

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

BOARD ORDER R7-2017-0001

**WASTE DISCHARGE REQUIREMENTS
FOR OWB PACKERS, LLC
BRAWLEY BEEF PLANT BIOFILTRO TREATMENT FACILITY
AND RECLAMATION AREAS
Brawley– Imperial County**

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

1. OWB Packers, LLC (OWB or Discharger), owns a beef processing plant (Facility), which is located at 57 Shank Road, Brawley, CA 92227, in Imperial County. A Facility map is included in Attachment A of this Order.
2. The Facility has an existing onsite wastewater treatment facility (Existing WWTF) that consists of primary screens, two Dissolved Air Flotation (DAF) units, an anaerobic digester (Pond 1), an intermediate dissolved air flotation unit, an aerobic activated sludge pond (Pond 2), a suspended air flotation (SAF) unit, a polishing pond (Pond 3), and a belt filter press for dewatering solids. All three ponds are unlined. The Existing WWTF also includes an unlined storm water pond onsite that is not considered part of the treatment facility. Attachment B of this Order shows a diagram of the Existing WWTF.
3. The Facility operations with the potential to generate wastewater are: (a) Beef Harvesting (kill floor), (b) Fabrication (where carcasses are broken down into wholesale beef cuts), (c) Beef grinding (to produce ground beef), (d) Cleaning and Sanitation of production areas, (e) Utilities (boilers, heaters, cooling towers), (f) Cattle pens, and (g) Sanitary Services for employees, personnel, and visitors. The Facility also has a rendering plant. The Discharger is not proposing to operate the rendering plant at this time. However, the Discharger may operate it once it increases production¹. Salt hiding operations are conducted in a closed loop system and have no associated discharges.
4. The Discharger submitted a Report of Waste Discharge (ROWD) dated June 27, 2016, and applied for Waste Discharge Requirements (WDRs) for a change in the method of wastewater treatment and reclamation at the Facility. The Colorado River Basin Water Board reviewed the ROWD and requested additional information. The Discharger submitted an amended ROWD on September 16, 2016. The revised ROWD was accepted as complete on October 12, 2016.
5. The Discharger proposes to replace the Existing WWTF, a pond-based unit treatment process, with BioFiltro BIDA®, a biofiltration system that uses earthworms and microbial processes to provide secondary treatment to the Facility's wastewater (BioFiltro WWTF). Under this proposal, the Discharger will abandon Pond 1, use Pond 2 for emergency temporary storage of wastewater and use Pond 3 for storage of treated wastewater. The

¹ If the Discharger resumes rendering operations no additional waste discharge requirements would be required. However, monitoring requirements would likely need to be revised to account for the wastewater contribution from this operation.

Discharger will keep and use the primary screens, the DAFs, the SAF, and belt-filter from the Existing WWTF to provide for removal of gross solids, deal with oil and grease, reduce the organic strength of the wastewater, and dewater solids. Attachment C of this Order shows the flow diagram for the BioFiltro WWTF. The proposed BioFiltro WWTF would have ultimate treatment capacity of 800,000 gallons per day (gpd) and will be built in three Phases as described in Finding 12, below.

6. The Discharger also proposes to discharge up to 238,000 gallons per day (gpd) of treated industrial wastewater to irrigate approximately 140 acres of farmland (Reclamation Area).² The Discharger plans to disinfect the BioFiltro WWTF effluent using Paracetic Acid (PAA), prior to discharge to land.³ The Reclamation Area consists of: (1) 10 acres, which are within the Facility and are owned by the Discharger; and (2) 130 acres (Assessor's Parcel Numbers 047-020-015, 047-020-016, and 047-020—017), which are immediately to the east of the Facility and leased by the Discharger. The Discharger proposes to operate and maintain the Reclamation Area and irrigate it with treated wastewater from the Facility to grow Bermuda grass for cattle feed.
7. The purpose of this Order is to establish requirements for discharges from the Biofiltro WWTF into ponds 2 and 3, including the use of up to 238,000 gpd of treated wastewater for irrigation of the Reclamation Area⁴. This Order does not regulate discharges of wastewater from the Existing WWTF into the unlined ponds. This Order does not regulate discharges from the Facility to the Brawley WWTP either⁵. The Discharger must obtain prior authorization from the City of Brawley if it wishes to discharge any wastewater from the Facility into the POTW. Further, the Discharger must obtain authorization from the Colorado River Basin Water Board prior to discharging more than 200,000 gpd from the BioFiltro system into the ponds and for discharging more than 238,000 gpd to the Reclamation Area.

Background

8. The Facility was previously owned by National Beef California, LP (NBC), who closed the Facility and ceased operations in May 2014. While NBC operated the Facility (6/2/2006 through 5/23/2014), the Facility generated approximately 0.590 to 1.655 million gallons per day (mgd) of industrial wastewater that was discharged (1) to areal groundwater through the three unlined ponds and (2) from the onsite WWTF into the City of Brawley's WWTP for further treatment and disposal. However, only approximately 0.012 mgd were discharged to groundwater through the unlined ponds.
9. The Discharger entered into a Purchase and Sales Agreement to the buy the Facility

² A Water Balance Study was preformed to determine the amount of wastewater from the Biofiltro WWTF that could be agronomically applied to the Reclamation Area. (Provost and Pritchard 2016). Based on this study, the Reclamation Area can accommodate up to 238,000 gpd. The Discharger reports that treated wastewater from the BioFiltro WWTF in excess of the 238,000 gpd will likely be discharged to the City of Brawley Wastewater Treatment Plant (Brawley WWTP or POTW).

³ PAA is an alternative to chlorine disinfection that does not form harmful disinfection byproducts. The equipment for the PAA disinfection system would include two chemical feed pumps to pump 12 percent PAA solution from a 300-gal tote, and a 12,000-gal reaction tank with a mixing system. It is not expected to result in any residual contaminants of concern in the discharge.

⁴ Discharges from the Existing WWTF are regulated under R7-2016-0007. Once the BioFiltro WWTF is built and fully operational, R7-2016-0007 will be rescinded.

⁵ The city of Brawley regulates industrial discharges into its POTW pursuant to its approved wastewater Pretreatment Program.

from NBC. The Facility was sold to the Discharger pursuant to the Agreement on June 16, 2016.

10. On January 14, 2016, the Colorado River Basin Water Board adopted Waste Discharge Requirements R7-2016-0007 for the Discharger for the discharge of wastewater from the Existing WWTF into the unlined ponds. The Colorado River Basin Water Board also adopted Time Schedule Order (TSO) R7-2016-0008 establishing a time schedule to implement a series of onsite wastewater treatment improvements at the Facility and a deadline to bring Pond 1 into compliance with Title 27, California Code of Regulations, Section 20005 et seq. The Discharger is currently in compliance with the TSO.

OWB’s Proposed BioFiltro and Reclamation Operations

11. The BioFiltro system uses an industry-specific mix of worms and bacteria to achieve maximum reduction efficiencies on parameters such as Biochemical Oxygen Demand (BOD); total suspended solids (TSS); fats, oils, and grease (FOG); total Nitrogen; total dissolved solids (TDS); ammonia; and phosphorous. The burrowing worms create air channels, digest suspended solids, and can achieve densities of 12,000 worms per cubic yard.
12. The BioFiltro system is a modular system that is designed based on the influent flow rate and contaminant loading. Each BioFiltro module is a rectangular, concrete box approximately 65 feet wide by 277 feet long and 4 feet tall. The Discharger proposes to build its BioFiltro WWTF in three Phases:

Activity	Construction Schedule		Cumulative Treatment Capacity of BioFiltro WWTF
	Start	End	
Phase 1	January 9, 2017	February 28, 2017	0.20 mgd
Phase 2	December 18, 2017	March 19, 2018	0.40 mgd
Phase 3	October 31, 2019	January 30, 2020	0.80 mgd

It is estimated that approximately 3 acres of BioFiltro modules and associated equipment, including a disinfection unit, would be needed to treat 200,000 gpd of wastewater (Phase 1); 5 acres would be needed to treat 400,000 gpd (Phase 2); and 12 acres would be required to treat the proposed flow of 800,000 gpd at full operation (Phase 3).

13. The ponds will essentially function as flow-equalization and storage reservoirs for the Reclamation Area to ensure there is sufficient reclaimed water to supplement the Reclamation Area water and nutrient demands and to ensure there is a place to store treated wastewater on days that irrigation is not needed.
14. Based on performance data from other BioFiltro systems, and previous performance of the Existing WWTF, Table 1 below shows the projected raw wastewater characteristics, the effluent from the DAF units prior to discharge into the Biofiltro WWTF, and effluent from the BioFiltro WWTF:

Table 1: Projected Discharge Characteristics
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Constituent	Units	Monthly Averages		
		Raw Wastewater	DAF Effluent	Final WWTF Effluent
Biochemical Oxygen Demand (BOD)	mg/L	6000	5200	<100
Total Suspended Solids	mg/L	3000	2200	<100
Total Dissolved Solids (TDS)	mg/L	2100	2100	2100
Total Nitrogen	mg/L	150	150	<50
Oil & Grease	mg/L	750	750	<50
Alkalinity	mg/L	500	500	500
pH	---			6.0-9.0

15. The treated wastewater is expected to be of similar quality as the water that would otherwise be used for irrigation in the Reclamation Area because the 130-acre site east of the Facility is currently cropped with Bermuda grass. The Imperial Irrigation District (IID) delivers Colorado River water to the 130-acre site via de Oakley Canal.⁶

16. The ROWD states that estimated monthly average evapotranspiration (ET) rates for Bermuda grass in the Imperial Valley vary from 1.102 inches in December to as high as 7.076 in July⁷. The monthly water balance accounts for average monthly precipitation data for the Brawley area, gross crop water demand, evaporation, irrigation efficiency, and soil types. It shows that the 238,000 gpd of treated wastewater generated by Phase 1 would constitute only 26% of the total average annual water demand to grow Bermuda grass on the 140 acres. The Discharger proposes to use IID water to meet the additional water demand of the 140 acres. More specifically, the Discharger proposes to use exclusively treated wastewater from the BioFiltro WWTF to irrigate the 140 acres from October through February; and use both treated wastewater and IID water from March through September to irrigate the 140 acres.

17. On November 30, 2016, the Discharger reported that it designated a company employee, who is not involved with the operation and maintenance of the WWTF and Reclamation Area, as liaison for the public to handle and follow through on complaints/allegations about objectionable odors from the Facility. Further, the Discharger reported that:
 - a. It is establishing a phone number for people to contact the liaison,
 - b. It will ensure the liaison forwards the complaint(s) received about alleged objectionable odors from the Facility or Reclamation Area to the Colorado River Basin Water Board, within 15 minutes of receipt of the call.

⁶ The 10-acre onsite parcel has not been under cultivation during the last 20 years. However, additional wastewater contributions are not expected to differ significantly.

⁷ Based on ETs for alfalfa.

- c. It will ensure the liaison keeps a log regarding complaints/allegations received and their disposition; and that the log will note the nature of the allegation, time and date when the call is received, and, if provided, the name of the caller. Further, it will describe the disposition of the complaint.

Hydrogeologic Conditions

18. The average annual precipitation in the Imperial Valley is about 3 inches per year. The average annual evapotranspiration rate is about 71 inches per year.
19. Soil units represented in the location of the Facility are the Imperial-Glenbar–silty clay and Imperial–silty clay to sandy silt. The shallow hydrogeologic profile includes surficial confining silty clay over sandy clayey silt, with an upper confined/semi-confined aquifer. The surficial confining unit consists of very stiff clay extending from 0 to 20 feet. Below that, at 20-25 feet below ground surface (bgs), there is a medium-dense sandy clayey silt unit. Soils in the 130-acre reclamation site are classified as Imperial-silty clay.
20. The closest surface waters to the Facility and 130-acre reclamation are the Oakley Canal and the McNeal Drain, which flow into the New River. The IID's Oakley Canal borders the Facility on the east and delivers IID water to the 130-acre reclamation site. The McNeal Drain runs northerly between the Facility and the 130-acre site.
21. First-encountered groundwater in the area is at about approximately 9-21 feet bgs and in an unconfined aquifer. There are no domestic or municipal wells within 500 feet of the Facility. Groundwater flow in the area is to the northwest toward the Salton Sea.
22. Groundwater monitoring from eleven on-site groundwater monitoring wells showed that the wastewater from NBC's operation discharged to the unlined ponds caused concentrations of BOD and Nitrate to increase slightly in areal groundwater when compared to background concentrations, albeit the increase was confined to the immediate vicinity of the ponds.⁸ Background TDS in areal groundwater was > 5,000 mg/L.

Basin Plan, Beneficial Uses, and Regulatory Considerations

23. The Water Quality Control Plan for the Colorado River Basin (Basin Plan), which was adopted on November 17, 1993, and amended on November 16, 2012, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (including amendments adopted by the Colorado River Basin Water Board to date).
24. The proposed discharges from the Facility to the storage ponds and to the Reclamation Area are within the Imperial Hydrologic Unit. The beneficial uses for the underlying groundwater are designated as:
 - a. Municipal supply (MUN)
 - b. Industrial supply (IND)

⁸ On June 27, 2013, pursuant to Section 13267 of the California Water Code, the Colorado River Basin Water Board issued an Investigative Order against NBC. In relevant part, the Investigative Order required NBC to conduct a groundwater investigation to determine whether the discharge to the unlined ponds adversely impacted groundwater and, if so, the extent of that impact.

25. Surface waters in the area of the Facility and Reclamation Area consist of the IID irrigation canals and surface drains (Imperial Valley Drains). The beneficial uses of the Imperial Valley Drains are:
- a. Fresh Water replenishment of Salton Sea (FRSH)
 - b. Non-contact Water Recreation (REC II)
 - c. Warm Water Habitat (WARM)
 - d. Wildlife Habitat (WILD)
 - e. Preservation of Endangered or Threatened Species (END)
26. State Water Resources Control Board Resolution 88-63 (as revised by Resolution 2006-0008), which is also known as the "Sources of Drinking Water" Policy, recognizes that Basin Plans do not provide sufficient detail in waterbodies designated as "Municipal" to judge clearly what is, or is not, a source of drinking water for various purposes. Accordingly, it exempts a waterbody from such designation if the TDS in the waterbody exceed 3,000 mg/L and the waterbody is not reasonably expected by the Regional Water Board to supply a public water system. The Basin Plan incorporates the Sources of Drinking Water Policy by reference.
27. First-encountered groundwater beneath the Facility and the 130-acre site has not been used for municipal purposes, is not currently used for municipal purposes, and is not reasonably expected to supply a public water system because of its relatively high salt concentrations (Total Dissolved Solids > 5,000 mg/L). Therefore, effluent limitations that would be protective of a municipal beneficial use, as prescribed in Title 22 of the California Code of Regulations, for nitrogen and TDS are not necessary for this discharge.
28. State policy promotes the use of recycled water to the maximum extent in order to supplement existing surface and ground water supplies to help meet water needs (CWC Sections 13510-13512). On January 15, 2015, the Colorado River Basin Water Board adopted Order R7-2015-0008, Conditional Waiver of WDRs for Agricultural Wastewater Discharges and Discharges of Wastes from Drain Operation and Maintenance Activities in the Imperial Valley (Conditional Agricultural Waiver). The Conditional Agricultural Waiver requires, in substantive part, that Imperial Valley farmers/growers implement management practices to address and prevent adverse water quality impacts from tailwater and tilewater discharges of wastes, including management practices for silt/sediment, nutrients, and pesticides.
29. This Order contains more stringent requirements than the Conditional Agricultural Waiver. This Order prohibits the discharge of tailwater that results from applying treated wastewater from the Facility to the Reclamation Area into surface waters to protect surface water quality. It also requires the Discharger to implement management practices for pesticides, including the suggested practices of Attachment D of this Order; and establishes a monitoring and reporting program to ensure, in relevant part, that: (1) subsurface drainage from the reclamation areas (i.e., tilewater) does not contain COCs exclusively associated with the Facility in concentrations that threaten surface water quality; (2) treated wastewater reclamation is taking place at agronomic rates and in a manner that prevents nuisance; and (3) the overall irrigation is also taking place in a manner that prevents adverse water quality impacts. Further, this Order requires the Discharger to submit various technical reports to verify implementation and compliance the conditions in this Order, including a final irrigation management for the Reclamation Area, proof that it has a qualified wastewater treatment plant operator for the BioFiltro

WWTF, and a work plan to manage and dispose of solids generated by the BioFiltro WWTF in accordance with state regulations.

30. This Order establishes WDRs pursuant to Division 7, Chapter 4, Article 4, of the California Water Code (CWC) for discharges that are not subject to regulation under Clean Water Act (CWA) Section 402 (33 U.S.C. Section 1342). CWC Section 13260(a) requires that any person discharging waste or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the state, to file a Report of Waste Discharge (ROWD) with the Regional Water Board to obtain coverage under WDRs or a waiver of WDRs. "Waste" is defined in CWC Section 13050(d).
31. 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.
32. CWC Section 13173 defines designated waste as either:
 - a. Hazardous waste that has been granted a variance from hazardous waste management requirements pursuant to Section 25143 of the Health and Safety Code.
 - b. Nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions as a waste management unit, could be released in concentrations exceeding applicable water quality objectives or could reasonably be expected to affect beneficial uses of the waters of the state contained in the appropriate state water quality control plan.
33. Release of designated waste to land is subject to full containment pursuant to the requirements of Title 27, CCR, Section 20005 et seq (Title 27) unless exempted from Title 27 requirements⁹. Section 20090(b) of Title 27, which provides that discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields, are not subject to Title 27 requirements if the following conditions are met:
 - a. The applicable regional water board has issued WDRs, reclamation requirements, or waived such issuance;
 - b. The discharge is in compliance with the applicable water quality control plan; and
 - c. The wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22, CCR as a hazardous waste.
34. The discharge authorized by this Order, except for discharges of residual sludge and solid waste from the Existing WWTF, are exempt from the solid waste requirements of Title 27.¹⁰ The proposed discharge satisfies the conditions to be exempted from the Title 27 requirements because the discharge will be regulated by these WDRs; the WDRs will ensure the discharge is in compliance with the Basin Plan; and the discharge is not a hazardous waste.
35. CWC Section 13267 authorizes regional water boards to require technical and monitoring

⁹ Sludge in Pond 1 is being handled as a "designated waste," pursuant to Title 27.

¹⁰ Discharges of the sludge waste in Pond 1 are regulated Order R7-2016-0007 and Time Schedule Order R7-2016-0008. The Colorado River Basin Water Board may revise Time Schedule Order R7-2016-0008 to be consistent with this Order as necessary.

reports. This Order requires submittal of technical reports and establishes a Monitoring and Reporting Program (MRP) to implement federal and state requirements and ensure compliance with this Order. 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. The technical reports required by this Order and the attached Monitoring and Reporting Program R7-2017-0001 are necessary to ensure compliance with these WDRs.

36. 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. The Facility is has coverage for stormwater under the State Water Resources Control Board General Permit for Storm Water Discharges Associated with Industrial Activities Order 2014-0057-DWQ (NPDES No. CAS000001).

Antidegradation Analysis

37. State Water Resources Control Board Resolution No. 68-16, "Policy with Respect to Maintaining High Quality Waters of the State," (Resolution 68-16) prohibits degradation of Waters of the State unless it has been shown that:
- a. The degradation is consistent with the maximum benefit to the people of the State;
 - b. The degradation will not unreasonably affect present and anticipated future beneficial uses;
 - c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives; and
 - d. The discharger employs BPTC to minimize degradation.

Resolution 68-16 applies whenever "existing quality of water is better than quality established in policies as of the date such policies become effective."¹¹ Resolution 68-16 does not apply to waters that are not high quality.

38. Resolution 68-16 does not apply to discharges to groundwater authorized in this Order. First encountered groundwater beneath the Facility is of poor quality that historically has not supported beneficial uses. A 1975 report prepared by the United State Geological Survey¹² indicates that shallow groundwater in the central portion of the Imperial Valley, including the Brawley area was rather saline due the widespread waterlogging from many years of repeated irrigations whose only drainage was the slow seepage into the

¹¹ Resolution 16-68 was adopted in 1968, therefore water quality as far back as 1968 may be relevant to an antidegradation analysis.

¹² O.J. Loeltz et al., 1975, Geological Reconnaissance of the Imperial Valley, California. Department of Interior. United States Printing Office, Washington, 1975.

Alamo and New Rivers (i.e., before tiledrains began to be installed in the Valley in the late 1930s). Specifically, the 1975 report found that groundwater quality at or below 120 feet bgs in the area of the Facility was also very poor, with TDS of 10,300 mg/L, as early as 1962.

39. When a receiving water body quality exceeds or just meets the applicable water quality objective due to naturally-occurring conditions or due to prior Board-authorized activities, the Colorado River Water Board must set limitations no higher than the objectives set forth in the Basin Plan unless a higher discharge limit is appropriate due to system mixing or removal of the constituent through percolation. (State Water Board Order No. WQ 81-5.) Here, an extensive network of tiledrains is expected to capture substantial portions of the discharge thereby removing COCs from the groundwater.
40. To the extent some of the discharge may percolate into the unconfined aquifer, the Colorado River Basin Water Board does not expect the discharge to cause or contribute to an exceedance of applicable water quality objectives because the groundwater is of poor quality that does not, and could not be reasonably expected to, support beneficial uses as described in Finding 26. Further, this Order requires the Discharger to apply reclaimed water used for irrigation at agronomic rates to properly manage COCs and prevent COCs:
 - a. For Designated Waste, the Discharger is abandoning the unlined ponds as part of the treatment system. Historically, the ponds infiltrated approximately 12,000 gpd of partially treated wastewater to areal groundwater. Pond 1 in particular posed the greatest threat to water quality because NBC used Pond 1 to treat designated waste, but the pond did not comply with applicable regulations in Title 27. Use of the BioFiltro WWTF will prevent this scenario because it will prevent wastewater from percolating like it did when Pond 1 was used as part of the treatment and disposal system.
 - b. For Nitrogen, the Western Fertilizer Handbook, 7th Edition (Table 4-1, p. 63), recommends a total Nitrogen loading rate of 225 lbs/acre/year for Bermuda grass. Application of wastewater in the Reclamation Area at agronomic rates for both nutrient and hydraulic loading is not expected to result in degradation of groundwater because the calculated monthly mass balance for Nitrogen in the BioFiltro WWTF effluent shows that the total nutritive value of the effluent (estimated to be 221 lbs/acre/year) is within the annual crop need for Bermuda Grass. As such, there should not be a need to apply any additional commercial Nitrogen fertilizer to the 140 acres.
 - c. For BOD, the Discharger's mass balance for BOD shows that the average monthly BOD loading rate is 1.4 lbs/acre/day, which is well below the maximum 100 lbs/acre/day loading rate recommended by USEPA in its "Pollution Abatement in the Fruit and Vegetable Industry: Wastewater Treatment" manual (Table IV.3, p. 66). Based on this, the Discharger will likely get natural incidental BOD removal in the reclamation areas.
 - d. For Salinity, Bermuda grass is considered a salt-tolerant crop. The critical salt loading rate for crop viability would occur when the Discharger irrigates exclusively with BioFiltro WWTF effluent (from October through February). The mass balance for salts indicates that the Fixed Dissolved Solids (FDS) in the

BioFiltro WWTF effluent should be approximately 1,225 mg/l. On an annual basis, however, using BioFiltro WWTF effluent and IID water to irrigate would be substantially similar to irrigating exclusively with IID water (TDS average of 975 and 850 mg/L, respectively).

- e. For Bacteria, the Discharger will be disinfecting the BioFiltro effluent prior to discharging it to land. Therefore, there should be no degradation of groundwater as indicated by pathogen-indicator bacteria.
41. Resolution 68-16 may apply to discharges to surface water authorized under this Order. However, the discharge will likely not degrade the beneficial uses of surface water because this Order prohibits the discharge of tailwater associated with irrigation of treated wastewater from the BioFiltro WWTF¹³ and requires the Discharger to apply reclaimed water used for irrigation at agronomic rates to properly manage COCs and prevent COCs from showing up in tilewater at concentrations that threaten water quality as described above.

CEQA

42. The Colorado River Basin Water Board is the Lead Agency for this project under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). As Lead Agency, the Colorado River Board conducted an Initial Study in accordance with section 15063 of the "State CEQA Guidelines" beginning at California Code of Regulations, title 14, section 15000 et seq. Based on the Initial Study, the Regional Water Board prepared a Mitigated Negative Declaration.
43. On October 13, 2016, the Colorado River Basin Water Board notified interested agencies and persons of its intent to adopt a Mitigated Negative Declaration (MND) for this project and filed a notice of intent to adopt an MND with the State Clearinghouse (SCH. #2016101034) on October 13, 2016. The Colorado River Basin Water Board provided interested agencies and persons with an opportunity to submit comments on the draft MND during a 30-day comment period that ended on November 14, 2016. (14 CCR §§ 15072, 15073). Three comment letters were received.
44. On November 17, 2016, the Colorado River Basin Water Board held a public hearing to consider adoption of the draft MND. After considering documents and comments on the draft MND, the Colorado River Basin Water Board adopted the MND finding, on the basis of the whole record before it, that there was no substantial evidence that the proposed Project, with mitigation, would have a significant effect on the environment.
45. CEQA requires that the Lead Agency must adopt a program for monitoring and reporting on any mitigation measures it has imposed in a negative declaration to assess efficacy and ensure compliance. (Pub. Res. Code, § 21081.6.) The Colorado River Basin Water Board has developed a mitigation monitoring and reporting program (MMRP) to implement all mitigation measures identified in the MND as necessary to mitigate or avoid significant environmental effects. The MMRP is included as Attachment E of this Order. The Colorado River Basin Water Board approves and adopts the MMRP concurrently with this Order as an enforceable condition of this Order.

¹³ Tailwater carries sediment, nutrients, and insoluble pesticides into receiving waters.

Public Participation

46. 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.
47. The Board, in a public hearing on January 19, 2016, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Discharge Prohibitions

1. Discharge of waste classified as “hazardous”, as defined in Title 23, CCR, Section 2521(a), or “designated”, as defined in California Water Code Section 13173, is prohibited, except as provided by Title 27.
2. Creation of contamination, pollution, or nuisance as defined in CWC Sections 13050(k), 13050(l), and 13050(m) is prohibited.
3. Discharge of wastewater from the BioFiltro WWTF into the City of Brawley WWTF is prohibited unless in accordance with an active industrial discharge permit issued by the City of Brawley.
4. Discharge into Ponds 2 and 3 and the Reclamation Area in a manner different than described in this Order is prohibited.
5. The discharge of tailwater comprised of treated wastewater or blended treated wastewater and IID water from the Reclamation Area to any surface waters or surface drainage courses is prohibited.
6. Bypass or overflow of untreated or partially treated waste is prohibited, except as provided in Provision H.9, below.
7. Application of wastewater to the Reclamation Area in excess of agronomic rates is prohibited.
8. Discharge to Pond 1 is prohibited unless the Discharger can demonstrate compliance with Title 27 for Pond 1 or the Discharger removes the solids from Pond 1.
9. Application of treated wastewater to the Reclamation Area other than for irrigation of livestock feed crops is prohibited.
10. Application of treated wastewater from the BioFiltro WWTF to the Reclamation Areas during a likely precipitation event¹⁴, when the precipitation event is forecast 12 hours prior to the scheduled application, or when the soils are saturated after a precipitation event is prohibited.

¹⁴ A likely precipitation event is any weather pattern that is forecast by National Oceanic and Atmospheric Administration's National Weather Service San Diego Sector to have a 50% or greater probability of producing precipitation in the Reclamation Area.

B. Effluent Limitations

1. The maximum monthly average daily discharge from the BioFiltro unit process and disinfection system into Ponds 2 and 3 shall not exceed 200,000 gallons per day (gpd).
2. The monthly average discharge of treated wastewater from the ponds into the Reclamation Area shall not exceed 238,000 gpd.
3. Discharge to the ponds shall not exceed the following limits:

Fecal Coliforms	Geometric Mean ¹	200 MPN ² /100 ml
	Maximum	400 MPN/100 ml
Fixed Dissolved Solids	Maximum	1500 mg/L
Oil and Grease	Maximum	30 mg/L
pH	Minimum	6.0
	Maximum	9.0

¹ Based on a minimum of five samples equally spaced over a 30-day period.

² No more than 10 percent of the total samples during a 30-day period shall exceed the Maximum.

C. Pond Specifications

1. A minimum depth of two (2) feet of freeboard shall be maintained at all times in Ponds 2 and 3.
2. The ponds shall be maintained so they will be kept in aerobic conditions at all times. The dissolved oxygen content in the upper zone (one foot) of the ponds shall not be less than 1.0 mg/L.
3. Wastewater treatment, storage, and disposal shall not cause pollution or nuisance as defined in CWC Sections 13050(l) and 13050(m).
4. The Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
5. The Ponds shall be managed to prevent breeding of mosquitoes, in particular:
 - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface;
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

D. Reclamation Area Specifications

1. Overall nitrogen loading of the Reclamation Area shall not exceed 225 lb/acre/year.
2. The BOD loading rate to the reclamation areas shall not exceed a daily average of 4.0 lbs/acre/day and a monthly average of 2.0 lbs/acre/day.
3. The perimeter of the Reclamation Area shall be graded to prevent ponding and prevent runoff onto adjacent properties.
4. Hydraulic loading of treated wastewater and IID water shall be at reasonable agronomic rates designed to minimize the percolation of wastewater and irrigation water below the root zone (i.e., deep percolation), considering the crop, soil, climate, and irrigation management system.
5. Irrigation with treated wastewater shall be performed in a manner to preclude runoff of wastewater from the Reclamation Area to adjacent property during saturated conditions.
6. The Reclamation Area shall be managed to prevent breeding of mosquitoes and other nuisance conditions. More specifically:
 - a. All applied water shall infiltrate completely within a 48-hour period;
 - b. Ditches not serving as wildlife habitat shall be maintained free of emergent, marginal, and floating vegetation; and
 - c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store treated wastewater.
7. The slope of Reclamation Area shall be maintained and leveled periodically to (a) avoid excessive slopes that trigger soil erosion and low spots that can pond/pool applied water throughout the reclamation areas; and (b) enhance uniform irrigation and irrigation efficiency.
8. The Discharger shall implement pesticide management practices to avoid adverse water quality impacts to surface and ground waters. Suggested Pesticide management practices are listed in Attachment D.

E. Tilewater Limitations

1. Tilewater from the Reclamation Area shall not contain pollutants in concentrations that degrade surface water quality.
2. Tilewater from the Reclamation Area shall not contain residual nutrients in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
3. Tilewater from the Reclamation Area shall not cause the Dissolved Oxygen in the receiving water to fall below 5.0 mg/L.

F. Sludge and Solids Limitations

1. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes (Sludge and Solids) shall be pursuant to Title 27. Disposal of Sludge and Solids

may not begin prior to review and approval of the Sludge and Solids Workplan by the Colorado River Basin Water Board's Executive Officer in accordance with section H.3.d of this Order.

2. Sludge and Solids use and disposal shall comply with Federal and State laws and regulations, including permitting requirements, and technical standards in 40 CFR Part 257.

G. General Specifications

1. Objectionable odors originating at the BioFiltro WWTF shall not be perceivable beyond the limits of the Facility.
2. Objectionable odors originating in the Reclamation Areas shall not be perceivable beyond the limits of the Reclamation Areas.
3. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
4. All treatment units shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
5. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the Facility inoperable.

H. Provisions

1. Compliance and Enforcement

- a. The Discharger shall comply with all of the conditions of this Order and the Monitoring and Reporting Program (MRP) R7-2017-0001. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (CWC, § 13000 et seq.), and grounds for 1) an enforcement action, or 2) termination, revocation, or modification of this Order¹⁵.
- b. The Colorado River Basin Water Board reserves its right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to CWC Sections 13323, 13268, and 13350, a TSO issued pursuant to CWC Section 13308, or referral to the California Attorney General for recovery of judicial civil liability.
- c. It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance

¹⁵ OWB has assumed responsibility for compliance with this Order. However, the property owner for the 130 acres, Highway 111, LLC, remains responsible for the condition of the land and any wastes discharged at its property. (See State Board WQO 86-11, In the Matter of the Petition of Southern California Edison Company). In the event OWB fails to control the discharge or to comply with this Order, the Colorado River Basin Water Board has the discretion to place responsibility on a property owner.

with the conditions of this Order.

2. Public Outreach

- a. **By January 30, 2017**, and pursuant to Finding 17, the Discharger shall submit to the Colorado River Basin Water Board a letter, which identifies the employee who has been designated as Public Liaison, the employee's contact information, its qualifications, level of responsibility within OWB, and the phone number for the public to call.
- b. Copies of the complaints received by the Public Liaison shall be forwarded to the Colorado River Basin Water Board at (760) 352-1464 and (760) 553-6839, within 15 minutes of receipt of the complaint.
- c. The Public Liaison's logbook shall be available to the Colorado River Basin Water Board for inspection and copying as necessary.

3. Technical Reports

- a. **By February 2, 2017**, the Discharger shall submit to the Colorado River Basin Water Board a technical report in the form of a letter, which identifies: (1) the person(s) responsible for supervising the operation and maintenance (O&M) of the BioFiltro WWTF and their qualifications to do so, (2) all other the personnel involved in the O&M of the BioFiltro WWTF, their qualifications, and level of responsibility.
- b. **By June 15, 2017**, the Discharger shall submit a technical report in the form of final Irrigation Management Plan (FIMP) for the Reclamation Areas for review and approval by the Colorado River Basin Water Board Executive Officer. The Executive Officer may grant the Discharger up to a six-month time extension for submittal of the FIMP should there be delays with the construction and operation of the BioFiltro WWTF. The FIMP shall at a minimum include:
 - i. A monthly irrigation water balance and Nitrogen, BOD, and TDS mass balances for each of the reclamation areas that are based on actual performance data for the BioFiltro WWTF:
 1. The water balance shall clearly identify the months when each of the reclamation areas will be irrigated exclusively with effluent from the BioFiltro WWTF, with IID water, and with both; and include the corresponding projected calculations for Nitrogen, BOD, and TDS; and
 2. TDS loading calculations for the reclamation areas shall be based on the actual FDS of the effluent from the BioFiltro WWTF and the TDS of IID water, and include the amount of salts that would be leached from the root zone on a monthly and annual bases;
 - ii. A map to scale (1 inch = 200 feet or better) that shows the pumping and distribution system for applying effluent from the BioFiltro WWTF and IID water;
 - iii. A description of the irrigation system cited in Item "b," above, and identification of areas and facilities where effluent from the BioFiltro and IID water blend

and/or mix if any;

- iv. A map to scale (1 inch = 200 feet or better) showing areal tile drains, tailwater box(es), tilewater pipe(s), discharge point(s) of tailwater box(es) and tilewater pipe(s), and the receiving surface water(s);
 - v. The name and contact information of the person(s) responsible for implementing the IMP and their qualifications to operate and maintain the reclamation areas;
 - vi. An organizational chart and contact information for all personnel involved in the BioFiltro WWTF and reclamation areas; and
 - vii. A description of all of the management practices, including practices for nutrient and pesticide management, to be implemented in the reclamation areas to prevent adverse water quality impacts and nuisance conditions.
- c. **By June 15, 2017**, the Discharger shall provide a copy of the Operation and Maintenance Manual and “as-built” drawings for the BioFiltro and the Paracetic Acid disinfection facility. The Executive Officer may grant the Discharger up to a six-month time extension for submittal of the Operation and Maintenance Manual and “as-built” drawings for the BioFiltro and the Paracetic Acid disinfection facility should there be delays with the construction and operation of the BioFiltro WWTF.
 - d. **By June 15, 2017**, the Discharger shall provide a technical report in the form of a work plan that addresses the proposed treatment, handling and disposal of solids from the BioFiltro WWTF in a manner that is consistent with all State and Federal laws and regulations, including 40 CFR Part 257. The report shall be subject to the approval of the Colorado River Basin Water Board Executive Officer.

4. Proper Operation and Maintenance

- a. The BioFiltro WWTF shall be supervised and operated by persons possessing the necessary expertise in the operation and maintenance of industrial wastewater treatment facilities.
- b. The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment and control, installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained, and made available to the Colorado River Basin Water Board’s Executive Officer on request.

5. Records

- a. The Discharger shall ensure that all personnel involved with the operation and maintenance of the BioFiltro WWTF and reclamation areas are familiar with the content of this Order, and shall maintain a copy of this Order at the Facility.
- b. 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), and the destination in accordance with the MRP of this Order. Sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the MRP of this Order and as required by Title 40, Code of Federal Regulations, Part 257. The results of the analyses shall be submitted to the Colorado River Basin Water Board as part of the MRP.
- c. The Discharger shall retain records of copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically.

6. Inspection and Entry

- a. The Discharger shall allow the Colorado River Basin Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - i. Enter the premises regulated by this Order, or the place where records are kept under the conditions of this Order;
 - ii. Have access to and copy, at reasonable times, records kept under the conditions of this Order;
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - iv. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the CWC, any substances or parameters at this location.

7. Modification and Transfer of Ownership

- a. Prior to implementing a modification that results in a material change in the quality or quantity of wastewater treated or discharged, or a material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Colorado River Basin Water Board, and obtain revised requirements as necessary.
- b. This Order is not transferable to any person without written approval by the Colorado River Basin Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Colorado River Basin Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment

that the new owner or operator is liable for compliance with this Order from the date of transfer. The Colorado River Basin Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the CWC.

8. Noncompliance Reporting

- a. The Discharger shall report orally, any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Colorado River Basin Water Board's Executive Officer, and the Office of Emergency Services as soon as:
 - i. The Discharger has knowledge of the discharge,
 - ii. Notification is possible, and
 - iii. Notification will not substantially impede cleanup or other emergency measures.

During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board'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 Colorado River Basin Water Board office in accordance with the above time limits.

9. Bypass

- a. Bypass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Colorado River Basin Water Board may take enforcement action against the Discharger for bypass unless:
 - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production; and
 - ii. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent bypass occurring during equipment downtime, or preventive maintenance; or
 - iii. Bypass is:
 1. Required for essential maintenance to assure efficient operation; and
 2. Neither effluent nor receiving water limitations are exceeded; and

3. The Discharger notifies the Regional Water Board ten (10) days in advance.
 - b. In the event of an unanticipated bypass, the Discharger shall immediately report the incident to the Colorado River Basin Water Board. During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board's office 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 bypass, any noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and

10. Certification

- a. In accordance with California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.
- b. All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the state of California, that the reports were prepared under his or her supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.

11. General

- a. This Order does not authorize violation of any federal, state, or local laws or regulations.
- b. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any action authorized under this Order, the Discharger shall obtain authorization for an incidental take prior to construction or operation of the project. The Discharger shall be responsible for meeting all requirements of the applicable Endangered Species Act.
- c. This 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.

- d. Provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.
- e. This Order may be modified, rescinded, or reissued, for cause. The filing of a request by the Discharger for modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance under this Order, does not stay any Order condition unless otherwise stated. Causes for modification include but are not limited to: a change in land application plans, or sludge use or disposal practices, and adoption of new regulations by the State Water Board or Colorado River Basin Water Board (including revisions to the Basin Plan), or Federal government.

I, Jose L. Angel, Interim Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order, with Attachments, adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on January 19, 2017.

Ordered By: _____

Jose L. Angel
JOSE L. ANGEL, P.E.
Executive Officer

1/19/2017

Date

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

MONITORING AND REPORTING PROGRAM R7-2017-0001
FOR
OWB PACKERS, LLC
BRAWLEY BEEF PLANT BIOFILTRATION WASTEWATER TREATMENT FACILITY
AND RECLAMATION AREA
Brawley– Imperial County

Location of Wastewater Treatment Facilities and Discharges:
T13S, R14E, Sections 27 and 28, SBB&M

A. General Monitoring Provisions

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 Colorado River Basin Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Board's Division of Drinking Water. 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.
2. 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.
3. 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.
4. Given the monitoring frequency prescribed by MRP R7-2017-0001, 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.
5. 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 Order, and records of all data used to complete the application for this 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.
- 6. If the facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Colorado River Basin Water Board indicating that there has been no activity during the required reporting period.

B. Source Water Monitoring

The Discharger's Facility supply water shall be monitored for the following:

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
General Minerals ¹	mg/L	Grab	Annually	Annual
Notes: ¹ General Minerals shall include at least Alkalinity (as CaCO ₃), Carbonate (as CaCO ₃), Bicarbonate (as CaCO ₃), Hardness (as CaCO ₃), TDS, Boron, Chloride, Potassium, Calcium, Sodium, Sulfate, and Magnesium				

C. Pond Influent Monitoring

- 1. The Discharger shall:
 - a. **By February 10, 2017**, install a flow meter either right after the BioFiltro WWTF or right after the disinfection system to continuously measure the flow discharged into the ponds; and establish a sampling station to collect representative samples of the influent into the ponds. The location of the sampling station shall be identified;
 - b. **By February 17, 2017**, shall submit a technical report in the form of a letter certifying that it has installed the flow meter and established the sampling station for the ponds. The letter shall describe the meter specifications and the location of the sampling station.
- 2. Influent into the storage ponds shall be monitored for the following constituents and according to the following schedule:

Constituent	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	Weekly	Monthly
Total Suspended Solids	mg/L	Grab	Weekly	Monthly
Inorganic TDS ⁵	mg/L	Grab	Weekly	Monthly
EC	µmhos/cm	Grab	Weekly	Monthly
Total Kjeldahl Nitrogen	mg/L	Grab	Weekly	Monthly
Ammonia (NH ₃) as N	mg/L	Grab	Weekly	Monthly
Nitrate (as NO ₃)	mg/L	Grab	Weekly	Monthly
Total Nitrogen	mg/L	Grab	Weekly	Monthly
pH	pH Units	Grab	Weekly	Monthly
Oil and Grease	mg/L	Grab	Monthly	Monthly
Fecal Coliforms	MPN ⁶ /100 ml	Grab	Minimum 5/per month ⁷	Monthly
General minerals ⁸	mg/L	Grab	4/year	Quarterly

Notes:

- ¹ Gallons per day
- ² Reported for each day with average monthly flow calculated
- ³ Biochemical Oxygen Demand
- ⁴ Milligrams per Liter
- ⁵ TDS, as used in this MRP, shall be determined using Standard Method 2540C for combined organic and inorganic TDS and EPA Method No. 160.4 for inorganic TDS.
- ⁶ Most Probable number
- ⁷ At equally spaced week-intervals during the month
- ⁸ Alkalinity (as CaCO₃), Carbonate (as CaCO₃), Bicarbonate (as CaCO₃), Hardness (as CaCO₃), TDS, Boron, Chloride, Potassium, Calcium, Sodium, Sulfate, Magnesium

D. Pond Monitoring

Storage Ponds shall be monitored for the following constituents and according to the following schedule:

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Freeboard	Feet	Observation	Weekly	Monthly
pH	pH Units	Grab	Daily	Monthly
Dissolved Oxygen ¹	mg/L	Grab	Daily	Monthly
Pond in use	Pond Number	Observation	Daily	Monthly
Wastewater color	---	Observation	Daily	Monthly

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Notes: ¹ To be measured between 8 and 9 am.				

E. Reclamation Areas Monitoring

1. The Discharger shall perform the following routine monitoring and loading calculations for each discrete reclamation area:

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Wastewater Application Area	---	Observation	Daily	Monthly
Precipitation	Inches ¹	Rain Gauge ²	Daily	Monthly
Treated Wastewater Flow	gpd	Measured	Daily	Monthly
Treated Wastewater Loading Rate	inches/day/acre ³	Calculated	Daily	Monthly
IID Water	gpd	Estimated	Daily	Monthly
IID Water Loading Rate	inches/day/acre ³	Calculated	Daily	Monthly
Total Hydraulic Loading Rate ⁴	inches/day/acre ³	Calculated	Daily	Monthly
BOD Loading Rate on application day ^{5,6}	lbs/acre/day	Calculated	Daily	Monthly
BOD Loading Rate on averaged over application cycle ^{5,7}	lbs/acre/day	Calculated	Daily	Monthly
Monthly Nitrogen Loading Rate from Treated Wastewater ⁸	lbs/acre/month	Calculated	Monthly	Monthly
Monthly Nitrogen Loading Rate from Fertilizer	lbs/acre/month	Calculated	Monthly	Monthly
Cumulative Annual Nitrogen Loading Rate ⁹	lbs/acre	Calculated	Monthly	Monthly
Inorganic TDS Loading Rate ¹⁰	lbs/acre/month	Calculated	Monthly	Monthly
Tilewater discharge	Yes/No	Observation	Daily	Monthly
Notes: ¹ Report to the nearest 0.1 inch. ² National Weather Service or Department of water Resources data from the nearest weather station is acceptable. ³ Report to the nearest 0.01 inch. ⁴ Includes total liquid application (i.e., precipitation, wastewater, and irrigation				

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
water). ⁵ BOD5 loading rates shall be calculated using the applied volume of wastewater, actual application area, and the average of the three most recent results of wastewater BOD5. ⁶ Application day, as referred to in this MRP, shall be defined as a 24-hour period. ⁷ Application cycle, as referred to in this MRP, shall be defined as the period (in days) of Wastewater application followed by resting interval until next wastewater application. ⁸ Wastewater nitrogen loading rates shall be calculated using the applied volume of wastewater, actual application area, and the wastewater total nitrogen. ⁹ Starting as zero each January 1 ¹⁰ Inorganic TDS loading rates shall be calculated using the applied volume of wastewater, actual application area, and the average of the three most recent results of wastewater inorganic TDS.				

- The Discharger shall also monitor the Reclamation Area daily when treated wastewater is applied to it and shall maintain a logbook that includes observations about the general condition of the Reclamation Area, including whether there is any tailwater discharge; any standing/pooled water and location of the standing water; the prevailing wind direction and estimated wind speed; and whether the Reclamation Area emits odors beyond its boundaries and a description of the odor(s). Copies of the entries into the logbook shall be available to the Colorado River Basin Water Board upon request. However, when odors beyond the boundaries are detected, a copy of the logbook with the notations for the date when the odor was detected shall also be included in the corresponding monthly self-monitoring report.

F. Tilewater Monitoring

By February 15, 2017, the Discharger shall submit for approval of the Executive Officer a proposed plan that establishes and identifies the proposed location of a minimum one tilewater sampling station for the 10-acre site and a minimum of one sampling station for the 130-acre site to collect representative samples of the tilewater from the reclamation operations. The approved sampling stations shall be monitored for the following constituents and according to the following schedule:

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Ammonia (NH ₃) as N	mg/L	Grab	Monthly	Monthly
TDS	mg/L	Grab	Monthly	Monthly
BOD	mg/L	Grab	Monthly	Monthly
General minerals	mg/L	Grab	Quarterly	Quarterly

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Iron	mg/L	Grab	Quarterly	Quarterly
Notes: ¹ General Minerals shall include at least Alkalinity (as CaCO ₃), Carbonate (as CaCO ₃), Bicarbonate (as CaCO ₃), Hardness (as CaCO ₃), TDS, Boron, Chloride, Potassium, Calcium, Sodium, Sulfate, and Magnesium				

G. Other Waste Operations Monitoring

1. The Discharger shall monitor the Facility’s cattle reception, pens, and processing areas; rendering operations should they be conducted at the Facility; and the overall onsite WWTF unit processes areas for the presence of wastes that have potential to emit objectionable odors. It shall maintain a logbook that includes:
 - a. Observations and notations about the general conditions of and presence of wastes at these area,
 - b. A description of the nature of the wastes (e.g., manure, wash wastewater, ponded wastewater, DAF Unit wastes, etc.);
 - c. Whether these areas are omitting odors perceivable beyond the Facility’s boundaries, the nature of the odors (e.g., strong putrid smell, rotten egg smell, etc.), the area(s) impacted by the smells.
 - d. Notations about the general weather conditions, including direction of prevailing winds, wind velocity, temperature, time of the day.

Monitoring shall take place at a minimum three times a day, at 8 am, 12 pm and 4 pm.

2. The Discharger shall monitor for objectionable odors at his Facility, but upwind of the Facility during its regular beef processing operations hours. Monitoring observations shall be included in the logbook cited in Item E.1, above, and include:
 - a. A description of the nature of the odors (e.g., strong putrid smell, rotten egg smell, etc.),
 - b. The area(s) impacted by the smells (e.g., Facility and area within ½-mile from the Facility);
 - c. Notations about the general weather conditions, including direction of prevailing winds, wind velocity, temperature, time of the day. To the extent traceable, it shall also include the source of the odors.
3. When objectionable odors are detected, the Discharger shall notify the Imperial County Air Pollution Control District Officer and Colorado River Basin Water Board (at 760 352-1464 and 760 553-6839) within 15 minutes when the objectionable odor is detected. If the odors are from the Facility, the Discharger shall also report the steps it is taking to eliminate them and when it expects to eliminate them.
4. Copies of logbook notations that document objectionable odors shall be included in the Discharger’s monthly Self-Monitoring Report.

H. Sludge Monitoring

1. 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 prior to disposal:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Arsenic	mg/kg ¹	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
Fecal Coliform	MPN/gram ²	Composite	Annually	Annually
Notes: ¹ Milligrams per kilogram ² Most Probable Number per gram				

I. 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 Colorado River Basin Water Board office annually.
2. The Discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with WDRs. Where appropriate,

the Discharger shall include supporting calculations (e.g., for monthly averages).

3. The results of any analysis taken, more frequently than required at the locations specified in this MRP shall be reported to the Colorado River Basin Water Board.
4. SMRs shall be certified under penalty of perjury (WDR Provisions H.10.b) 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 Colorado River Basin Water Board, shall be signed by a principal executive officer or ranking elected official.
7. A duly authorized representative of the Discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Colorado River Basin Water Board's Executive Officer.
8. The Discharger shall report any failure in the facility (wastewater treatment plant, and collection and disposal systems). The incident shall be reported immediately to the Colorado River Basin Water Board'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 Colorado River Basin Water Board

by the 15th of following month. Quarterly monitoring reports shall be submitted by February 15, May 15, August 15, and November 15. Annual monitoring reports shall be submitted to the Colorado River Basin Water Board by February 15 of the following 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:



JOSE L. ANGEL, P.E.
Executive Officer



Date