

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

SPECIAL BOARD ORDER R7-2016-0019
AMENDING WASTE DISCHARGE REQUIREMENTS ORDER R7-2015-0004
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT NO. CA0104523 FOR CITY OF BRAWLEY WASTEWATER TREATMENT PLANT
BRAWLEY – IMPERIAL COUNTY

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

A. Background.

1. On June 11, 2015, the Regional Water Board adopted Board Order R7-2015-0004, NPDES Permit No. CA0104523, prescribing Waste Discharge Requirements for City of Brawley (Discharger). The amendment is for the wastewater treatment plant (Facility) located at 5015 Best Road, Brawley, CA 92227.
2. Board Order R7-2015-0004 permits the discharge of 5.9 million gallons per day (MGD) of secondary treated wastewater from City of Brawley wastewater treatment plant (Facility) to the New River, a water of the United States. Board Order R7-2015-0004 will expire on June 30, 2020.
3. The Discharger owns and operates a wastewater collection, treatment and disposal system and provides sewerage service to the City of Brawley (service to a population of approximately 27,000). The Facility consists of three raw water lift stations, a headworks facility, three wave oxidation Biolac® activated sludge treatment units equipped with diffusers that provide extended aeration, three secondary clarifiers, an activated sludge pumping station, an ultraviolet disinfection system, and solar greenhouse sludge drying structures. The Biolac® activated sludge treatment system became operational in December 2011.
4. On March 10, 2016, the Discharger submitted letters requesting reduction of testing frequencies for Nitrogen species (i.e., nitrate, nitrite, ammonia and total nitrogen) required in the Attachment E – Monitoring and Reporting Program of Board Order No. R7-2015-0004. Based on the information in the Discharger's letters, the new Facility has demonstrated excellent performance with no ammonia and toxicity violations for over the last three and one-half years. The Discharger requests reducing the monitoring frequency for Nitrogen species from weekly to quarterly.
5. Pursuant to California Water Code (CWC) Sections 13263(e) and 13381, and Title 40 Code of Federal Regulations (40 CFR) Sections 122.41(f), 122.62, and 124.5, Board Order R7-2015-0004 may be modified, or rescinded and reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. (40 CFR 122.41(f).) Causes for modification include, but are not limited to, the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, adoption of new regulations by the State Water Board or the Regional Water Board, including revisions to the Basin Plan, or to correct technical mistakes or mistaken interpretations of law made in determining permit conditions. (40 CFR 122.62(a), 122.62(a)(15).)

6. A review of effluent monitoring data submitted during the period from July 2012 to February 2016, which is the period during the permit term when the new activated sludge treatment system was in operation, indicate ammonia concentrations ranging from 0.56 mg/L to 2.24 mg/L, which is far below the ammonia effluent limitation set forth in Board Order No. R7-2015-0004 of 3.2 mg/L for daily maximum. Further, the discharge from the Facility during the period when the new treatment system is operational complies with the whole effluent toxicity triggers.
7. The Discharger's Pretreatment Plan was approved by the Regional Water Board on March 20, 2014, through Resolution R7-2014-0020. The approved Pretreatment Program effectively controls any potential discharge from an industrial source. The National Beef California (NBC) plant in Brawley was identified as an industrial source discharging to the Facility. The NBC plant in Brawley started its operation from June 2006 until April 2014 when it closed its operation. It had an onsite wastewater treatment facility (NBC WWTF) that provided wastewater treatment and disposal services for the slaughterhouse. The on-site NBC WWTF consisted of two dissolved air flotation (DAF) units, an anaerobic digester, an aerobic activated sludge pond, a clarifier, a polishing pond, a suspended air flotation (SAF) unit, and a belt press. Up to 1.625 million gallons per day (mgd) of pretreated wastewater from the SAF unit (operational in May 2011) was discharged to the city of Brawley's municipal wastewater collection system for further treatment and disposal at the Facility. The wastewater discharged from NBC WWTF into the Facility is also characterized by relatively high concentrations of ammonia. Both ammonia and toxicity effluent limitations have been met since March 2012 when upgrades to the Facility were completed and officially commissioned by the city of Brawley.
8. This Special Board Order revises Board Order R7-2015-0004 to reduce the monitoring frequency for Nitrogen species (i.e., nitrate, nitrite, ammonia and total nitrogen) from weekly to monthly and further reduce to quarterly if ammonia monitoring continues meeting effluent requirement. Pursuant to 40 CFR 124.10(b) and CWC Section 13167.5, public notice of this draft revised Board Order must be provided to allow at least thirty (30) days for the public to comment on it, and public notice of a public hearing must also be given at least 30 days before the hearing. The two notices may be combined. These public participation requirements provide stakeholders potentially affected by this action with an opportunity to comment on the proposed revised Board Order
9. Pursuant to 40 CFR 124.10(b) and CWC Section 13167.5, the Regional Water Board published Public Notice No. 7-16-15 for this proposed Board Order on April 4, 2016.

B. Facility Description. The Discharger owns and operates a municipal wastewater treatment plant. The total design capacity of the wastewater treatment plant is 5.9 MGD. The WWTP provides secondary treatment through a Biolac® activated sludge treatment system that was brought online in December 2011. The treatment system is comprised of three Biolac® activated sludge treatment units equipped with air diffusers, three secondary clarifiers, an activated sludge pumping station, ultraviolet disinfection, and sludge processing facilities. The Discharger has converted one of the inactive primary clarifiers into a sludge thickening unit and the other inactive primary clarifier into a sludge holding tank. Wasted activated sludge is thickened in a sludge thickening unit, dewatered in a centrifuge sludge dewatering unit, and then dried using solar greenhouse sludge drying structure. The Biolac® process operates without primary treatment; therefore, no primary sludge is produced during the treatment process. Wastewater is discharged from Discharge Point 001 to the New River, a water of the United States. .

C. California Environmental Quality Act (CEQA). This action to amend an NPDES permit is exempt from the provisions of Chapter 3 of CEQA (commencing with Section 21100) of Division 13 of the California Public Resources Code in accordance with Section 13389 of the CWC.

D. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations (see Attachment A of this Order for full details on Public Participation).

E. Consideration of Public Comment. The Regional Water Board, in a public hearing, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that Board Order R7-2015-0004 is amended in the manner specified below upon the effective date of this Special Board Order, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Special Board Order as well as with those portions of Board Order R7-2015-0004 that were not amended by this Special Board Order:

1. Page E-5, IV.A.1. Table E-3. Effluent Monitoring. Replace minimum sampling frequency of 1x/Week with 1x/Month and 1x/Quarter for Nitrate, Nitrite, Ammonia and Total Nitrogen shown below (new items are underlined and deleted items are shown in red strikeout):

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Flow ¹	MGD	Recorder / Flow Meter	1x/Day	See Section I.B of the MRP
pH	Standard Units	Grab	1x/Day	See Section I.E and I.F of the MRP
Temperature	°F	Grab	1x/Day	"
BOD ₅	mg/L	24-Hr. Composite	1x/Week	"
	lbs/day			
TSS	mg/L	24-Hr. Composite	1x/Week	"
	lbs/day			
<i>Escherichia coli</i> (<i>E. coli</i>)	MPN/100 ml	Grab	5x/Month ²	³
Fecal coliform	MPN/100 ml	Grab	5x/Month ²	See Section I.E and I.F of the MRP
Enterococci	MPN/100 ml	Grab	5x/Month ²	"
Dissolved Oxygen	mg/L	Grab	1x/Month	"
Copper, Total Recoverable	µg/L	Grab	1x/Month	See Section I.G of the MRP
Cyanide ⁴	µg/L	Grab	1x/Month	See Section I.G and I.H of the MRP
Bis(2-ethylhexyl)Phthalate	µg/L	Grab	1x/Month	See Section I.G of the MRP
Dissolved Solids, Total	mg/L	Grab	1x/Quarter	See Section I.E and I.F of the MRP
Hardness, Total (as CaCO ₃)	mg/L	Grab	1x/Quarter	"
Oil and Grease ⁵	mg/L	Grab	1x/Month	"

Nitrates, as N	mg/L	Grab	1x/Week <u>1x/Month</u> <u>1x/Quarter</u> ^{7,8}	"
Nitrites, as N	mg/L	Grab	1x/Week <u>1x/Month</u> <u>1x/Quarter</u> ^{7,8}	"
Ammonia, as N	mg/L	Grab	1x/Week <u>1x/Month</u> <u>1x/Quarter</u> ^{7,8}	"
Total Nitrogen, as N	mg/L	Grab	1x/Week <u>1x/Month</u> <u>1x/Quarter</u> ^{7,8}	"
Total Phosphate, as P	mg/L	Grab	1x/Quarter	"
Priority Pollutants ⁶	µg/L	24-Hr. Composite	1x/Year	See Section I.G of the MRP

¹ Report total daily flow and monthly average daily flow.

² Five samples equally spaced over a 30-day period with a minimum of one sample per week.

³ The Discharger may monitor for *E. coli* using analytical methods, Standard Method 9221.F or 9223 (APHA. 1998, 1995, 1992. Standard Methods for the Examination of Water and Wastewater. American Public Health Association, 20th, 19th, and 18th Editions. Amer. Publ. Hlth. Assoc., Washington D.C.)

⁴ Refer to section I.H for additional information and recommendations for sampling and analyses of Cyanide.

⁵ Total oil and grease shall include the polar and non-polar fraction of oil and grease materials.

⁶ All Priority Pollutants as defined by the California Toxics Rule (CTR), codified at 40 C.F.R. section 131.38.

⁷ Following six rounds of collection of monthly data showing no ammonia exceedance, the monitoring frequency shall be reduced to quarterly.

⁸ Any ammonia exceedance that occurs during the quarterly monitoring will require the monitoring frequencies to return to monthly and to follow footnote 7's requirements.

2. Page E-12, VIII.A.1. Table E-6. Receiving Water Monitoring Requirements – RSW-001. Replace minimum sampling frequency of 1x/Week with 1x/Quarter for Nitrate, Nitrite, Ammonia and Total Nitrogen shown below (new items are underlined and deleted items are shown in red strikethrough):

Table E-6 Receiving Water Monitoring Requirements – RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	Standard Units	Grab	1x/Month	See Section I.E and I.F of the MRP
Temperature	°F	Grab	1x/Month	"
Dissolved Oxygen	mg/L	Grab	1x/Month	"
Total Dissolved Solids	mg/L	Grab	1x/Month	"
Hardness (as CaCO ₃)	mg/L	Grab	1x/Month	"
Nitrates, as N	mg/L	Grab	1x/Week <u>1x/Quarter</u>	"
Nitrites, as N	mg/L	Grab	1x/Week <u>1x/Quarter</u>	"
Ammonia, as N	mg/L	Grab	1x/Week <u>1x/Quarter</u>	"
Total Nitrogen, as N	mg/L	Grab	1x/Week <u>1x/Quarter</u>	"
Total Phosphate, as P	mg/L	Grab	1x/Month	"
Ortho-Phosphate, as P	mg/L	Grab	1x/Month	"

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Priority Pollutants ¹	µg/L	Grab	1x/Year	See Section I.G of the MRP

3. Page E-13, VIII..B.1. Table E-7. Receiving Water Monitoring Requirements – RSW-002. Replace minimum sampling frequency of 1x/Week with 1x/Quarter for Nitrate, Nitrite, Ammonia and Total Nitrogen shown below (new items are underlined and deleted items are shown in red strikeout):

Table E-7 Receiving Water Monitoring Requirements- RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	Standard Units	Grab	1x/Month	See Section I.E and I.F of the MRP
Temperature	°F	Grab	1x/Month	"
Dissolved Oxygen	mg/L	Grab	1x/Month	"
Total Dissolved Solids	mg/L	Grab	1x/Month	"
Nitrates, as N	mg/L	Grab	1x/Month <u>1x/Quarter</u>	"
Nitrites, as N	mg/L	Grab	1x/Month <u>1x/Quarter</u>	"
Hardness	mg/L	Grab	1x/Month	"
Ammonia, as N	mg/L	Grab	1x/Month <u>1x/Quarter</u>	"
Total Nitrogen, as N	mg/L	Grab	1x/Month <u>1x/Quarter</u>	"
Total Phosphate, as P	mg/L	Grab	1x/Month	"
Ortho-Phosphate, as P	mg/L	Grab	1x/Month	"

I, Jose Angel, Interim Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 30, 2016.



 JOSE L. ANGEL, P.E.
 Executive Officer