CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

BOARD ORDER R7-2013-0025

WASTE DISCHARGE REQUIREMENTS FOR COACHELLA VALLEY WATER DISTRICT, OWNER/OPERATOR NORTH SHORE WASTEWATER TREATMENT FACILITY North Shore – Riverside County

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

- Coachella Valley Water District (hereinafter referred to as CVWD or Discharger), P.O. Box 1058, Coachella, CA 92236, owns and operates a wastewater treatment and disposal system that provides sewerage service to the community of North Shore, Riverside County. The property for the wastewater treatment facility (WWTF), Assessor's Parcel No. 723-226-003, is located at 72-900 Commerce Street, North Shore, CA, in the NW ¼ of Section 34, T7S, R10E, SBB&M shown on the Location and Vicinity Map (Attachment A), incorporated herein and made part of this Board Order.
- 2. The Regional Water Board has determined that Waste Discharge Requirements (WDRs) for the discharge are in need of revision. There is no substantial change in the quality or quantity of discharge. The WDRs are being updated administratively to implement the most up to date laws and regulations applicable to the discharge.
- 3. The discharge from the WWTF has been subject to WDRs in Board Order 89-028 adopted on May 17, 1989. This Board Order updates the WDRs to comply with the current laws and regulations as set forth in the California Water Code (CWC) and the California Code of Regulations (CCRs).

Wastewater Treatment Facility and Discharge

- 4. The WWTF consists of an aerated pond, an activated sludge treatment plant (not in use) including a tertiary filter (also not in use), three sludge drying beds, two emergency storage ponds, and two evaporation/percolation ponds. The aerated lagoon has a synthetic liner and a reported design treatment capacity of 33,000 gallons per day (gpd). The activated sludge treatment plant has a reported design treatment capacity of 180,000 gpd. It is not anticipated that the activated sludge treatment plant will be put back into service.
- 5. During the period of September 2007 through September 2012, average monthly wastewater flows from the WWTF ranged from 13,000 to 23,000 gpd. Wastewater is treated in the aerated pond and discharged to the evaporation/percolation ponds for disposal.
- 6. The aerated pond is checked annually for sludge accumulation and solids are removed as needed. Removed solids are stockpiled and dried on site then transported to another CVWD facility permitted for disposal of the biosolids. The evaporation/percolation ponds are scarified periodically to maintain acceptable percolation; no solids are percolated

during this process.

- 7. Back-up power is available by portable generators.
- 8. The Discharger's Self-Monitoring Reports (SMR) from September 2007 through September 2012 characterize the WWTF influent and effluent as follows:

Influent Total Dissolved Solids	802 mg/L ¹
Effluent Flow Settleable Matter cBOD TSS pH	0.018 MGD ² 0.02 ml/L ³ 21 mg/L ⁴ 100 mg/L 8.1 s.u ⁵
Total Dissolved Solids	1104 mg/L

¹ milligrams per liter

² million gallons per day

³ milliliters per liter

⁴5-day carbonaceous biochemical oxygen demand

⁵ standard unit

- 9. A groundwater monitoring network was installed in 2007 to monitor the influence of the discharge on groundwater. The groundwater monitoring network consists of three wells, Upgradient well MW1 and downgradient wells MW2 and MW3. Groundwater monitoring data has been collected and submitted quarterly to the Regional Water Board starting in September 2007. Average total dissolved solids (TDS) for the wells are: MW1 970 mg/L, MW2 2148 mg/L and MW3 1906 mg/L. MW1 has shown a sharp decrease in TDS concentration over the course of three years. TDS concentrations have dropped from 1,200 mg/L in 2009 to about 375 mg/L in 2012. CVWD states that the decrease is likely due to excess application of domestic water for irrigation to a large vegetative barrier and broken irrigation lines in the vicinity of MW1.
- 10. There are no significant industrial users discharging to the WWTF's collection system.

Hydrogeologic Conditions

- 11. Annual precipitation averages about three (3) inches. Annual evapotranspiration rate is approximately 72 inches.
- 12. The Salton Sea is approximately one-half mile west of the WWTF.
- 13. There are no domestic or municipal production wells within one mile of the WWTF.
- 14. Water supply to the community has an average TDS concentration of approximately 150 mg/L. Water supply to the community is from production wells over eight (8) miles away from the North Shore community.
- 15. Depth to groundwater in the vicinity of the WWTF ranges from 46 to 54 feet below ground

surface.

- 16. Soils in the area of the WWTF consist of gravelly sand derived of gravelly alluvium from granite.
- 17. Regional groundwater gradient in the area is from northwest to southeast.
- 18. The WWTF site is located in the seismically active Coachella Valley and is considered likely to be subject to moderate to strong ground motion from earthquakes in the region.

Basin Plan, Beneficial Uses, and Regulatory Considerations

- 19. The 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 Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.
- 20. The discharge is within the East Salton Sea Hydrologic Unit. Beneficial uses for groundwater are:
 - a. Municipal supply (MUN),
 - b. Agricultural supply (AGR)
- 21. 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).
- 22. 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.
- 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).
- 24. 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.
- 25. 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 solid waste requirements of Title 27, CCR, Section 20005 et seq. (hereinafter Title 27). This exemption is based on Section 20090(a) of Title 27, which states in relevant part that discharges of 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.

26. 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. § 1342(p).). In pertinent 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 North Shore WWTF has a design flow of 0.033 MGD and is therefore not subject to the Clean Water Act's storm water program.

Groundwater Degradation

- 27. 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) requires a Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than as described in plans and policies (e.g., violation of any water quality objective). Moreover, the discharge is required to meet WDRs that result in the best practicable treatment or control (BPTC) of the discharge necessary to assure pollution or nuisance will not occur, and highest water quality consistent with maximum benefit to the people will be maintained.
- 28. Some degradation of groundwater from the discharge to the evaporation ponds is consistent with Resolution 68-16, provided that the degradation:
 - a. Is confined to a reasonable area;
 - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures;
 - c. Is limited to waste constituents typically encountered in domestic wastewater; and
 - d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.

- 29. The discharge of wastewater from the WWTF, as permitted herein, reflects BPTC. The controls assure the discharge does not create a condition of pollution or nuisance, and that water quality will be maintained which is consistent with the anti-degradation provisions of Resolution 68-16. The WWTF incorporates:
 - a. Aerated lagoons for treatment of domestic wastewater;
 - b. Solids handling facilities;
 - c. An operation and maintenance manual;
 - d. Staffing to assure proper operation and maintenance; and
 - e. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.
- 30. Constituents in domestic WWTF effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts (TDS). The WWTF provides substantial removal of soluble organic matter, solids, and nitrogen.
- 31. The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L. Domestic water supply to the community has a TDS concentration of about 150 mg/. The TDS increase for this facility is approximately 950 mg/L.
- 32. The facility does not provide a nitrification/denitrification process, therefore, it is probable that nitrogen would reach groundwater in concentrations that exceed Title 22, CCR standards. Degradation by nitrogen should be confined to the area in the immediate vicinity of the Facility. Given the volume of the discharge, it is not anticipated that the discharge will result in the loss of any beneficial uses or cause violation of water quality objectives for nitrogen.
- 33. Given the depth to groundwater, there is a potential that pathogen-indicator bacteria will reach groundwater at densities exceeding those prescribed in Title 22, CCR. However the transport of pathogen-indicator bacteria through soils is limited in range and any impacts to groundwater would be confined to the area in the immediate vicinity of the Facility. Since there are no municipal or domestic wells in the vicinity of the Facility, no degradation to a municipal or domestic source is anticipated.
- 34. State Water Board Resolution No. 88-63 states that all surface and ground waters of the State having a TDS of less than 3,000 mg/L are considered to be suitable, or potentially suitable for municipal or domestic supply. Groundwater in the vicinity of the WWTF has a TDS concentration of about 2,000 mg/L. The discharged effluent has an average TDS concentration of about 1,100 mg/L, therefore, it is not likely that groundwater degradation by TDS will occur.
- 35. The effluent limits prescribed in this Board Order for waste constituents are appropriate and protective of water quality objectives. CVWD North Shore WWTF provides a valuable service to the community that is protective of human health and the environment. This is consistent with maximum benefit to the people of the state. Accordingly, the discharge as authorized is consistent with the anti-degradation provisions of Resolution 68-16.

CEQA and Public Participation

- 36. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.).
- 37. The Board has notified the Discharger and all known interested agencies and persons of its intent to draft WDRs for this discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 38. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order 89-028 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 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 discharge of any wastewater from the facility to any surface waters or surface drainage courses is prohibited.
- 5. The Discharger shall not accept waste in excess of the design treatment capacity of the disposal system.
- 6. The discharge of waste to land not owned or authorized for such use by the Discharger is prohibited.
- 7. Surfacing, ponding or overflow of wastewater outside of the designated disposal locations is prohibited.
- 8. Bypass or overflow of untreated or partially treated waste is prohibited.

B. Effluent Limitations

1. Effluent discharged to the evaporation ponds for disposal shall not exceed the following effluent limits:

Constituent	<u>Units</u>	Monthly <u>Average</u>	Weekly <u>Average</u>
cBOD₅ ¹	mg/L ²	40	60

 $^{\rm 1}$ 5-day carbonaceous biochemical oxygen demand at 20°C $^{\rm 2}$ milligrams per liter

- 2. Effluent from the WWTF shall not have a pH below 6.0 or above 9.0.
- 3. The oxidation basins and evaporation/percolation basins shall be maintained so they will be kept in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of evaporative/storage basins shall not be less than 1.0 mg/L.
- 4. Discharges of wastes or wastewater shall not increase the total dissolved solids content of receiving waters, unless it can be demonstrated to the satisfaction of the Regional Water Board that such an increase in total dissolved solids does not adversely affect beneficial uses of receiving waters.

C. Discharge Specification

- 1. The 30-day monthly average volume of wastewater treated by the WWTF shall not exceed 0.033 MGD.
- 2. A minimum depth of two (2) feet of freeboard shall be maintained at all times in the aeration pond and evaporation/percolation basins.
- 3. All treatment, 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.
- 4. 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.
- 5. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
- 6. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the WWTF and disposal area.

D. Groundwater Limitations

- 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.

E. Provisions

Special Provisions

- 1. The Discharger shall perform a TDS study to evaluate the incremental increase in salinity above the source water (community water supply). The study shall address the practicability of a 400 mg/L incremental increase above the source water and the impact the discharge has on the beneficial uses of the receiving groundwater. The report shall be submitted to the Regional Board's Executive Officer two (2) years after the date of adoption of this Board Order. The following items describe the purpose and minimum requirements for the report:
 - a. Evaluation by the Discharger must include information on the following factors relating to the discharge:
 - i. Description of the municipal entity and facilities.
 - ii. Description of the quantity and salinity of domestic water sources contributing to discharge.
 - iii. Description of significant salt sources of the municipal wastewater collection system, and identification of entities responsible for each source, if available.
 - iv. Description of the wastewater discharge, receiving waters, quantity, salt load, and salinity.
 - v. Alternative plans for minimizing salt contribution from the municipal sources. Alternative plans should include:
 - 1) Description of system salt sources and alternative means of control; and
 - 2) Cost of alternative plans in dollars per ton, of salt removed from discharge.
 - vi. Such other information pertinent to the study as the permitting authority may deem necessary.
 - b. In determining what permit conditions shall be required, the permit issuing authority shall consider the following criteria including, but not limited to:
 - i. The practicability of achieving a 400 mg/L incremental increase.
 - ii. Where a 400 mg/L incremental increase is not determined to be practicable, the Discharger shall provide the following:
 - 1) The impact of the proposed salt input of each alternative on the beneficial uses of the groundwater in terms of tons per year and concentration;
 - 2) Costs per ton of salt removed from discharge of each alternative plan;
 - 3) Capability of minimizing the salt discharge;
 - 4) A proposed value for the practical incremental increase; and
 - 5) A justification for the proposed practical incremental increased value.

Standard Provisions

2. 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, § 13000 et seq.), and grounds for enforcement action.

- 3. The Discharger shall comply with Monitoring and Reporting Program (MRP) R7-2013-0025, and future revisions thereto, as specified by the Regional Water Board's Executive Officer, which is incorporated by this reference and attached hereto.
- 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 WWTF 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 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 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 Regional Water Board's Executive Officer 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 Regional 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.
- d. Ponds will include safe perimeter vehicle access roads or foot trails to allow Coachella Valley Mosquito and Vector Control District staff to schedule periodic inspections and when necessary, control mosquito or other vector populations.
- 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 Regional Water Board's Executive Officer.
- 13. Any proposed change in use or disposal of biosolids requires the approval of the Regional 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.
- 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 Regional 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 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 Regional Water Board as part of the MRP.
- 16. The Discharger shall provide a report to the Regional 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 facility reaches design capacity.
- 17. 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 Regional Water Board, and obtain revised requirements.
- 18. Prior to a change in ownership or management of WWTF, 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 Regional Water Board.
- 19. The Discharger shall provide adequate notice to the Regional Water Board's 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;

- b. 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.
- 20. The Discharger shall report orally, any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Regional Water Board's 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 Regional Water Board's office voice recorder at (760) 346-7491. 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. The discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the facility or collection system to the Regional Water Board office in accordance with the above time limits.

- 21. 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 Regional Water Board's Executive Officer, or if required by an applicable standard for sludge use and disposal.
- 22. 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 Regional 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 Regional Water Board ten (10) days in advance.
- 23. In the event of an unanticipated by-pass, the Discharger shall immediately report the incident to the Regional Water Board. During non-business hours, the Discharger shall leave a message on the Regional Water Board's office voice recorder. 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 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.

Limitations

- 24. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 25. 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.
- 26. 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 Regional 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 May 16, 2013.

original signed by ROBERT PERDUE Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2013-0025 FOR COACHELLA VALLEY WATER DISTRICT, OWNER/OPERATOR NORTH SHORE WASTEWATER TREATMENT FACILITY North Shore – Riverside County

Location of Wastewater Treatment Facilities and Discharges: NW ¼ of Section 34, T7S, R10E, SBB&M

A. Monitoring

- 1. 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 (Wat. Code) § 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.
- 2. Water Code section 13267 states, in part:

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

3. Water Code section 13268 states, in part:

"(a) (1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of § 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in accordance with subdivision (b). (b) (1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with § 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs."

4. The Discharger owns and operates the wastewater system that is subject to Board Order R7-2013-0025. 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 Regional 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 Regional 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. 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.
- 10. Given the monitoring frequency prescribed by MRP R7-2013-0025, if only one sample is available for a given reporting period, compliance with monthly average, or weekly average Discharge Specifications, will be determined from that sample.
- 11. The Discharger shall comply with the following:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

- b. The Discharger shall retain records of all monitoring information, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least 5 years from the date of the sample, measurement, report or application.
- c. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements.
 - ii. The individual(s) who performed the sampling or measurements.
 - iii. The date(s) analyses were performed.
 - iv. The individual(s) who performed the analyses.
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.
- 12. 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 Regional Water Board indicating that there has been no activity during the required reporting period.

Influent Monitoring

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

<u>Constituent</u>	<u>Units</u>	<u>Type of</u> Sample	Sampling <u>Frequency</u>	Reporting <u>Frequency</u>
Flow (Total Plant Influent)	MGD	Measurement	Weekly ¹	Quarterly
20°C cBOD ₅ ²	mg/L ³	Grab	Quarterly	Quarterly
Total Suspended Solids	mg/L	Grab	Quarterly	Quarterly

¹ Influent measured weekly, calculated to be a daily average and reported quarterly as MGD.

² 5-day carbonaceous biochemical oxygen demand at 20 °C.

³ milligrams per Liter

WWTF Effluent Monitoring

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

Constituent	<u>Units</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>	Reporting <u>Frequency</u>
20° C cBOD₅	mg/L	Grab	Quarterly	Quarterly
Total Suspended Solids	mg/L	Grab	Quarterly	Quarterly
Settleable Solids	ml/L ⁴	Grab	Quarterly	Quarterly
рН	pH units	Grab	Quarterly	Quarterly
Dissolved Oxygen	mg/L	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
VOCs ⁵	μg/L ⁶	Grab	Annually	Annually

⁴ milliliters per Liter
⁵ Analysis of Volatile Organic Compounds is to be accomplished using the USEPA test methods 601 and 602 or 624
⁶ micrograms per Liter

Water Supply to the Community

15. The Discharger is required to obtain or acquire annual total dissolved solids concentrations of the source water, either through monitoring or obtaining the data from the drinking water purveyor.

<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	Annually	Annually

Groundwater Monitoring

16. The Discharger shall monitor groundwater wells MW-1, 2, and 3 according to the following schedule:

Constituent	<u>Units</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>	Reporting <u>Frequency</u>
Donth to Croundwater (bas)	4			
Depth to Groundwater (bgs)	ft	measurement	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
рН	pH Units	Grab	Quarterly	Quarterly
VOCs	μg/L	Grab	Annually	Annually

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 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>Constituent</u>	<u>Units</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>	Reporting <u>Frequency</u>
Arsenic	mg/kg ⁶	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
Molybdenum	mg/kg	Composite	Annually	Annually
Nickel	mg/kg	Composite	Annually	Annually
Selenium	mg/kg	Composite	Annually	Annually
Zinc	mg/kg	Composite	Annually	Annually

<u>Constituent</u>	<u>Units</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>	Reporting <u>Frequency</u>
Fecal Coliform	MPN/gram ⁷	Composite	Annually	Annually

⁶ milligrams per kilogram

⁷ most popular number per gram

B. Reporting

- 1. 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 Regional 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 Regional 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 SMR, and other information requested by the Regional 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;
 - 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 Regional 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 Regional Water Board's 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.

Results of analyses performed shall be provided within 15 days of sample collection.

- 9. The Discharger shall attach a cover letter to the SMR. 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 Regional 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 Regional Water Board by January 15th of the following year.
- 11. The Discharger shall submit monitoring reports to:

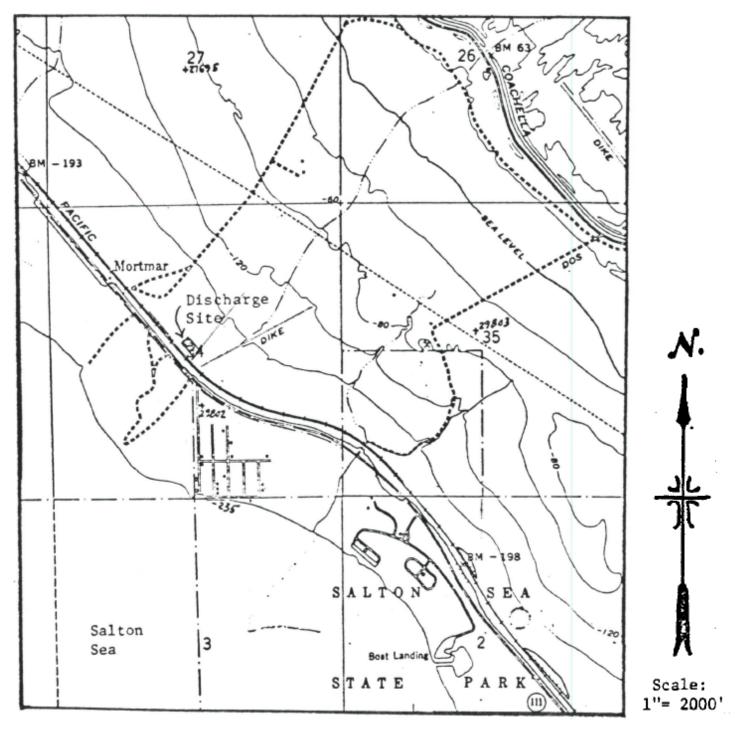
California Regional Water Quality Control Board Colorado River Basin Region 73720 Fred Waring, Suite 100 Palm Desert, CA 92260

Ordered By:

<u>Original signed by</u> ROBERT PERDUE Executive Officer

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION



Coachella Valley Water District North Shore Wastewater Treatment Facility North Shore – Riverside County NW ¼ of Section 34, T7S, R10E, SBB&M