#### BOARD ORDER R7-2014-0007

# WASTE DISCHARGE REQUIREMENTS FOR SALTON COMMUNITY SERVICES DISTRICT, OWNER/OPERATOR DESERT SHORES WASTEWATER TREATMENT PLANT Desert Shores – Imperial County

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

- 1. Salton Community Services District (SCSD or Discharger), P. O. Box 5268, Salton City, CA 92275, owns and operates a sewage collection system and wastewater treatment plant (WWTP or Facility) that provides sewage services to Desert Shores, an unincorporated community in Imperial County. The WWTP location is Coolidge Road and Highway 86, Desert Shores, CA 92247, in the Northeast ¼ of Section 17, Township 9 Section, Range 9 East, San Bernardino Baseline and Meridian, shown in Attachment A, herein made part of this Order by reference.
- 2. On March 23, 2012, the Discharger submitted a Report of Waste Discharge (ROWD) to update Waste Discharge Requirements (WDRs) for the WWTP. The Colorado River Basin Water Board has determined that WDRs for the discharge are in need of revision. The WDRs are being updated to implement the most current laws, regulations, and Colorado River Basin Water Board policies applicable to the discharge.
- 3. The discharge has been subject to waste discharge requirements adopted in Board Order 98-008.
- 4. There are two domestic wells located approximately ¼ mile away and immediately down-gradient and northeast of the WWTP. On January 22, 1996, Colorado River Basin Water Board staff inspected the WWTP in response to a nearby property owner's complaint of groundwater and soil contamination believed to be caused by seepage from the WWTP disposal ponds. The property owner claimed that seepage water from the WWTP's disposal ponds had impacted the well on his property with increased total dissolved solids concentration in the groundwater and caused soil moisture and salt crusting.
- 5. In 1996, the Discharger installed a network of groundwater monitoring wells at the site of the WWTP to investigate soil and groundwater contamination. The Discharger's initial investigation produced inconclusive results and continued monitoring was required in Board Order 98-008.
- 6. A technical report titled "Corrective Action Plan Desert Shores Wastewater Collection and Disposal System", dated September 12, 1997, was submitted by the Discharger. The report indicated that high salinity in the ground water was a result of infiltrating wastewater from treatment ponds. The report further concluded that restoring the quality of the areal ground water, downgradient of the facility to the point where it is suitable for domestic use, was not likely to be technically feasible.

- 7. On March 5, 1998, the Colorado River Basin Water Board issued Cleanup and Abatement Order (CAO) 98-019 requiring the Discharger to take corrective action for impacts due to groundwater contamination. Subsequently, the Discharger: a) provided domestic water service to residents adjacent to the WWTP, b) provided soil remediation to the property closest to the WWTP and c) performed a survey and repaired portions of the sanitary sewer collection system that had infiltration of saltwater from the Salton Sea. On June 15, 2005, the Colorado River Basin Water Board issued the Discharger a letter acknowledging the completion of all tasks required by CAO 98-019.
- 8. In February 2013, Colorado River Basin Water Board staff investigated numerous complaints of nuisance odors and surface wetting on and around the property adjacent to the WWTP. Board staff observed that the soils in the area immediately around the WWTP appeared wet, but could not conclusively determine the source of the surface wetting observed. Groundwater monitoring at the Facility is essential to determine the extent to which discharges of wastes from the Facility may be contributing to the surface wetting and are impacting groundwater quality.
- 9. On July 23, 2013, the Assistant Executive Officer issued a Notice of Violation against the Discharger for the failure to comply with its monitoring requirements and a California Water Code (CWC) Section 13267 Technical Order, requiring the Discharger to investigate the condition of the groundwater monitoring wells. The Technical Order also required the Discharger to submit a work plan and implement groundwater monitoring as required by Board Order 98-008. The non-compliance for failing to implement groundwater monitoring and reporting continues to be under investigation by the Assistant Executive Officer.
- 10. In response to the 13267 Technical Order the Discharger submitted a work plan dated August 23, 2013, reporting that the groundwater monitoring wells were silted and inaccessible for monitoring and in need of redevelopment or replacement. On December 20, 2013, the Colorado River Basin Water Board staff sent a letter to the Discharger requiring that the groundwater monitoring network be reconditioned or reconstructed and groundwater monitoring be initiated immediately thereafter.
- 11. The Discharger initially attempted to redevelop the existing wells but during the redevelopment effort, it determined that the wells were unable to be redeveloped for the purpose of compliance with Board Order 98-008. The Discharger, therefore, properly closed the existing 13 groundwater monitoring wells and installed nine new wells in the boring locations of the old groundwater monitoring wells as shown in Attachment C, herein made part of this Order by reference. The new monitoring well construction included removal of the existing well casing via overdrilling using a hollow stem auger to a depth of 20 feet below ground surface (bgs). The new wells were constructed in the same boring by installing PVC well screen, a bentonite transition seal, concrete surface seal and a protective steel monument. The remaining wells were abandoned in accordance with the California Department of Water Resources standards. If necessary, the Discharger proposes to install a tenth groundwater monitoring well on the opposite side of the property adjacent to the WWTP. This Board Order contains a Special Provision that requires the Discharger to submit a Quality Assurance Project Plan (QAPP) that specifies the Discharger's groundwater monitoring and reporting protocols.

# **Wastewater Treatment Facility and Discharge**

- 12. The treatment system consists of seven aeration ponds, arranged in series, as shown in Attachment B, herein made part of this Order by reference. Final disposal is accomplished in evaporation/percolation ponds (aeration ponds). There is no discharge to waters of the United States. The facility is designed for a maximum flow of 0.2 million gallons per day (MGD).
- 13. Self-Monitoring Reports (SMRs) submitted by the Discharger for the period from January 2009 through December 2009 show that the average daily inflow into the ponds is approximately 0.12 MGD and the average total dissolved solids (TDS) concentration into the ponds is about 1,700 milligrams per liter (mg/L).
- 14. The Discharger reports that there is currently no significant industrial wastewater being discharged to the wastewater treatment facility.

# **Hydrogeologic Conditions**

- 15. Annual average precipitation in Desert Shores is about 3 inches per year.
- 16. There are no streams in the vicinity of the Facility; however, the area is subject to infrequent flash floods. The Salton Sea is located approximately one mile to the east.
- 17. The direction of groundwater flow in the area of the wastewater treatment plant (WWTP) is northeast towards the Salton Sea.
- 18. There are no domestic wells within 500 feet of the on-site infiltration basins.
- 19. The community obtains its water supply from the Coachella Valley Water District and a nearby groundwater supply well which has an average TDS concentration of about 970 mg/L.
- 20. Reports submitted by the Discharger indicate that depth to ground water in the vicinity of the Facility is between three and nine feet below ground surface.
- 21. Soil borings indicate the upper two to five feet consist of loose and moist silty clay. The clay is underlain by wet clayey sand with gravel and cobbles.

#### Basin Plan, Beneficial Uses, and Regulatory Considerations

- 22. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) designates beneficial uses and establishes water quality objectives for ground and surface waters in the Region, and contains implementation programs and policies to achieve objectives. In addition, State Water Resources Control Board (State Water Board) Resolution 88-63 requires that, with certain exceptions, the Colorado River Basin Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.
- 23. The WWTP is located within the West Salton Sea Hydrologic Unit, which has the following beneficial uses for ground water:
  - a. Municipal supply (MUN), and

- b. Agriculture supply (AGR)
- 24. 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 (MCL), and bacteriological limits specified in Section 64421 et seq. of Title 22, California Code of Regulations (CCR). The narrative objectives are:
  - a. Ground water for use as domestic or municipal water supply (MUN) shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity (Basin Plan, page 3-8).
  - b. Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities which ultimately discharge in areas where such wastes can percolate to ground water usable for domestic and municipal purposes are prohibited (Basin Plan, page 3-8).
- 25. 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 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.
- 26. Section 13267 of the California Water Code (CWC) authorizes the regional water boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements.
- 27. This Order establishes WDRs pursuant to Division 7, Chapter 4, Article 4, of the CWC for discharges that are not subject to regulation under Clean Water Act (CWA) Section 402 (33 U.S.C. Section 1342).
- 28. Pursuant to CWC section 13263(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.
- 29. The discharge authorized by this Board 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 Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1, 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 are exempt provided that such discharges are regulated by WDRs, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable Title 27 provisions. These requirements have been met. The discharge is domestic sewage, this Board Order regulates that discharge 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.

### **Groundwater Degradation**

30. 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."

- 31. Some degradation of groundwater from the discharge to the evaporation/infiltration ponds is consistent with Resolution 68-16, provided that:
  - a. The Discharger confines the degradation from the proposed discharge to a specified area;
  - b. The Discharger minimizes the degradation by regular maintenance and proper operation of its WWTP, and by full implementation of Best Practicable Treatment or Control (BPTC) to manage the proposed discharge;
  - c. The degradation is limited to waste constituents typically encountered in domestic wastewater as specified in the limitations of this Order; and
  - d. The degradation does not result in water quality less than that prescribed in the applicable basin plan, including violation of any water quality objective.
- 32. Constituents in domestic WWTP effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts (TDS). Given the treatment technology of the WWTP (equivalent to secondary) and the depth to groundwater (three to nine feet), it is anticipated that groundwater is degraded by nitrogen, coliforms and TDS. Monitoring for nitrogen and pathogens in the WWTP effluent have not been a requirement of Board Order 98-008, and although Monitoring and Reporting Program 98-008 did require groundwater monitoring for nitrate as nitrogen, ammonia as nitrogen and fecal coliform, the groundwater monitoring program was not implemented, hence, there is insufficient data to determine the extent of groundwater degradation. This Board Order includes requirements to monitor for nitrogen constituents and TDS in the effluent and nitrogen, coliforms and TDS in groundwater.
- 33. The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L. Domestic water supply to the community showed an average of about 970

- mg/L during the period of January 2009 to December 2013. The average TDS increase over the domestic water supply for this facility during the same time period was about 730 mg/L.
- 34. Historical data suggested that groundwater in the vicinity of the WWTP had been Groundwater samples collected in April 1997 indicated that the TDS concentration in a nearby well located at the residence in the vicinity of the WWTP was 10,997 mg/L. Board Order 98-008 stated that seepage from the treatment ponds had impacted groundwater in the vicinity of the WWTF with salts. Hydrogeological investigations showed that Salton Sea water had seeped into the collection system and increased the TDS in the wastewater treatment lagoons. It was suspected that the high TDS water from the lagoons had been seeping into the ground and increasing the TDS of the groundwater. On November 4, 1996, Colorado River Basin Water Board staff collected wastewater samples from the facility. Analyses of the collected samples indicated TDS concentrations ranging between 7,139 mg/L to 16,984 mg/L. CAO 98-019 required the Discharger to perform a survey and repair portions of the sanitary sewer collection system that had infiltration of saltwater from the Salton Sea. Although a subsequent sampling of wastewater inflow into the ponds shows the TDS concentration is about 1,700 mg/L, a study is necessary to determine the current TDS concentration in groundwater.
- 35. Water quality data for the groundwater in the vicinity of wastewater disposal ponds prior to construction of the WWTP is sparse. The data that is available indicates that the well at Coolidge Springs had a total dissolved solids concentration of about 2200 mg/L, a chloride concentration of 990 mg/L and sulfate concentration of 300 mg/L.
- 36. The Special Provisions of this Board Order require the Discharger to conduct a two year study through data collection and analysis to quantify groundwater degradation for TDS, nitrogen and coliforms.
- 37. The Colorado River Basin Water Board developed the requirements in this Board Order based on information submitted as part of the application, through monitoring and reporting programs, and through special studies.
- 38. Federal regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990, (40 CFR Parts 122, 123, and 124) to implement the Clean Water Act's storm water program set forth in Clean Water Act section 402(p) (33 U.S.C. section 1342(p).). In relevant part, the regulations require specific categories of facilities that discharge storm water associated with industrial activity to "waters of the United States" to obtain 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. 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 a day or more, or required to have an approved pretreatment program under 40 CFR Part 403, are considered to be engaging in "industrial activity" for purposes of the Clean Water Act's storm water program. The Facility has a design treatment capacity of 0.20 MGD, therefore, the facility is not subject to the federal regulations for discharges of stormwater associated with industrial activity.

### **CEQA and Public Participation**

- 39. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations (CCR), 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 seq.).
- 40. The 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 an opportunity to submit comments.
- 41. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that 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. Discharge Prohibitions

- 1. Discharge of waste classified as "hazardous", as defined in Title 23, CCR, Section 2521(a), or "designated", as defined in California Water Code Section 13173, is prohibited.
- 2. The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in Sections 13050(I) and 13050(m) of Division 7 of the California Water Code.
- 3. Discharge of treated wastewater at a location other than the designated disposal areas is prohibited.
- 4. The WWTP shall be maintained to prohibit sewage or treated effluent from overflowing.
- 5. The discharge of any wastewater from the facility to any surface waters or surface drainage courses is prohibited.
- 6. The discharge of waste to land not owned or authorized for such use by the Discharger is prohibited.
- 7. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
- 8. Bypass or overflow of untreated or partially treated waste is prohibited.

### **B.** Groundwater Limits

- 1. Discharge from the WWTF disposal ponds shall not cause groundwater to:
  - a. Contain waste constituents in concentrations statistically greater than background water quality.
  - b. Contain constituents in excess of California Maximum Contaminant Levels (MCLs), as

set forth in the California Code of Regulations, Title 22, Section 64426.1 for bacteriological constituents; Section 64431 for inorganic chemicals; Section 64432.1 for nitrates; and Section 64444 for organic chemicals.

c. Acquire taste, odor, toxicity, or color that creates nuisance or impairs beneficial use.

#### C. Effluent Limitations

1. The effluent limitation listed below, as defined by the character of the ponded wastewater, shall comply with the following:

		Effluent Limitations		
<u>Constituent</u>	<u>Units</u>	Average	Average	
		<u>Monthly</u>	<u>Weekly</u>	
Biochemical Oxygen Demand (BOD 5-day 20°C)	mg/L	45	65	

- 2. The ponded wastewater at the WWTP shall not have a pH below 6.0 or above 9.0.
- 3. The oxidation basins and evaporative/infiltration basins shall be maintained so they will be kept in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of evaporative/infiltration basins shall not be less than 1.0 mg/L.

### D. Discharge Specification

- 1. The 30-day average daily dry-weather inflow to the treatment ponds shall not exceed 0.20 MGD.
- 2. The treatment or disposal of wastes from the WWTP shall not cause pollution or nuisance as defined in sections 13050(I) and 13050(m) of Division 7 of the California Water Code, respectively.
- 3. A minimum two feet of freeboard shall be maintained at all times in each evaporation/infiltration pond.
- 4. All storage and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 5. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration during the non-irrigation season. 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.
- 6. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.
- 7. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
- 8. The evaporation/infiltration ponds shall be maintained and operated so as to maximize infiltration and minimize the increase of salinity in the groundwater.

9. The Discharger shall not accept waste in excess of the design treatment capacity of the disposal system.

### E. Special Provisions

- 1. **By October 1, 2014**, the Discharger shall submit a Quality Assurance Project Plan that details the protocols to conduct the groundwater monitoring required by this Board Order. The QAPP shall specifically detail all aspects of groundwater sample collection, including: a) sampling method protocols and procedures, b) instrumentation and sampling equipment used, c) sample identification procedures, d) sample preservation, e) sample documentation, f) chain of custody procedures, and g) data validation, repeatability, precision, and accuracy to ensure data collected and analyzed from the monitoring wells is representative of the groundwater quality. The herein groundwater monitoring and reporting requirements are immediately effective upon adoption of this Board Order. The QAPP, however, is subject to review from Colorado River Basin Water Board staff and approval from the Executive Officer.
- 2. The Discharger shall conduct a two year groundwater study through data collection and analysis to quantify groundwater degradation for TDS, nitrogen and coliforms. By October 1, 2014, the Discharger shall submit a technical report in the form of a proposed work plan and schedule to conduct an investigation to assess water quality impacts to groundwater as a result of the discharge in the vicinity of the disposal ponds. The investigation shall also address the effects of groundwater mounding and the potential for surfacing or surface wetting in the vicinity of the disposal ponds. The groundwater study work plan may include sampling in addition to that required by the MRP and must include the submittal of a final report that includes recommendations and rationale for facility physical plant, and/or operation and maintenance modifications. The Discharger must include interim progress reports in the Facility's MRP annual report. The Discharger's proposals in the groundwater study work plan are subject to review from Colorado River Basin Water Board staff and approval from the Executive Officer.

#### F. Standard Provisions

- The Discharger shall comply with all of the conditions of this Board Order. Noncompliance
  is a violation of the Porter-Cologne Water Quality Control Act (CWC, Section 13000 et
  seq.), and is grounds for enforcement action.
- 2. The Discharger shall comply with Monitoring and Reporting Program (MRP) R7-2014-0007, and future revisions thereto, incorporated herein and made part of this Order by reference, as specified by the Colorado River Basin Water Board's Executive Officer.
- 3. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Colorado River Basin Water Board Executive Officer and in Monitoring and Reporting Program R7-2014-0007. Such specifications are subject to periodic revisions as may be warranted. Documents that are normally sent via mail by the Discharger, such as regulatory reports, documents, submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall be converted to Portable Document Format (PDF) or other appropriate Microsoft application, such as Excel, and emailed to RB7-wdrs\_paperless@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and sent mailed to the Colorado River

Basin Water board office in Palm Desert.

- 4. The Discharger shall not cause degradation of any water supply in accordance with State Water Resources Control Board Resolution 68-16.
- 5. Standby, power generating facilities shall be available to operate the plant during a commercial power failure.
- 6. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
- 7. The WWTP 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. The Discharger shall complete an Operation and Maintenance Plan (O&M Plan) that is made available to the Colorado River Basin Water Board's staff on request. At all times the Discharger must properly operate and maintain all systems and components of collection, treatment, storage and control, installed or used to achieve compliance with this Board Order. Proper operation and maintenance includes 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 Board 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's staff on request.
- 9. 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.
- 10. 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 Board Order, or the place where records are kept under the conditions of this Board Order;
  - b. Have access to and copy, at reasonable times, records 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.
- 11. 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.

- 12. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to Title 27, and the review and approval of the Colorado River Basin Water Board Executive Officer.
- 13. Biosolids are the nutrient-rich organic materials that result from the treatment of domestic sewage sludge. Any proposed change in use or disposal of biosolids requires the approval of the Colorado River Basin Water Board Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least 90 days in advance of the change.
- 14. Sludge use and disposal shall comply with Federal and State laws and regulations, including permitting requirements, and technical standards in 40 CFR Part 503. If the State and Colorado River Basin Water Boards are delegated the authority to implement 40 CFR Part 503 regulations, this Order may be revised to incorporate appropriate time schedules and technical standards. The Discharger shall comply with the standards and time schedules in 40 CFR part 503, whether or not part of this Order.
- 15. The Discharger shall complete a Sludge and Septage Management Plan that is made available to the Colorado River Basin Water Board's staff on request. At all times the Discharger must properly manage the accumulation of sludge in the ponds and any ancillary disposal and aeration of septage that is also placed into the ponds as necessary to achieve compliance with this Board Order. The Discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is consistent with all State and Federal laws and regulations and obtain prior written approval from the Colorado River Basin Water Board specifying location and method of disposal, before disposing of treated or untreated sludge, or similar solid waste.
- 16. 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 Board 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 Board Order and as required by Title 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.
- 17. 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.
- 18. Prior to implementing a modification that results in a material change in the quality or quantity of wastewater treated or discharged, or a 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.
- 19. Prior to a change in ownership or management of WWTP, 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.

- 20. The Discharger shall provide adequate notice to the Colorado River Basin Water Board Executive Officer of the following:
  - a. The introduction of pollutants into any treatment facility described in the Findings of this Board Order from an indirect Discharger which would be subject to Section 301 or 306 of the Clean Water Act, if the pollutants were discharged directly;
  - Any substantial change in the volume or character of pollutants introduced into any treatment facility described in the Findings of this Board Order, by an existing or new source; and
  - c. Any planned physical alteration or addition to the facilities described in this Board Order, or change planned in the Discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Board Order conditions that are different from or absent in the existing Board Order, including notification of additional disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan.
- 21. The Discharger shall report orally, any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Colorado River Basin Water Board Executive Officer, and the Office of Emergency Services 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.

During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board office voice recorder at (760) 346-7491. A written report shall also be provided within five 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. The discharger shall report all intentional or unintentional spills in excess of one thousand gallons occurring within the facility or collection system to the Colorado River Basin Water Board office in accordance with the above time limits.

- 22. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled SMR or earlier if requested by the Colorado River Basin Water Board Executive Officer, or if required by an applicable standard for sludge use and disposal.
- 23. By-pass (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 by-pass unless:
  - a. By-pass 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 by-pass. Severe property damage does not mean economic loss caused by delays in production; and

There were no feasible alternatives to by-pass, 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 by-pass occurring during equipment downtime, or preventive maintenance.

#### b. By-pass is:

- i. Required for essential maintenance to assure efficient operation; and
- ii. Neither effluent nor receiving water limitations are exceeded; and
- iii. The Discharger notifies the Colorado River Basin Water Board ten days in advance.
- 24. In the event of an unanticipated by-pass, 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 office voice recorder. A written report shall be provided within five business days the Discharger is aware of the incident. The written report shall include a description of the by-pass, 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.
- 25. All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm water drain systems or other courses under their jurisdiction.
- 26. Storm water discharges from the facility shall not cause or threaten to cause pollution or contamination.
- 27. **By December 18, 2014**, the Discharger shall submit to the Regional Water Board a technical report demonstrating compliance with Standard Provisions F.24 and F.25. The report shall be prepared by a California registered civil engineer and be subject to the approval of the Executive Officer.
- 28. Storm water discharges from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.
- 29. The Discharger is the responsible party for the waste discharge requirements and the monitoring and reporting program for the facility. The Discharger shall comply with all conditions of these waste discharge requirements. 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 waste discharge requirements by the Colorado River Basin Water Board.
- 30. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 31. This Board Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights, or infringement of federal, state, or local laws or regulations.
- 32. This Board Order may be modified, rescinded, or reissued, for cause. The filing of a

request by the Discharger for a Board Order modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance, does not stay any Board Order condition. Causes for modification include a change in land application plans, or sludge use or disposal practices, and adoption of new regulations by the State or Colorado River Basin Water Board (including revisions to the Basin Plan), or Federal government.

I, Robert Perdue, 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 September 18, 2014.

ROBERT PERDUE Executive Officer

MONITORING AND REPORTING PROGRAM R7-2014-0007 FOR

SALTON COMMUNITY SERVICES DISTRICT, OWNER/OPERATOR DESERT SHORES WASTEWATER TREATMENT FACILITY

Desert Shores - Imperial County

Location of Wastewater Treatment Facility and Discharges: SE ¼ of Section 21 and SW ¼ of Section 22, T10S, R10E, SBB&M

### A. 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 (CWC) 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. CWC 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. CWC 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 section 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 section 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 R7-2014-0007. The reports are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Cole 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 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 Department of Health Services. 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. 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.
- 9. 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. This period may be extended by request of the Colorado River Basin Water Board's Executive Officer at any time. 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. Samples shall be collected at the location specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.
- 11. 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**

12. Influent to the WWTP (just prior to entering the treatment pond) shall be monitored according to the following schedule:

Constituent	<u>Units</u>	Type of <u>Sample</u>	Sample <u>Frequency</u>	Reporting <u>Frequency</u>
Flow	$MGD^1$	measurement	Daily	Monthly
20°C BOD <sub>5</sub> <sup>2</sup>	mg/L <sup>3</sup>	grab	Monthly	Monthly
TSS	mg/L	grab	Monthly	Monthly

# **WWTP Pond Monitoring**

13. The Discharger shall monitor the ponded wastewater from the WWTP according to the following schedule:

Constituent	<u>Units</u>	Type of <u>Sample</u>	Sample <u>Frequency</u>	Reporting Frequency
рН	s.u. <sup>4</sup>	grab	Weekly	Monthly
Dissolved Oxygen <sup>5</sup>	mg/L	grab	Twice-weekly	Monthly
20°C BOD₅	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	mg/L	grab	Annually	Annually
Ammonia as N	mg/L	grab	Annually	Annually
Total phosphorous	mg/L	grab	Annually	Annually
VOCs (EPA 624)	μg/L <sup>6</sup>	grab	Annually	Annually

<sup>&</sup>lt;sup>1</sup> Million Gallons per Day

<sup>&</sup>lt;sup>2</sup> 5-day Biochemical Oxygen Demand at 20 degrees Celsius.

<sup>&</sup>lt;sup>3</sup> milligrams per liter

<sup>&</sup>lt;sup>4</sup> standard units

<sup>&</sup>lt;sup>5</sup> Dissolved Oxygen shall be monitored at the upper one foot layer of the evaporation/percolation ponds. Samples shall be collected between 8:00 A.M. and 9:00 A.M.

<sup>&</sup>lt;sup>6</sup> micrograms per liter

# Water Supply to the Community

14. Domestic water supply shall be monitored according to the following schedule:

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

# **Groundwater Monitoring**

15. Groundwater monitoring wells 3, 4, 9, 11, 13 and any future wells installed shall be monitored according to the following schedule:

Constituent	<u>Units</u>	Type of Sample	Sampling <sup>7</sup> <u>Frequency</u>	Reporting <sup>8</sup> <u>Frequency</u>
Depth to Groundwater (bgs	s) ft	measurement	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
рН	s.u.	Grab	Monthly	Monthly
Chloride	mg/L	Grab	Monthly	Monthly
Sulfate	mg/L	Grab	Monthly	Monthly
Nitrate as Nitrogen	mg/L	Grab	Monthly	Monthly
Nitrite as Nitrogen	mg/L	Grab	Monthly	Monthly
Total Nitrogen	mg/L	Grab	Monthly	Monthly
Fecal Coliform	MPN/100/mL	<sup>9</sup> Grab	Monthly	Monthly

16. Groundwater monitoring wells 2, 6, 10 and 12, shall be monitored according to the following schedule:

Constituent	<u>Units</u>	Type of <u>Sample</u>	Sampling <sup>o</sup> <u>Frequency</u>	Reporting <sup>r</sup> Frequency
Depth to Groundwater (bgs)	ft	measurement	Monthly	Monthly

### **Sludge Monitoring**

17. The Discharger shall report annually on the quantity, location and method of disposal of all sludge and similar solid materials being produced at the WWTP. 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 WWTP shall be sampled and analyzed for the following:

<u>Constituent</u>	<u>Units</u>	Type of <u>Sample</u>	Sample <u>Frequency</u>	Reporting Frequency
Arsenic	ma/ka <sup>10</sup>	composite	Annually	Annually

<sup>&</sup>lt;sup>7</sup> Sampling frequency shall be monthly for the first 12 months and quarterly thereafter.

<sup>&</sup>lt;sup>8</sup> Reporting frequency shall be monthly for the first 12 months and quarterly thereafter.

<sup>&</sup>lt;sup>9</sup> Most Probable Number per 100 milliliters

<sup>&</sup>lt;sup>10</sup> milligrams per kilogram

Constituent	<u>Units</u>	Type of <u>Sample</u>	Sample <u>Frequency</u>	Reporting <u>Frequency</u>
Cadmium	mg/kg	composite	Annually	Annually
Copper	mg/kg	composite	Annually	Annually
Lead	mg/kg	composite	Annually	Annually
Mercury	mg/kg	composite	Annually	Annually
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/gram <sup>11</sup>	composite	Annually	Annually

# **B.** Reporting

### **Operation and Maintenance**

- The Discharger shall inspect and document any operation/maintenance 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 reports shall be submitted to the Colorado River Basin Water Board Office annually.
- 2. 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. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
- 3. 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.
- 4. SMR 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.
- 5. 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 a fine and imprisonment for knowing violations".
- 6. The SMRs, and other information requested by the Colorado River Basin Water Board, shall be signed by a principal executive officer or ranking elected official.
- 7. A duly authorized representative of the Discharger may sign the documents if:
  - a. The authorization is made in writing by the person described above;

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<sup>&</sup>lt;sup>11</sup> Most Probable Number per gram.

- 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.
- 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 attach a cover letter to the 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.
- 10. 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 15<sup>th</sup> day of the following month. Quarterly monitoring reports shall be submitted by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup> and October 15<sup>th</sup>. Annual monitoring reports shall be submitted to the Colorado River Basin Water Board by January 15<sup>th</sup> of the following year.
- 11. The Discharger shall submit, technical monitoring and all documents that are normally mailed by the Discharger, such as regulatory documents, submissions, materials, data, and correspondence electronically. All information required to be submitted in accordance to this Board Order must be emailed prior to the regulatory due date. To accomplish electronic submittal of documents the Discharger shall convert the signed original report to Portable Document Format (PDF), other appropriate Microsoft application, such as Excel documents may also be emailed. Email all the documents to <a href="mailto:RB7-wdrs\_paperless@waterboards.ca.gov">RB7-wdrs\_paperless@waterboards.ca.gov</a>. Documents that are 50 MB or larger should be transferred to a disk and sent mailed to:

California Regional Water Quality Control Board

Colorado River Basin Region

73-720 Fred Waring, Suite 100

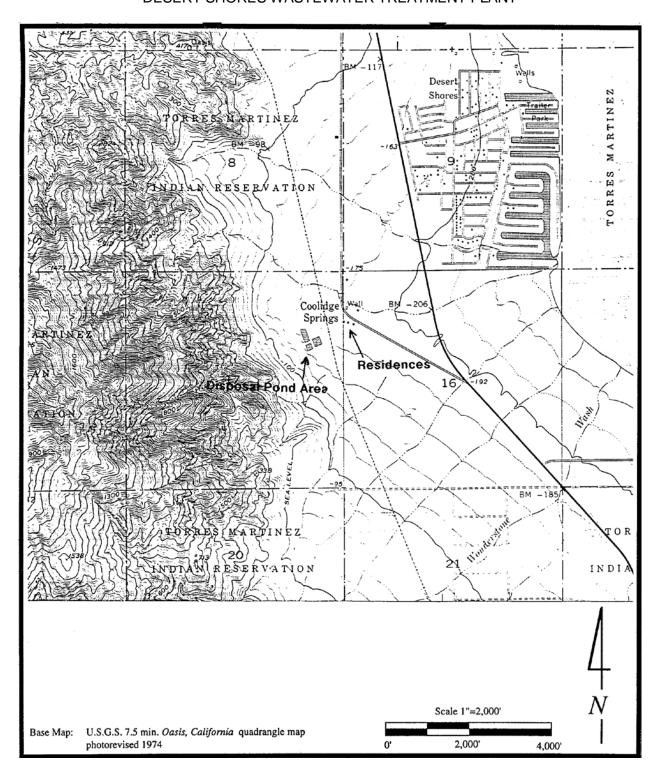
Palm Desert, CA 92260

ROBERT PERDUE

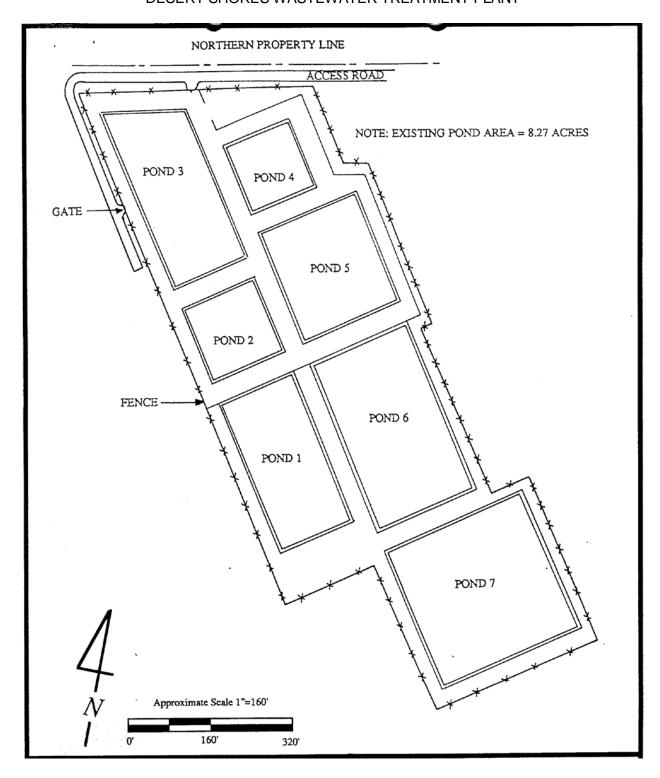
Date

Executive Officer

# BOARD ORDER R7-2014-0007 SALTON COMMUNITY SERVICES DISTRICT, OWNER/OPERATOR DESERT SHORES WASTEWATER TREATMENT PLANT



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