges of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of the Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in title 27, division 2, subdivision 1 of the California Code of Regulations, commencing with section 20005. This exemption is based on section 20090(a) of title 27, which states in relevant part that discharges of domestic sewage or treated effluent, and treatment or storage facilities associated with municipal wastewater treatment plants, are exempt provided that such discharges are regulated by WDRs consistent with applicable water quality objectives, and that residual sludges or solid waste from wastewater treatment facilities are discharge of domestic wastewater and associated treatment and storage facilities in a manner consistent with applicable surface and ground water quality objectives, and residual sludges or solid waste from the Facility will be managed pursuant to title 27.
- 28. Section 13267 of the Water Code authorizes the Colorado River Basin Water Board to require technical and monitoring reports. The monitoring and reporting requirements in Monitoring and Reporting Program (MRP) R7-2018-0013 are necessary to determine compliance with this Order. The State Water Board's electronic database, GeoTracker Information Systems, facilitates the submittal and review of Facility documents. The burden, including costs, of this MRP bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.
- 29. Pursuant to Water Code section 13263, subdivision (g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Water Recycling Regulatory Considerations

- 30. State policy promotes the use of recycled water to the maximum extent in order to supplement existing surface and ground water supplies to help meet water needs. (Water Code, §§ 13510-13512.) One of the primary conditions on the use of recycled water is protection of public health. (Water Code, §§ 13521, 13522.) The discharge as authorized by this Order is consistent with the state policy and meets the requirements of title 22, division 4, chapter 3 of the California Code of Regulations to ensure protection of public health.
- 31. The State Water Board adopted a *Policy for Water Quality Control for Recycled Water* (Recycled Water Policy) on February 3, 2009 and amended the Policy on January 22, 2013. Section 7.b.(4) of the amended Policy states that permits or requirements for landscape irrigation projects shall include, in addition to any other appropriate recycled water monitoring requirements, monitoring for priority pollutants in the recycled water production facility once per year, except when the recycled water production facility has a design production flow for the entire water reuse system of one MGD or less. For these smaller facilities, recycled water shall be monitored for priority pollutants once every five years. Priority pollutants are those identified in 40 Code of Federal Regulations part 423, Appendix A.
- 32. The State Water Board's Division of Drinking Water (DDW) (formerly, the California Department of Public Health [CDPH]) is statutorily required to establish uniform statewide recycling criteria for the various uses of recycled water to ensure protection of public health where recycled water use is involved. (Wat. Code, § 13521.) DDW has promulgated

regulatory criteria in title 22, division 4, chapter 3, section 60301 et seq. of the California Code of Regulations. DDW regulatory criteria include specified approved uses of recycled water, numerical limitations and requirements, treatment method requirements and performance standards. DDW regulations allow use of alternate methods of treatment in some cases, so long as the alternate methods are determined by DDW to provide equivalent treatment and reliability.

- 33. DDW has established statewide reclamation criteria for the use of recycled water and developed guidelines for specific uses, including the Discharger's proposed irrigation of trees and plants at its Facility:
 - a. Recycled water used for surface irrigation of the following is required to be at least undisinfected secondary recycled water (Cal. Code Regs., tit. 22, § 60304):
 - i. Orchards where the recycled water does not come into contact with the edible portion of the crop,
 - ii. Vineyards where the recycled water does not come into contact with the edible portion of the crop,
 - iii. Non-food-bearing trees (Christmas tree farms are included in this category provided no irrigation with recycled water occurs for a period of 14 days prior to harvesting or allowing access by the general public),
 - iv. Fodder and fiber crops and pasture for animals not producing milk for human consumption,
 - v. Seed crops not eaten by humans,
 - vi. Food crops that must undergo commercial pathogen-destroying processing before being consumed by humans, and
 - vii. Ornamental nursery stock and sod farms provided no irrigation with recycled water occurs for a period of 14 days prior to harvesting, retail sale, or allowing access by the general public.
- 34. The discharge as authorized by this Order is consistent with the State Water Board's Recycled Water Policy and the Water Code. The undisinfected secondary recycled water standard found in California Code of Regulations, title 22, section 60304 is an appropriate level of treatment and performance for the intended reuse.

State Antidegradation Policy

- 35. State Water Board Resolution 68-16, entitled *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution 68-16), generally prohibits the Colorado River Basin Water Board from authorizing discharges that will result in the degradation of high quality waters, unless it is demonstrated that any change in water quality will (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high quality waters.
- 36. When receiving water body quality exceeds or just meets the applicable water quality objective due to naturally-occurring conditions or to prior Board-authorized activities, it is not

a high quality water and not subject to the requirements of Resolution 68-16. However, the Discharger is still required to use "best efforts" to control the discharge of waste.

- 37. Constituents in domestic wastewater treatment facility effluent that typically present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and total dissolved salts (TDS). The proposed WWTF provides substantial removal of soluble organic matter, solids, and nitrogen.
- 38. TDS. First-encountered groundwater beneath the Facility is of poor quality that historically has not supported beneficial uses. The Discharger conducted groundwater monitoring at several locations at the Facility, and concluded in the report titled *Report of Limited Groundwater Evaluation, Two Aeration Ponds at Proposed Wastewater Treatment Plant, Salton City Area, Imperial County, California*, that the ground water is too saline for municipal use. The results of groundwater monitoring show TDS concentrations of 29,200 and 34,500 mg/L in two wells at the location of the evaporation/percolation ponds. Based on the foregoing, the Colorado River Basin Water Board finds that groundwater in the area of the proposed discharge is not and cannot reasonably be expected to be a source of municipal or domestic supply. Consequently, the underlying groundwater is not a "high quality" waster with respect to TDS.
- 39. **Coliforms.** While secondary treatment reduces fecal coliform densities by 90 to 99%, the remaining organisms in effluent are still 10⁵ to 10⁶ MPN/100 ml. (United States Environmental Protection Agency, *Design Manual, Municipal Wastewater Disinfection*, October 1986.) Coliforms do not generally transport through soils any appreciable distance, and given the soil types at the disposal ponds, it is not likely that pathogen-indicator bacteria will reach groundwater at densities exceeding those prescribed in title 22 of the California Code of Regulations.
- 40. The Colorado River Basin Water Board has determined that some degradation of groundwater from the discharge to the evaporation/percolation ponds is consistent with the Resolution 68-16 because any limited degradation:
 - a. Is confined to a reasonable area;
 - Is minimized by means of full implementation, regular maintenance, and optimal operation of best practicable treatment and control (BPTC) measures by the Discharger;
 - c. Is limited to waste constituents typically encountered in domestic wastewater;
 - d. Does not unreasonably affect any beneficial uses of groundwater prescribed in the Basin Plan, and will not result in the violation of any water quality objective; and
 - e. Is consistent with the maximum benefit to the people of the state.
- 41. The discharge of wastewater from the TRC WWTF, as permitted herein, reflects BPCT. The controls ensure the discharge does not create a condition of pollution or nuisance, and that the highest water quality defined by the physical and chemical nature of the local groundwater will be maintained, which is consistent with the antidegradation provisions of Resolution No. 68-16. The WWTF incorporates:
 - a. Controls to monitor the concentrations of waste constituents;

- b. Structural controls to dispose of waste constituents in a designated area;
- c. Sludge handling facilities;
- d. An operation and maintenance manual;
- e. Staffing to assure proper operation and maintenance; and
- f. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.
- 42. Degradation of groundwater by some of the typical waste constituents associated with discharges from a facility treating domestic wastewater, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from reliance on numerous, concentrated individual wastewater systems, and the impact on water quality will be substantially less. The economic prosperity of surrounding communities and associated industries is of maximum benefit to the people of the state, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

Stormwater

- 43. Federal regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990 (40 C.F.R. parts 122, 123, and 124) to implement the Clean Water Act's storm water program set forth in Clean Water Act section 402, subdivision (p) (33 U.S.C. § 1342, subd. (p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to "waters of the United States" to obtain National Pollutant Discharge Elimination System (NPDES) permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.
- 44. The State Water Board adopted Water Quality Order 2014-0057-DWQ (NPDES No. CAS000001), General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit), on July 1, 2015. Facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge, that are within the confines of the facility, with a design flow of one million gallons per day or more, or required to have an approved pretreatment program under 40 Code of Federal Regulations part 403, are required to enroll under the Industrial General Permit unless there is no discharge of industrial storm water to waters of the United States. All stormwater generated at the Facility is directed to the evaporation/percolation ponds, does not leave the boundaries of the Facility, and does not reach waters of the United States. Therefore, the Discharger is not required to enroll under the Industrial General Permit.

CEQA and Public Participation

45. 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, § 21000 et seq.).

- 46. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to update waste discharge requirements for this discharge and has provided them with an opportunity for a public meeting and to submit comments.
- 47. 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 R7-2012-0034 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Discharge Prohibitions

- 1. Discharge of waste classified as "hazardous," as defined in California Code of Regulations, title 27, section 20164, or "designated," as defined in Water Code section 13173 and California Code of Regulations, title 27, section 20164, is prohibited.
- 2. Discharge of treated wastewater at a location other than the designated disposal areas or as recycled water used for irrigation at approved use areas, is prohibited.
- 3. The discharge of any wastewater from the Facility to any surface waters or surface drainage courses is prohibited.
- 4. The Discharger shall not accept waste in excess of the design treatment capacity of the Facility's disposal system.
- 5. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
- 6. Bypass or overflow of untreated or partially-treated waste is prohibited.
- 7. Application of recycled water and fertilizers containing nitrogen at a rate greater than the agronomic uptake rate of the crops grown is prohibited.
- 8. The discharge of treated wastewater to land not owned or authorized for such use by the Discharger is prohibited.
- 9. The storage, treatment, or disposal of wastes from the Facility shall not cause contamination, pollution, or nuisance as defined in section 13050, subdivisions (k), (l), and (m) of the Water Code.

B. Effluent Limitations

1. The discharge to the disposal ponds shall comply with the following:

| <u>Constituent</u> | <u>Units</u> | Effluent Limitations | | |
|--------------------|--------------|----------------------|----------------|--|
| | | Average Monthly | Average Weekly | |
| BOD ₅ | mg/L | 45 | 65 | |

- 2. The 30-day average daily dry-weather flow to the treatment ponds shall not exceed 0.185 mgd.
- 3. Effluent from the TRC WWTF shall not have a pH below 6.0 or above 9.0.
- 4. The oxidation ponds and evaporative/storage ponds shall be maintained so they will be kept in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of evaporative/storage ponds shall not be less than 1.0 mg/L.

C. Pond Specifications

- 1. A minimum depth of freeboard of two (2) feet shall be maintained at all times in all ponds.
- 2. The ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
- 3. The ponds shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 4. The ponds shall be managed to prevent breeding of mosquitoes, in particular:
 - 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.
- 5. TRC WWTP shall be operated and maintained to comply with BPTC.
- 6. The Discharger shall provide a report to the Colorado River Basin Water Board when it determines that the plant's average dry-weather flow rate for any month exceeds 80 percent of the design capacity. The report should indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.
- 7. Objectionable odors originating at the WWTF shall not be perceivable beyond the limits of the Facility.
- 8. Public contact with wastewater ponds shall be precluded through such means as fences, signs, and other acceptable alternatives.

D. Reclamation Specifications

1. The Discharger shall submit a technical report that is a work plan for the location and types of trees and other plants proposed to be irrigated with undisinfected secondary recycled

water for the Colorado River Basin Water Board Executive Officer's review and approval prior to implementation of the work plan.

- 2. No irrigation with, or impoundment of, undisinfected secondary recycled water shall take place within 150 feet of any domestic water supply well.
- 3. No spray irrigation of any recycled water shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground or schoolyard.
- 4. Except as allowed under section 7604 of title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.
- 5. No recycled water used for irrigation, or soil that has been irrigated with recycled water, shall come into contact with edible portions of food crops eaten raw by humans.
- 6. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in pollution, or adversely affect water quality, as defined in the Water Code.
- 7. The delivery or use of recycled water shall be in conformance with the reclamation criteria contained in title 22 of the California Code of Regulations, or amendments thereto, for the irrigation of food crops, irrigation of fodder, fiber, and seed crops, landscape irrigation, supply of recreational impoundments and ground water recharge.
- 8. Recycling of WWTF effluent shall be at reasonable agronomic rates considering the crop, soil, and climate. The annual nutrient loading of the application areas, including the nutritive value of organic and chemical fertilizers and recycled water shall not exceed crop demand.
- 9. Objectionable odors originating in the areas treated with recycled water shall not be perceivable beyond the limits of those areas.
- 10. Public contact with recycled water shall be controlled using signs and/or other appropriate means. The non-disinfected wastewater is not approved for off-site distribution. Conspicuous signs shall be posted in a prominent location in each area where nondisinfected wastewater is stored on-site. Each sign or label with "Non-disinfected wastewater - No body contact or drinking" wording shall be displayed as well as the international warning symbol.

E. Sludge and Solids Limitations

- 1. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to title 27 of the California Code of Regulations.
- 2. Sludge use and disposal shall comply with federal and state laws and regulations, including permitting requirements, and technical standards in 40 Code of Federal Regulations part 503.

- 3. Any proposed change in use or disposal of biosolids requires the approval of the Colorado River Basin Water Board's Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least 90 days in advance of the change.
- 4. The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the MRP of this Order. Sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the MRP of this Order and as required by 40 Code of Federal Regulations part 503. The results of the analyses shall be submitted to the Colorado River Basin Water Board as part of the MRP.

F. Standard Provisions

- Noncompliance. The Discharger shall comply with all of the terms, requirements, and conditions of this Order and Monitoring and Reporting Program R7-2018-0022. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2) termination, revocation and reissuance, or modification of these waste discharge requirements; or (3) denial of an Order renewal application.
- 2. Enforcement. The Colorado River Basin Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.
- 3. **Proper Operation and Maintenance.** The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment, and control, installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes, but is not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained, and made available to the Colorado River Basin Water Board on request.
- 4. Reporting of Noncompliance. The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Colorado River Basin Water Board office and the Office of Emergency Services within twenty-four (24) hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, Discharger shall leave a message on the Colorado River Basin Water Board's office voicemail. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance.

- 5. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.
- 6. **Material Changes.** Prior to any modifications which would result in any 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 if required by the Colorado River Basin Water Board, obtain revised requirements before any modifications are implemented.
- 7. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing certification of appropriate grade pursuant to section 3680, chapter 26, division 3, title 23 of the California Code of Regulations.
- 8. **Familiarity with Order.** The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order, and shall maintain a copy of this Order at the site.
- 9. **Inspection and Entry.** 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 the premises regulated by this Order, or the place where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, records 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 purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.
- 10. **Records Retention.** The Discharger shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically.
- 11. **Change in Ownership.** This Order is not transferable to any person without written approval by the Colorado River Basin Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Colorado River Basin Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Colorado River Basin Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.
- 12. **Bypass.** Bypass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is

prohibited. The Colorado River Basin Water Board may take enforcement action against the Discharger 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 causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production; and
- b. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent bypass occurring during equipment downtime, or preventive maintenance; or
- c. Bypass is (1) required for essential maintenance to ensure efficient operation; (2) neither effluent nor receiving water limitations are exceeded; and (3) the Discharger notifies the Colorado River Basin Water Board ten (10) days in advance.

In the event of an unanticipated bypass, the Discharger shall immediately report the incident to the Colorado River Basin Water Board. During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board's office voicemail. A written report shall be provided within five (5) business days the Discharger is aware of the incident. The written report shall include a description of the bypass, any noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- 13. **Backup Generators.** Standby, power generating facilities shall be available to operate the Facility during a commercial power failure.
- 14. Format of Technical Reports. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with chapter 30, division 3, title 23 of the California Code of Regulations, as groundwater raw data uploads electronically over the internet into the State Water Board's GeoTracker database, found at: https://geotracker.waterboards.ca.gov/. Documents that are normally mailed by the Discharger, such as regulatory documents, narrative technical monitoring program reports, and such reports submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall also be uploaded into GeoTracker in the appropriate Microsoft software application, such as word, excel, or an Adobe Portable Document Format (PDF) file. Large documents are to be split into manageable file sizes appropriately labelled and uploaded into GeoTracker. The Facility is assigned GeoTracker Global Identification No. WDR100035569.
- 15. **Qualified Professionals.** In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be

prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.

- 16. **Certification Under Penalty of Perjury.** All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the State of California, that the reports were prepared under his or her supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.
- 17. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
- 18. Modification, Revocation, Termination. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, rescission, or reissuance, or the Discharger's notification of planned changes or anticipated noncompliance, does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, a change in land application plans or sludge use/disposal practices, or the adoption of new regulations by the State Water Board, Colorado River Basin Water Board (including revisions to the Basin Plan), or federal government.
- 19. **Severability.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.

I, Paula Rasmussen, Acting Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region on November 8, 2018.

Ordered By: <u>Original signed by</u> PAULA RASMUSSEN Acting Executive Officer

> <u>11-8-2018</u> Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2018-0013 FOR SALTON COMMUNITY SERVICES DISTRICT, OWNER/OPERATOR THOMAS R. CANNELL WASTEWATER TREATMENT PLANT Salton City - Imperial County

Location of Wastewater Treatment Facilities and Discharges: NW ¼ of SE ¼ of Section 26, T10S, R10E, SBB&M

A. Monitoring

- This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267 and describes requirements for monitoring the relevant wastewater system and groundwater quality. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Colorado River Basin Water Board or its Executive Officer.
- The Discharger owns and operates the wastewater system that is subject to WDRs Order R7-2018-0013. The reports are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Code section 13267, the Discharger shall implement the MRP and shall submit the monitoring reports described herein.
- 3. The collection, preservation, and holding times of all samples shall be in accordance with United States Environmental Protection Agency (USEPA)-approved procedures. Unless otherwise approved by the Colorado River Basin Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Board, Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP). All analyses shall be conducted in accordance with the latest edition of the Guidelines Establishing Test Procedures for Analysis of Pollutants (40 C.F.R. part 136), promulgated by the USEPA.
- 4. Samples shall be collected at locations approved by the Colorado River Basin Water Board's Executive Officer. If no location is specified, sampling shall be conducted at the most representative sampling point available.
- 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. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for period greater than 24-hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

- 7. 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.
- 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 Order, and records of all data used to complete the application for this Order, for a period of at least five (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.
- 9. 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;
 - e. The analytical techniques or method used; and
 - f. The results of such analyses.
- 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.

Influent Monitoring

11. Influent to the WWTF shall be monitored according to the following schedule:

| <u>Parameter</u> | <u>Units</u> | Type of Sample | Sample <u>Frequency</u> | Reporting <u>Frequency</u> |
|------------------|-------------------|----------------|----------------------------|-------------------------------|
| Flow | mgd | measurement | Daily | Monthly |
| BOD ₅ | mg/L ¹ | grab | Monthly | Monthly |
| TSS | mg/L | grab | Monthly | Monthly |

WWTF Effluent Monitoring (Pond)

12. The Discharger shall monitor effluent from the WWTF according to the following schedule:

¹ milligrams per liter

| <u>Parameter</u> | <u>Units</u> | Type of Sample | Sample Frequency | Reporting Frequency |
|---|--------------|---------------------|---------------------|------------------------|
| Freeboard | feet | measurement | Monthly | Monthly |
| рН | s.u. | grab | Weekly | Monthly |
| DO | mg/L | grab | Weekly | Monthly |
| BOD ₅ | mg/L | grab | Monthly | Monthly |
| TSS | mg/L | grab | Monthly | Monthly |
| TDS | mg/L | grab | Monthly | Monthly |
| Nitrate as N | mg/L | grab | Annually | Annually |
| Nitrite as N | mg/L | grab | Annually | Annually |
| Total Nitrogen as N | mg/L | grab | Annually | Annually |
| Ammonia as N | mg/L | grab | Annually | Annually |
| Total phosphorous | mg/L | grab | Annually | Annually |
| VOCs (EPA 624) | µg/L² | grab | Annually | Annually |
| Volume of wastewater used for landscape irrigation | MGD | Flow Measurement | Daily | Monthly |

Water Supply to the Community

13. The domestic water supply shall be monitored according to the following schedule:

| <u>Constituent</u> | <u>Units</u> | Type of <u>Sample</u> | Sampling <u>Frequency</u> | Reporting <u>Frequency</u> |
|---------------------------|--------------|--------------------------|------------------------------|-------------------------------|
| Total Dissolved Solids | mg/L | Grab | Monthly | Monthly |

Sludge Monitoring

14. The Discharger shall report annually on the quantity, location, and method of disposal of all sludge and similar solid materials being produced at the WWTF. If no sludge is disposed of during the year being reported, the Discharger shall state, "No Sludge Removed" in the annual monitoring report. Sludge that is generated at the WWTF shall be sampled and analyzed for the following:

| <u>Parameter</u> | <u>Units</u> | Type of <u>Sample</u> | Sample <u>Frequency</u> | Reporting <u>Frequency</u> |
|------------------|--------------|--------------------------|----------------------------|-------------------------------|
| Arsenic | mg/kg³ | composite | Annually | Annually |
| Cadmium | mg/kg | composite | Annually | Annually |
| Copper | mg/kg | composite | Annually | Annually |
| Lead | mg/kg | composite | Annually | Annually |
| Mercury | mg/kg | composite | Annually | Annually |

² micrograms per liter

³ milligrams per kilogram

Reporting

| <u>Parameter</u> | <u>Units</u> | Type of <u>Sample</u> | Sample <u>Frequency</u> | Reporting <u>Frequency</u> |
|------------------|--------------|--------------------------|----------------------------|-------------------------------|
| Molybdenum | mg/kg | composite | Annually | Annually |
| Nickel | mg/kg | composite | Annually | Annually |
| Selenium | mg/kg | composite | Annually | Annually |
| Zinc | mg/kg | composite | Annually | Annually |
| Fecal Coliform | MPN/100mL | composite | Annually | Annually |

Depth to Groundwater

15. The Discharger shall monitor groundwater in the area of the disposal ponds for the following:

| <u>Parameter</u> | <u>Units</u> | Type of <u>Sample</u> | Sampling <u>Frequency</u> | Reporting <u>Frequency</u> |
|------------------|--------------|--------------------------|------------------------------|-------------------------------|
| Depth (bgs) | feet | measurement | Monthly | Monthly |

Operation and Maintenance

1. The Discharger shall monitor and report the following:

Activity

The Discharger shall inspect and document any operation/maintenance Annually problems by inspecting each unit process. In addition, calibration of flow meters and equipment shall be performed in a timely manner and documented. Operation and Maintenance (O&M) reports shall be submitted to the Colorado River Basin Water Board office annually.

B. Reporting

- Daily, weekly, and monthly monitoring shall be included in the monthly monitoring report. Monthly monitoring reports shall be submitted to the Colorado River Basin Water Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted by January 15th, April 15th, July 15th and October 15th. Annual monitoring reports shall be submitted to the Colorado River Basin Water Board by January 15th of the following year.
- 2. The Discharger shall attach a cover letter to the self-monitoring reports (SMRs). The information contained in the cover letter shall clearly identify violations of the WDRs, discuss corrective actions taken or planned, and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.
- 3. In reporting 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 in such a manner as to clearly illustrate whether the Facility is operating in compliance with the WDRs. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).

4. Each report submitted to the Colorado River Basin Water Board shall contain the following statement:

"I certify under the 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 ensure that qualified personnel properly gathered and evaluated the information submitted. 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 a fine and imprisonment.

Executed on the _____day of _____ at ____

(Signature)"

- 5. The SMRs and any other information requested by the Colorado River Basin Water Board shall be signed by a principal executive officer or ranking elected official. 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.
- 6. The SMRs shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.
- 7. The results of any analysis taken more frequently than required at the locations specified in this MRP shall be reported to the Colorado River Basin Water Board.
- 8. The Discharger shall report any failure in the Facility (wastewater treatment plant and collection and disposal systems). The incident shall be reported immediately to the Colorado River Basin Water Board Executive Officer as soon as:
 - a. The Discharger has knowledge of the discharge,
 - b. Notification is possible, and
 - c. Notification will not substantially impede cleanup or other emergency measures.
- 9. The Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under this MRP and future revisions thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and PDF monitoring reports to the State Water Board's GeoTracker database. Documents that are 100 megabytes (MB) or larger should be broken down into smaller electronic files, labelled properly, and uploaded into GeoTracker.

Ordered By: <u>Original signed by</u> PAULA RASMUSSEN Acting Executive Officer

> <u>11-8-2018</u> Date



