

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. R7-2007-0053

WASTE DISCHARGE REQUIREMENTS
FOR
BORREGO WATER DISTRICT, OWNER/OPERATOR
RAMS HILL WASTEWATER TREATMENT FACILITY
Borrego Springs – San Diego County

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

1. Borrego Water District, P. O. Box 1870, Borrego Springs, California 92004, (hereinafter referred to as the Discharger), submitted an updated Report of Waste Discharge (ROWD) to the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board), on September 14, 2005, for the Rams Hill Wastewater Treatment Facility.
2. The property for the Wastewater Treatment Facility (WWTF) (Assessor's Parcel No. 200-120-42 and 200-120-41) is located about four miles southeast of Borrego Springs in the E 1/2 of Section 23, T11S, R6E, SBB&M.

Wastewater Treatment and Disposal Facilities

3. The WWTF includes a comminutor, parshall flume, grit chamber, an oxidation ditch, two secondary clarifiers, a flow equalization basin, three evaporation-percolation ponds, and sludge drying beds. The WWTF has a design capacity of 250,000 gallons per day (gpd).
4. Current flows into the Facility average approximately 60,000 gpd. During the summer, flows average approximately 20,000 gpd. Effluent from the treatment Facility is discharged to evaporation/percolation ponds. Sludge from the Facility is discharged to on-site drying beds for stabilization. The sludge is removed every four to five years for off-site disposal at a waste management facility approved by the Regional Board.
5. The WWTF services approximately 20 percent of the community of Borrego Springs' specifically, the Rams Hill residential community and the Town Center area, which includes hotels, a motel, and small business along Palm Canyon Drive. The remaining 80 percent of Borrego Springs is serviced by individual septic tank-subsurface disposal systems.
6. The discharge from the WWTF is currently regulated by Waste Discharge Requirements Board Order No. 90-032. Board Order No. 90-032 is neither adequate nor consistent with the current plans and policies of the Board.

Hydrogeological Conditions

7. The WWTF is about 520 feet above mean sea level. Surface water runs off as sheet flow, draining to the east.

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8. Soils at the WWTF from ground surface to approximately 35 feet below ground surface (bgs) consist of fine to coarse sands, and silty clays.
9. Average annual precipitation for the area is 6.8 inches, and average annual evaporation is 50 inches. Temperatures in the Borrego Springs area can reach 120° F in summer.
10. The Discharger owns and operates a network of eleven groundwater wells that provide domestic water for the community. Groundwater quality in Borrego Springs varies from good to excellent. Depth to first encountered groundwater is approximately 60 feet bgs.
11. The Discharger reports that domestic water for the sewerred portion of the community is supplied by four wells. The wells are reportedly upgradient of the WWTF and show the following constituent concentrations for 2006:

Constituent	ID1-Well 12	ID1-Well 16	ID4-Well 3	ID4-Well 11
Total Dissolved Solids	410	370	790	430
Chloride	52	75	71	46
Nitrate-Nitrogen	0.32	1.2	2.6	0.43
Sulfate	92	58	390	90
Fluoride	0.5	0.5	0.4	0.3

Basin Plan, Beneficial Uses, and Regulatory Considerations

12. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of ground and surface waters in this Region.
13. The discharge is taking place in the Anza-Borrego Hydrological Unit. The beneficial uses of groundwater in the Anza-Borrego Hydrological Unit are municipal supply, agricultural supply, and industrial supply.
14. The Basin Plan establishes narrative and numeric water quality objectives for groundwater that Waste Discharge Requirements (WDRs) implement. For groundwater designated as municipal and domestic supply, the numeric objectives are the maximum contaminant levels (MCLs), and bacteriological limits specified in Section 64421 et seq. of Title 22, California Code of Regulations (CCR). Regarding narrative objectives, the Basin Plan states in relevant part that:

“Groundwater...shall not contain taste or odor producing substances in concentrations that adversely affect beneficial uses as a result of human activity...” (Basin Plan, page 3-9.)

“Discharges of water softener regeneration brines...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 3-9.)

15. These WDRs implement narrative and numeric water quality objectives established by the Basin Plan for ground and surface waters.

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16. The discharge authorized herein, and treatment and storage facilities associated with the discharge of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of Title 27, CCR, Section 20005 et seq. (hereinafter Title 27). The exemption, pursuant to Section 20090(a) of Title 27, is based on the following:
 - a. The waste consists primarily of domestic sewage and treated effluent;
 - b. The WDRs are consistent with water quality objectives; and
 - c. The treatment and disposal facilities described herein are associated with a domestic wastewater treatment facility.
17. State Water Resources Control Board (State Board) Resolution No. 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereinafter Resolution No. 68-16) requires a regional 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 that described in plans and policies (e.g. violation of any water quality objective). The discharge is required to meet WDRs that result in the best practicable treatment or control necessary to assure that pollution or nuisance will not occur, and highest water quality consistent with maximum benefit to the people will be maintained.
18. Some degradation of groundwater from the discharge to the disposal ponds is consistent with Resolution No. 68-16 provided that degradation:
 - a. Is confined to a reasonable area;
 - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of best practicable treatment and control (BPTC) measures;
 - c. Is limited to waste constituents typically encountered in domestic wastewater; and
 - d. Does not result in water quality less than that prescribed in the Basin Plan, including violation of any water quality objective.
19. The discharge from the WWTF as permitted herein reflects BPTC for wastewater. The control is intended to assure the discharge does not create a condition of pollution or of nuisance, and that the highest water quality defined by groundwater limits will be maintained, which is consistent with the antidegradation provisions of Resolution No. 68-16. The WWTF incorporates:
 - a. Technology for secondary treated domestic wastewater;
 - b. Sludge 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 Facility and ancillary equipment during commercial power loss.
20. Waste constituents in typical domestic WWTF effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts (TDS). The proposed WWTF provides substantial removal of soluble organic matter and solids. It also reduces fecal coliform densities by 90 to 99% however

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the plant is ineffective reducing TDS, which in effluent discharged to ponds will concentrate through evaporation before percolating into the subsurface.

21. Given the above, disposal ponds are likely to degrade groundwater by increasing TDS. However, the degradation should be limited to the area directly underlying and immediately downgradient of the disposal ponds and limited to salinity constituents.
22. The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L (i.e., $150 < \text{TDS}_{\text{effluent}} - \text{TDS}_{\text{water supply}} < 380$ mg/L). Excepting the TDS reported for ID4-Well 3, the TDS of groundwater supplied to residents and businesses is below the lower TDS limit prescribed by Title 22, CCR (i.e., it is of excellent quality). The TDS of the effluent discharged to the disposal ponds is reportedly 540 mg/L.
23. The Discharger has not provided the flow-weighted average TDS concentration of domestic water needed to determine the current incremental addition of TDS from domestic water usage. Likewise, the Discharger has not investigated, and appropriately addressed, the extent of water softener regeneration brine discharges into the sewage collection system (e.g., eliminate brine discharges to the extent practicable to comply with the Basin Plan). At such time, this Order may be reopened to establish a more appropriate TDS effluent limit for the discharge.
24. For domestic wastes without water softener discharges, a TDS effluent limit of 500 mg/L limits salt degradation to a reasonable amount, and reasonably protects present and anticipated, future uses of groundwater.
25. Groundwater limits equal to water quality objectives for indicator waste constituents and parameters are appropriate because they maintain background water quality to the maximum extent practicable. Economic prosperity of local communities and associated industry/commerce is of maximum benefit to the people of California. Therefore, it is reasonable to allow groundwater degradation immediately beneath the WWTF to accommodate growth, provided the terms and conditions of the Basin Plan are not violated.
26. This Order prescribes groundwater monitoring to establish background water quality, and to ensure compliance with Basin Plan objectives. To ensure groundwater degradation is limited, compliance with objectives will be determined through groundwater monitoring wells designated as points of compliance (POCs) to the extent they are necessary. In this context, the Discharger is investigating background water quality to allow the Regional Board to make a determination on appropriate groundwater protection standards and whether POCs are necessary.
27. Section 13241 of the California Water Code (CWC) requires the Regional Board to consider various factors, including economics, when adopting water quality objectives. Water Code Section 13263 requires the Regional Board to address factors in Section 13241 when adopting WDRs. The State Board, however, has held that Regional Boards need not address Section 13241 factors when implementing existing water quality objectives in WDRs, given that the factors were considered when initially

adopting water quality objectives. These WDRs implement adopted water quality objectives. Therefore, no additional analysis of Section 13241 factors is required.

28. The Monitoring and Reporting Program No. R7-2007-0053 is necessary to determine compliance with WDRs, and to determine Facility impacts, if any, to receiving water.

Other

29. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA) (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity to obtain National Pollutant Discharge Elimination System (NPDES) permits, and to implement Best Conventional Pollutant Technology (BCT) and Best Available Technology Economically Achievable (BAT) to reduce or eliminate industrial storm water pollution.
30. The State Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001) specifying WDRs for storm water discharges associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries for coverage under the Permit.
31. The Discharger indicates that there are no discharges of pollutants, as defined in 33 U.S.C. Section 1362(12), from this site. Therefore, an NPDES permit is not necessary for this Facility.
32. Pursuant to CWC Section 13263(g), the discharge of waste is a privilege, not a right. Adoption of this Order does not create a vested right to continue this waste discharge.

CEQA and Public Participation

33. In accordance with Section 15301, Chapter 3, Division 6, Title 14 of the California Code of Regulations, the issuance of WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, Section 21000 et seq.).
34. The Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for this discharge, and has provided them with an opportunity for a public meeting, and an opportunity to submit comments.
35. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order No. 90-032 be rescinded, 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 wastes to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as 'hazardous,' as defined in Section 2521(a) of Title 23, CCR, Section 2510 et seq., or 'designated,' as defined in California Water Code Section 13173, is prohibited.
3. Bypass or overflow of untreated or partially treated waste is prohibited, except as allowed in Provision E.12.
4. Discharge of waste from the sewer collection system at any point upstream of the WWTF is prohibited.
5. Discharge of wastewater from the WWTF other than into the evaporation/percolation ponds described in Finding Nos. 3 and 4, above, is prohibited.
6. Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal ponds are prohibited.

B. DISCHARGE SPECIFICATIONS

1. The average monthly discharge flow from the Facility into the disposal ponds shall not exceed 250,000 gallons-per-day.
2. Effluent discharged into the ponds shall not exceed the following limits:

Constituent	Unit	Monthly Average
BOD ₅ ¹	mg/L ²	30
Total Suspended Solids	mg/L	30
Settleable Matter	ml/L ³	0.3
¹ 5-day biochemical oxygen demand at 20 °C. ² milligrams per liter ³ milliliters per liter.		

3. Ponds shall not have a pH below 6.0 or above 9.0.
4. The treatment or disposal of wastes from the Facility shall not cause pollution or nuisance, as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code.
5. Public contact with wastewater shall be precluded or controlled through such means as fences and signs, or acceptable alternatives.

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6. The Discharger shall not cause degradation of any water supply.
7. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in concentrations that cause violation of groundwater limits.
8. The WWTF (treatment, storage, and disposal areas, etc.) shall be operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
9. Objectionable odor originating at the WWTF shall not be perceivable beyond the limits of the WWTF.
10. As a means of discerning compliance with Discharge Specification B.9 above, the dissolved oxygen content in the upper one foot of wastewater in all ponds shall not be less than 1.0 mg/L.
11. Freeboard shall never be less than two feet in any pond (measured vertically). Lesser freeboard may be allowed if certified in writing by a California registered civil engineer as adequate to prevent overtopping, overflows, or levee failures.
12. Ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation. 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.
13. Ponds shall be managed to prevent breeding of mosquitoes. In particular:
 - a. An erosion control plan 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, and herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
14. 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.

C. SLUDGE DISPOSAL

Sludge defined in this document is solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge is sludge that will not undergo further treatment at the WWTF. Biosolids are sludge that is treated, tested, and demonstrated to be beneficial, and legal to use pursuant to federal and state regulations, as a soil amendment for agriculture, silviculture, horticulture, and land reclamation.

1. Collected screenings, biosolids, grease and oil, and other solids removed from liquid wastes shall be disposed of in a manner consistent with Title 27 and approved by the Executive Officer.

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2. Treatment and storage of sludge generated by the WWTF shall be confined to the Facility property, and conducted in a manner that precludes infiltration of waste constituents into soils in concentrations that will violate groundwater limits.
3. Storage of residual sludge, solid waste, and biosolids on property of the WWTF shall be temporary, and controlled/contained in a manner that minimizes leachate formation, and precludes infiltration of waste constituents into soil in concentrations that will violate groundwater limits.
4. Any proposed change in biosolids use or disposal practice, from a previously approved use/practice, shall be reported to the Regional Board Executive Officer and U.S. Environmental Protection Agency Regional Administrator at least 90 days in advance of the change.
5. Use and disposal of sludge shall comply with existing Federal and State laws and regulations, including permitting requirements and technical standards included in Title 40 of the Code of Federal Regulations (CFR), Part 503. If the Federal government delegates to the State and Regional Boards the authority to implement regulations contained in 40 CFR Part 503, this Order may be reopened to incorporate time schedules and technical standards. The Discharger must comply with the standards and time schedules contained in 40 CFR Part 503 whether or not incorporated into this Order.

D. GROUNDWATER LIMITS

The discharge to disposal ponds, in combination with other sources, shall not cause groundwater at the Facility to:

1. Contain waste constituents in concentrations statistically greater than receiving water limits, where specified below, or background water quality where not specified. (For purposes of comparison, background water quality shall be determined when background monitoring provides sufficient data. Quality determined in this manner establishes "water quality protection standards.")
2. Contain chemicals, heavy metals, or trace elements in concentrations that adversely affect beneficial uses or exceed maximum contaminant levels specified in the 22 CCR, Division 4, Chapter 15.
3. Exceed a most probable number of total coliform organisms of 2.2/100 ml over any seven-day period.
4. Exceed concentrations of radionuclides specified in 22 CCR, Division 4, Chapter 15.
5. Contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

6. Contain chemical constituents in concentrations that adversely affect agricultural use.
7. Exhibit a pH less than 6.5 or greater than 8.5.

E. PROVISIONS

1. The Discharger shall comply with "Monitoring and Reporting Program No. R7-2007-0053, and future revisions thereto, as specified by the Regional Board Executive Officer.
2. Standby power generating facilities shall be available to operate the Facility during a commercial power failure.
3. The WWTF shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Section 3680, Chapter 26, Division 3, Title 23 CCR. The Discharger shall ensure that all operating personnel are familiar with the content of this Board Order.
4. Prior to any modification at this Facility that would result in a material change in the quality or quantity of wastewater treated or discharged, or a material change in the location of the discharge, the Discharger shall report all pertinent information in writing to the Regional Board, and obtain revised requirements before implementing the modification.
5. Prior to any change in ownership or management of this Facility, 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 Board.
6. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
7. The Discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
 - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.

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8. The Discharger shall comply with all of the conditions of this Board Order, including timely submittal of technical and monitoring reports as directed herein, or by the Executive Officer pursuant to Section 13267 of the CWC. Any noncompliance with this Board Order constitutes a violation of the CWC, and is grounds for enforcement action.
9. The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment and control that are 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, or similar systems when necessary to achieve compliance with this Board Order. All systems both in service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of inspection results and maintenance performed, and made available to the Regional Board upon demand.
10. The Discharger shall comply with the following:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. The Discharger shall retain records of all monitoring information including: all calibration and maintenance records; 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 Board Order application. The records shall be retained for at least five years from the date of the sample, measurement and/or report of application.
 - c. Records of monitoring information shall include:
 1. The date, exact place, and time of sampling or measurement;
 2. The individual(s) who performed the sampling or measurement;
 3. The date the analysis was performed;
 4. The individual(s) who performed the analysis;
 5. The analytical technique or method used; and
 6. The result of each analysis.
11. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, submitted in accordance with the specifications ordered by the Regional Board Executive Officer. Such specifications are subject to periodic revisions as may be warranted.
12. By-pass (i.e., the intentional diversion of waste streams from any portion of a treatment facility, except diversions designed to meet variable effluent limits) is prohibited. The Board may take enforcement action against the discharger for by-pass unless:
 - a. By-pass is required for essential maintenance to assure efficient operation;
 - b. Effluent and receiving water limits are not exceeded;
 - c. The discharger notifies the Board ten days in advance;

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- d. 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 treatment facilities that cause loss of function; and substantial or permanent loss of natural resources. Severe property damage does not mean economic loss caused by delays in production.
- e. There are no feasible alternatives to by-pass, such as use of auxiliary treatment facilities, or retention of untreated waste. This condition is not satisfied if the Discharger did not implement preventive maintenance, or install adequate back-up equipment to prevent a by-pass likely to occur during equipment downtime.

The Discharger shall submit notice of an unanticipated by-pass as required in paragraph c. above.

- 13. Unless otherwise approved by the Regional Board Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.
- 14. **By November 15, 2007**, the Discharger shall submit a technical report in the form of a work plan that includes a time schedule for implementation, and specific tasks and milestones to identify and/or control discharges of water softener brines into the collection system to ensure compliance with Discharge Prohibition A.6, and to establish an appropriate TDS effluent limit. The work plan is subject to review and approval by the Regional Board Executive Officer.
- 15. The Discharger is responsible for compliance with these WDRs, and the Monitoring and Reporting Program for the Facility. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement action, including Regional Board Orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these WDRs by the Regional Board.
- 16. The Discharger shall provide a report to the Regional Board when the treatment Facility average flow rate for any month exceeds 80 percent of the design capacity specified in Finding No. 3 above. The report shall indicate steps the Discharger will take to accommodate wastes received in excess of the Facility's current design capacity.
- 17. The Discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, or report. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.
- 18. The Discharger shall provide adequate notice to the Regional Board Executive Officer of the following:

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- a. Introduction of new pollutants into any treatment Facility described in the Findings of this Board Order from an indirect Discharger subject to Section 301 or 306 of the Clean Water Act if discharging the pollutants directly.
 - b. A substantial change in the volume or character of pollutants introduced into any treatment Facility described in this Board Order, by an existing or new source.
 - c. A physical alteration or addition to any Facility described in this Board Order, or a change in the Discharger's sludge use or disposal practice, where such alteration, addition, or change may justify a Board Order revision prior to implementation (e.g., adding disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan).
19. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the next scheduled self-monitoring report, or earlier if requested by the Regional Board Executive Officer, or if required by an applicable standard for sludge use and disposal.
 20. The Discharger shall provide a plan describing the method to treat, handle, and dispose of sludge that is consistent with State and Federal laws and regulations. The Discharger shall obtain written approval from the Regional Board Executive Office prior to disposing of treated or untreated sludge (or similar solid wastes) using a method not described in Finding No. 4.
 21. The Discharger shall maintain a permanent log of all solids removed from the treatment Facility for use and/or disposal offsite, and provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and destination in accordance with the Monitoring and Reporting Program No. 2007-0053. Sludge stockpiled at the treatment Facility shall be sampled and analyzed for constituents listed in the sludge monitoring section of Monitoring and Reporting Program No. 2007-0053, and as required by 40 CFR, Part 503. The results of the analyses should be submitted to the Regional Board as part of the Monitoring and Reporting Program.
 22. This Board Order may be modified, terminated, or revoked and reissued for cause. Filing a request for a Board Order modification, termination, or revocation and reissuance, does not stay any Board Order condition. Likewise, notifying the Board of anticipated noncompliance does not stay any Board Order condition. Situations that may require a Board Order update include promulgation of new State or Federal regulation, a revision to the Basin Plan, or a change in land application plans, sludge use, or sludge disposal.
 23. This Board Order does not convey property rights of any sort, or any exclusive privileges, nor does it authorize injury to private property or invasion of personal rights, nor any infringement of federal, state or local laws and regulations.
 24. The Discharger shall report any noncompliance that may endanger human health or the environment. The Discharger shall immediately report orally information of noncompliance to the Regional Board office and the Office of Emergency Services as soon as:
 - (1) The Discharger has knowledge of the discharge,
 - (2) Notification is possible, and

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During non-business hours, the Discharger shall leave a message on the Regional Board office voice recorder. A written report shall be provided within five business days of the time the Discharger is aware of the incident. The written report shall describe the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance.

25. The Discharger shall report intentional or unintentional sewage spills in excess of one thousand (1,000) gallons occurring within the Facility or collection system to the Regional Board office in accordance with the time limits in Provision No. 24.

I, Robert Perdue, Executive Officer do hereby certify the foregoing is a full, true and correct copy of a Board Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on September 19, 2007.

for Jose Angel, P.E.

ROBERT PERDUE
Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. R7-2007-0053
FOR
BORREGO WATER DISTRICT, OWNER/OPERATOR
RAMS HILL WASTEWATER TREATMENT FACILITY
Borrego Springs – San Diego County

Location of Discharge: E 1/2 of Section 23, T11S, R6E, SBB&M

MONITORING

1. 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 Executive Officer, all analyses shall be conducted by a laboratory certified by the California Department of Public Health, except Dissolved Oxygen and pH, which may be performed by WWTF staff using EPA approved methods. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40CFR Part 136), promulgated by the USEPA.
2. Samples shall be collected at the location specified in the Permit and in this Program. If no location is specified, sampling shall be conducted at the most representative sampling point available.

INFLUENT MONITORING

At a minimum, wastewater influent shall be monitored for the following constituents from samples collected at the specified frequency:

October through April (high-season)				
Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gpd ¹	Flow Measurement	Daily ²	Monthly
20°C BOD ₅ ³	mg/L ⁴	Grab	Monthly	Monthly
Suspended Solids	mg/L	Grab	Monthly	Monthly
¹ Gallons per day ² Reported for each day with average monthly flow ³ 5-day biochemical oxygen demand at 20 °C ⁴ Milligrams per liter				

May through September (off-season)				
Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gpd ¹	Flow Measurement	Daily ²	Quarterly
20°C BOD ₅ ³	mg/L ⁴	Grab	Quarterly	Quarterly
Total Suspended Solids	mg/L	Grab	Quarterly	Quarterly
¹ Gallons per day ² Reported for each day with average monthly flow ³ 5-day biochemical oxygen demand at 20 °C ⁴ Milligrams per liter				

EFFLUENT MONITORING

Effluent samples shall be representative of the discharge, and collected immediately before discharge into disposal ponds. The time the grab sample is collected shall be recorded. At a minimum, wastewater effluent shall be monitored for the following constituents from samples collected at the specified frequency:

October through April (high-season)				
Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Total Suspended Solids	mg/L	Grab	2/month ¹	Monthly
20° C BOD ₅	mg/L	Grab	2/month	Monthly
Settleable Solids	mg/L	Grab	2/month	Monthly
Total Nitrogen	mg/L	Grab	2/month	Monthly
Total Dissolved Solids	mg/L	Grab	2/month	Monthly
pH	pH units	Grab	2/month	Monthly
VOCs ²	µg/L ³	Grab	2/year	Semi-annually
¹ 2 samples per month with at least 2 weeks between samples ² Volatile Organic Compounds testing is to be accomplished using USEPA Test Method 601 and 602, or 624. ³ Micrograms per liter.				

May through September (off-season)				
Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Total Suspended Solids	mg/L	Grab	Quarterly	Quarterly
20° C BOD ₅	mg/L	Grab	Quarterly	Quarterly
Settleable Solids	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
pH	pH units	Grab	Quarterly	Quarterly
VOCs ¹	µg/L ²	Grab	2/year	Semi-annually
¹ Volatile Organic Compounds testing is to be accomplished using USEPA Test Method 601 and 602, or 624. ² Micrograms per liter.				

DISPOSAL PONDS MONITORING

A permanent marker shall be placed in each pond calibrated to indicate the water level at design capacity, and available operational freeboard. The Discharger shall inspect ponds in use at least weekly, and document visual observations in a bound log book. Observations shall indicate:

- a. The occurrence and location of weeds within the pond, or along the bank;
- b. The occurrence and location of dead algae, vegetation, scum, or debris on the pond surface;
- c. Burrowing animals or insects; and
- d. Color of the pond/cell.

A copy of the entries shall be submitted with the next self-monitoring report. If corrective action is required, the self-monitoring report shall include a description of actions taken or scheduled. At a minimum, wastewater ponds shall be monitored for the following constituents from samples collected at the specified frequency:

October through April (high-season)				
Constituent	Unit	Type of Sample	Sampling Frequency	Reporting Frequency
Dissolved Oxygen ¹	mg/L	Grab	2/month	Monthly
pH	pH Units	Grab	2/month	Monthly
Freeboard	Feet	Observation	2/month	Monthly
¹ Samples shall be collected from each pond opposite the inlet, at a depth of one foot or less. Samples shall be collected between 8:00 A.M. and 9:00 A.M.				

May through September (off-season)				
Constituent	Unit	Type of Sample	Sampling Frequency	Reporting Frequency
Dissolved Oxygen ¹	mg/L	Grab	Quarterly	Quarterly
pH	pH Units	Grab	Quarterly	Quarterly
Freeboard	Feet	Observation	Quarterly	Quarterly
¹ Samples shall be collected from each pond opposite the inlet, at a depth of one foot or less. Samples shall be collected between 8:00 A.M. and 9:00 A.M.				

WATER SUPPLY TO THE COMMUNITY

By (30 days following adoption of this Order), the Discharger shall propose a station for obtaining representative samples from the community domestic water supply. The proposed station is subject to review and approval by the Regional Board Executive Officer. If source water is obtained from more than one well, TDS shall be reported as a weighted average, with supporting calculations included. At a minimum, supply water shall be monitored for the following constituents from samples collected at the specified frequency:

Constituents	Units	Sampling Frequency	Reporting Frequency
Standard Minerals ¹	mg/l	Annually	Annually
pH	pH units	Quarterly	Quarterly
¹ At a minimum, Standard Minerals shall include: total dissolved solids, calcium, chloride, fluoride, iron, magnesium, manganese, nitrate, potassium, sodium, sulfate, barium, total alkalinity (including alkalinity series), and hardness.			

GROUNDWATER MONITORING

By November 31, 2007, the Discharger shall submit a work plan that includes a time schedule for developing a groundwater monitoring network to characterize background groundwater quality in the vicinity of the disposal ponds. Groundwater monitoring wells shall be constructed as prescribed in California Well Standards (Bulletin 74-90, supplement to Bulletin 74-81). The work plan shall be subject to review and approval by the Regional Board Executive Officer, and prepared by a California registered civil engineer or registered engineering geologist with experience in this type of investigation.

At a minimum, the groundwater monitoring network shall include:

1. A sufficient number of background monitoring points installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater not affected by a release from the wastewater pond;
2. A map of the proposed well locations, and
3. A schematic of the proposed wells.

Following approval of the proposed network by the Regional Board Executive Officer, a minimum of one groundwater monitoring well shall be established upgradient of the disposal ponds. To determine the appropriate water quality protection standards, monthly samples shall be collected from the background monitoring well(s) for a period of one year. Further, groundwater elevation relative to mean sea level shall be measured in all wells on a monthly basis, and used to the extent practicable to determine ground water direction, and gradient.

If subsequent sampling of the background monitoring well(s) indicates significant variations in water quality due to seasonal fluctuations or reasons unrelated to waste disposal activities, the Discharger may request modification of the water quality protection standards. At a minimum, groundwater shall be monitored for the following constituents from samples collected at the specified frequency:

Constituent	Units	Type of Sample	Sampling Frequency (during 1 st year)	Sampling Frequency (after 1 st year)
Standard Minerals ¹	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
VOCs	mg/L	Grab	Quarterly	Quarterly
pH	pH Units	Grab	Monthly	Quarterly

¹ At a minimum, Standard Minerals shall include: total dissolved solids, calcium, chloride, fluoride, iron, magnesium, manganese, nitrate, potassium, sodium, sulfate, barium, total alkalinity (including alkalinity series), and hardness.

Following completion of the 12 months of sampling, the Discharger shall submit a technical report in the form of an engineering report. The report shall statistically analyze water quality monitoring data for each sampled parameter to interpret the data to establish background water quality, and provide recommendations regarding future groundwater monitoring, including the need to establish POCs. The specifications for each statistical analysis method used shall be provided. The report shall also include the results of groundwater elevations and to the extent possible the elevations shall be represented graphically using flow nets. This technical report is requested pursuant to Section 13267 of the California Water Code. The report shall **be submitted to the Regional Board within 60 days following the last sampling event** to determine background water quality and shall be prepared by a California Registered civil engineering or engineering geologist with experience in hydrogeological investigations.

SLUDGE MONITORING

On an annual basis, the Discharger shall submit a monitoring report describing current and proposed sludge disposal methods, and quantity of sludge disposed of in the previous calendar year. If more than one method of sludge disposal was used, the report shall quantify sludge disposal by method:

1. For **landfill disposal**, include: (1) the Board Order number for the facility Waste Discharge Requirements, (2) the waste classification of the landfill(s), and (3) the name and location of facilities receiving sludge.
2. For **land application**, include: (1) the location of the site(s), (2) the Board Order number for the facility Waste Discharge Requirements, (3) a technical report analyzing application rates and procedures in relation to the Department of Health Services *Manual of Good Practices for Landspreading of Sewage Sludge*, and EPA's *Process Design Manual for Land Application of Municipal Sludges*, and Title 23, CCR, Section 2511(f), and (4) for subsequent uses of the land.
3. For **incineration**, include: (1) the name and location of sludge incineration site(s), (2) the Board Order number for the facility Waste Discharge Requirements, (3) the method for disposing ash, and (4) the name and location of facilities receiving ash (if applicable).
4. For **composting**, include: (1) the location of the site(s), and (2) the Board Order number for the facility Waste Discharge Requirements.

REPORTING

1. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the Facility is operating in compliance with WDRs. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
2. 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 the analysis was performed;
 - d. The individual(s) performing the analysis;
 - e. The analytical technique or method used; and
 - f. The result of each analysis.
3. The results of any analysis obtained more frequently than required by this Board Order at the locations specified in the Monitoring and Reporting Program, shall be reported to the Regional Board.
4. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring report.
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".

Monitoring and Reporting Program
Borrego Water District
Rams Hill WWTF

6. The Monitoring and Reporting Program, and other information requested by the Regional 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 specifies 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 Executive Officer.
8. Reporting of any failure at the Facility (wastewater treatment plant, and collection and disposal system) shall be as described in Provision No. 19. Results of any analysis performed as a result of a failure of the Facility shall be provided within ten (10) days after collection of the samples.
9. The discharger shall attach a cover letter to the Self-Monitoring Report. The information contained in the cover letter shall clearly identify violations of the WDRs, discuss corrective actions taken or planned, and propose a time schedule for planned corrective actions. Identified violations shall include a description of the requirement that was violated and a description of the violation.
10. Daily, weekly and monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by January 15th, April 15th, July 15th, and October 15th of each year. Annual monitoring reports shall be submitted to the Regional Board by January 15th of each year.
11. The Discharger shall submit monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring, Suite 100
Palm Desert, CA 92260

Ordered by: 

ROBERT PERDUE
Executive Officer

September 19, 2007
Date