CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

Office
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Palm Desert, CA 92260

WaterBoards.ca.gov/Coloradoriver/

ORDER R7-2020-0010
NPDES No. CA0105015

WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF CALIPATRIA CALIPATRIA WASTEWATER TREATMENT PLANT

Table 1. Discharger Information

Discharger	City of Calipatria
Name of Facility	Calipatria Wastewater Treatment Plant
Facility Address	106 Lindsey Road
County	Imperial County
Prior Order	R7-2015-0005

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Treated Municipal Wastewater	33º, 08’, 51”	115º, 33’, 10”	“G” Drain

Table 3. Administrative Information

This Order was adopted on:	November 12, 2020
This Order shall become effective on:	December 1, 2020
This Order shall expire on:	November 30, 2025
Due Date for Next Report of Waste Discharge (ROWD) and Application for National Pollutant Discharge Elimination System (NPDES) Permit Reissuance:	June 2, 2025, or as soon as possible if planned changes meet the Notice Requirement under 40 C.F.R. 122.41(l)(1).
Discharge Classification by U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Colorado River Basin Region:	Major

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I, PAULA RASMUSSEN, Executive Officer, hereby certify that the following is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on November 12, 2019.

PAULA RASMUSSEN
Executive Office

TABLE OF CONTENTS

1. FACILITY INFORMATION 4
2. FINDINGS 4
2.A.Legal Authorities. 4
2.B. Background and Rationale for Requirements. 4
2.C. Provisions and Requirements Implementing State Law. 4
2.D. Notification of Interested Parties. 4
2.E. Consideration of Public Comment. 4
3. DISCHARGE PROHIBITIONS 5
4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS 5
4.A. Effluent Limitations 5
4.B. Land Discharge Specifications – Not Applicable 7
4.C. Recycling Specifications – Not Applicable 7
5. RECEIVING WATER LIMITATIONS 7
5.A. Surface Water Limitations 7
5.B. Groundwater Limitations – Not Applicable 9
6. PROVISIONS 9
6.A. Standard Provisions 9
6.B. Monitoring and Reporting Program (MRP) Requirements 10
6.C. Special Provisions 11
7. COMPLIANCE DETERMINATION 17

TABLE OF TABLES

Table 1. Discharge Information 1
Table 2. Discharge Location 1
Table 3. Administrative Information 2
Table 4. Effluent Limitations 6
Table 5. Compliance Schedule 16

TABLE OF ATTACHMENTS

ATTACHMENT A – DEFINITIONS A-1
ATTACHMENT B – MAP B-1
ATTACHMENT C – FLOW SCHEMATIC C-1
ATTACHMENT D – STANDARD PROVISIONS D-1
ATTACHMENT D – STANDARD PROVISIONS E-1
ATTACHMENT F – FACT SHEET F-1
ATTACHMENT G – SUMMARY OF WQBELs CALCULATIONS G-1
ATTACHMENT H – BIOSOLIDS AND SLUDGE MANAGEMENT H-1

1. FACILITY INFORMATION

Information describing the City of Calipatria Wastewater Treatment Plant (Facility) is summarized on the cover page and in Sections 1 and 2 of the Fact Sheet (Attachment F). Section 1 of the Fact Sheet also includes information regarding the Facility's permit application.

2. FINDINGS

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

2.A. Legal Authorities. This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).This Order is also issued pursuant to section 402 of the federal Clean Water Act and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2, subject to the requirements in this Order.

2.B. Background and Rationale for Requirements. The Colorado River Basin Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G through H are also incorporated into this Order.

2.C. Provisions and Requirements Implementing State Law. The provisions/requirements in Subsections 4.B, 4.C, 5.B, and 6.A.2 are included to implement state law only. These provisions/requirements are not required or authorized under the federal Clean Water Act; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

2.D. Notification of Interested Parties. The Colorado River Basin Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided them with an opportunity to submit written comments and recommendations. Details of the notification are provided in the Fact Sheet.

2.E. Consideration of Public Comment. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the public hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that Order R7-2015-0005 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Colorado River Basin Water Board from taking enforcement action for violations of the previous Order.

3. DISCHARGE PROHIBITIONS

3.A. The discharge of waste to land is prohibited unless authorized in a separate waste discharge permit.

3.B. The discharge of treated wastewater from the Facility at a location or in a manner different from that described in this Order is prohibited.

3.C. The discharge of trash from the Facility to "G" Drain, or any other water of the United States, is prohibited.

3.D. The bypass or overflow of untreated or partially-treated wastewater or wastes to "G" Drain is prohibited, except as allowed under Sections 1.G (Bypass) and 1.H (Upset) of Attachment D, Standard Provisions.

3.E. The discharge of waste in excess of the design treatment or disposal capacity of the system, 1.73 million gallons per day (MGD), is prohibited.

3.F. The discharge of waste that causes contamination, pollution, or nuisance as defined in Water Code section 13050, subdivisions (k), (l) and (m), respectively, is prohibited.

4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS

4.A. Effluent Limitations

4.A.1 Final Effluent Limitations for Discharge Point 001

4.A.1.a. The Discharger shall maintain compliance with the following effluent limitations for the discharges from the aerated lagoon system at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the MRP, Attachment E:

Table 4. Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	1.73	---	---	---	---
Biochemical Oxygen Demand (BOD) (5 day @ 20 Deg. C)	mg/L	45	65	---	---	---
Biochemical Oxygen Demand (BOD) (5 day @ 20 Deg. C)	lbs/day[1]	649	938	---	---	---
Oil and Grease	mg/L	---	---	25	---	---
Oil and Grease	lbs/day[1]	---	---	361	---	---
pH	Standard Units	---	---	---	6.0	9.0
Total Suspended Solids (TSS)	mg/L	30	45	---	---	---
Total Suspended Solids (TSS)	lbs/day[1]	433	649	---	---	---
Residual Chlorine	mg/L	0.01	---	---	---	0.02
Residual Chlorine	lbs/day[1]	0.14	---	---	---	---
Copper	µg/L	25.0	---	50.1	---	---
Copper	lbs/day[1]	0.36	---	0.72	---	---

[1] The mass-based effluent limitations are based on a design capacity of 1.73 MGD.

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Bis (2-ethylhexyl) Pthalate	µg/L	5.9	---	12	---	---
Bis (2-ethylhexyl) Pthalate	lbs/day[1]	0.085	---	0.17	---	---

4.A.1.b. Percent Removal: The average monthly percent removal of BOD 5-day 20°C shall not be less than 65 percent.

4.A.1.c. Toxicity: There shall be no toxicity in the treatment plant effluent, nor shall the treatment plant effluent cause any toxicity in the receiving water, as defined in Section 5 of the MRP. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or toxicity tests of appropriate duration or other appropriate methods specified by the Colorado River Basin Water Board.

4.A.1.d. Bacteria: The bacterial density in the wastewater effluent discharged to the "G" Drain shall not exceed the following values, as measured by the following bacterial indicators:

E. Coli. A six-week rolling geometric mean (GM)[2] of *Escherichia coli* (*E. coli*) not to exceed 100 colony forming units (cfu) per 100 milliliters (mL), calculated weekly and a statistical threshold value (STV)[3] of 320 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

4.A.2. Interim Effluent Limitations – Not Applicable

4.B. Land Discharge Specifications – Not Applicable

4.C. Recycling Specifications – Not Applicable

5. RECEIVING WATER LIMITATIONS

5.A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) and are a required part of this Order. The discharge from the Facility shall not cause or

[2] GM = geometric mean, a six-week rolling geometric mean calculated weekly.
[3] STV = statistical threshold value, not to be exceeded by more that 10 percent of samples collected in a calendar month, calculated in a static manner.

contribute to the following in the "G" Drain:

5.A.1. Dissolved Oxygen. The concentration of dissolved oxygen to fall below 5.0 milligrams per liter (mg/L). When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.

5.A.2. Oil, Grease, and Floating Material. Oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.

5.A.3. Pesticides. The deposition of pesticides or any combination of pesticides in concentrations that adversely affect beneficial uses.

5.A.4. Color. Discoloration that creates a nuisance or adversely affects beneficial uses.

5.A.5. Biostimulatory Substances. Biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

5.A.6. Turbidity. An increase in turbidity that adversely affects beneficial uses.

5.A.7. pH. The normal ambient pH to fall below 6.0 or exceed 9.0 units.

5.A.8. Temperature. An alteration in the natural temperature, unless the Discharger can demonstrate to the satisfaction of the Colorado River Basin Water Board that the alteration in temperature does not adversely affect beneficial uses.

5.A.9. Settleable Substances. The deposition of material in amounts that cause a nuisance or adversely affect beneficial uses.

5.A.10. Chemical Constituents. Chemical constituents to be present in concentrations that adversely affect beneficial uses.

5.A.11. Toxicity. Toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

5.A.12. Taste and Odors. An increase in taste- or odor-producing substances that adversely affects beneficial uses.

5.A.13. Total Dissolved Solids. The concentration of total dissolved solids (TDS) to exceed an annual average concentration of 4,000 mg/L or a maximum daily concentration of 4,500 mg/L.

5.A.14. Water Quality Standards. The violation of any applicable water quality standard for receiving waters adopted by the Colorado River Basin Water Board or the State Water Resources Control Board (State Water Board) as required by the federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Clean Water Act section 303 or amendments thereto, the Colorado River Basin Water Board will revise and modify this permit in accordance with such more stringent standard.

5.B. Groundwater Limitations – Not Applicable

6. PROVISIONS

6.A. Standard Provisions

6.A.1. Federal Standard Provisions. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

6.A.2. Colorado River Basin Water Board Standard Provisions. The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:

6.A.2.a. The Facility shall be protected from any washout or erosion of wastes or covering material, and from any inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.

6.A.2.b. The Discharger shall ensure that all site-operating personnel are familiar with the contents of this Order and shall maintain a copy of this Order at the site.

6.A.2.c. The Discharger's wastewater treatment plant shall be supervised and operated by persons possessing certification of the appropriate grade pursuant to California Code of Regulations, title 23, section 3680.

6.A.2.d. The Discharger shall immediately notify the Office of Emergency Services by phone at (800) 852-7550 to report any noncompliance that may endanger human health or the environment as soon as: (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures.

6.A.2.e. The Discharger shall provide a report to the Colorado River Basin Water Board upon determining that the treatment plant's monthly average flow rate for any month exceeds 80 percent of the design treatment or disposal capacity. The report should indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.

6.A.2.f. In the event of any changes in ownership or management of this operation, the Discharger shall notify the Colorado River Basin Water Board of such change in writing. The Discharger shall also notify the succeeding owner or operator by letter that the new owner or operator must apply for coverage under this Order prior to discharging. The Discharger shall forward a copy of this letter to the Colorado River Basin Water Board within 30 days of providing to the notice to the succeeding owner or operator.

6.A.2.g. Prior to any modifications in this Facility which would result in any material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Colorado River Basin Water Board, and if required by the Colorado River Basin Water Board, obtain revised requirements before any modifications are implemented.

6.A.2.h. This Order does not authorize violation of any federal, state, or local laws or regulations.

6.A.2.i. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this Facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

6.A.2.j. In the event the Discharger does not comply or will be unable to comply with this Order for any reason, the Discharger shall notify the Colorado River Basin Water Board as follows:

1) For noncompliance with any prohibition, effluent limitation, or receiving water limitation of this Order, or for a spill in excess of 1,000 gallons:

   i. The Discharger shall notify the Colorado River Basin Water Board by email to RB7-coloradoriver@waterboards.ca.gov within 24 hours of having knowledge of such noncompliance.

   ii. The Discharger shall submit a written report within five days of noncompliance, unless this requirement is waived by Colorado River Basin Water Board staff. The written report shall state the nature, time, duration, and cause of the noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation.

2) For all other forms of noncompliance:

   The Discharger shall notify the Colorado River Basin Water Board at the time monitoring reports are submitted.

6.A.2.k. In accordance with Water Code section 1211, the Discharger shall obtain approval from the State Water Board's Division of Water Rights prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse.

6.B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP in Attachment E of this Order and any future revisions thereto. This MRP may be modified by the Executive Officer at any time during the term of this Order and may include an increase in the number of parameters to be monitored, the frequency of the monitoring, the number and size of samples to be collected, or minor clarifications on MRP requirements.

6.C. Special Provisions

6.C.1. Reopener Provisions

6.C.1.a.Standard Revisions. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, revocation and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, the modification of land application plans, or the adoption of new regulations by the State Water Board or the Colorado River Basin Water Board, including revisions to the Basin Plan.

6.C.1.b.Whole Effluent Toxicity. As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a numeric chronic toxicity limitation, an acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE. Additionally, if a numeric chronic toxicity water quality objective is adopted by the State Water Board, this Order may be reopened to include effluent limitations based on that objective.

6.C.1.c.303(d)-Listed Pollutants. If new or revised water quality objectives or Total Maximum Daily Loads (TMDLs) come into effect for receiving waters, the effluent limitations in this Order may be modified as necessary to reflect any updated water quality objectives and TMDL waste load allocations.

6.C.1.d. Reasonable Potential. This Order may be modified or revoked and reissued if present or future investigations demonstrate that the Discharger is causing or contributing to excursions above any applicable water quality standard or objective, or adversely impacting water quality and/or the beneficial uses of receiving waters.

6.C.1.e Pretreatment Program. Pursuant to 40 C.F.R. section 403.8(e), the Colorado River Basin Water Board may modify, or revoke and reissue, the NPDES permit if the Discharger must implement a pretreatment program.

6.C.2. Special Studies, Technical Papers and Additional Monitoring Requirements

6.C.2.a. Toxicity Reduction Evaluation (TRE) Plan

The Discharger must review and update the Toxicity Reduction Evaluation (TRE) Work Plan as defined in Attachment A. The Discharger must conduct a TRE if repeated tests reveal toxicity as a result of waste discharges under this Order. The Discharger shall take all reasonable steps to control toxicity once the source of toxicity is identified. Failure to conduct the required toxicity tests or conduct a TRE shall result in the establishment of effluent limitations for chronic toxicity under this Order and/or appropriate enforcement action.

6.C.2.b. Optional Metal Translator Study

Should the Discharger wish to use a translator for metals and selenium other than the default USEPA conversion factors listed in Tables 2 and 3 of the

California Toxics Rule (CTR), the Discharger shall perform studies to determine site-specific metal translators and must submit a written request to the Executive Officer. Otherwise, the USEPA conversion factors shall remain the default standard used when calculating any water quality-based effluent limitations for selenium and metals. USEPA has developed a guidance manual entitled, *The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion* (EPA 823-B-96-007, June 1996).

6.C.2.c. Discharger Monitoring Report-Quality Assurance (DMR-QA) Study

USEPA requires major permittees subject to an NPDES Permit to participate in the annual DMR-QA Study Program. The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits.

There are two options to satisfy the requirements of the DMR-QA Study Program: (1) The Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) per the waiver issued by USEPA to the State Water Board, the Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from its own laboratories or its contract laboratories. A Water Pollution Performance Evaluation Study is similar to the DMR-QA Study; it also evaluates a laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES Program.

The Discharger shall ensure that the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board's Quality Assurance Program Officer. The State Water Board's Quality Assurance Program Officer will send the DMR-QA Study results or the results of the most recent Water Pollution Performance Evaluation Study to USEPA's DMR-QA Coordinator and Quality Assurance Manager.

6.C.3. Best Management Practices and Pollution Prevention

6.C.3.a. Pollutant Minimization Program

The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) when there is evidence that a priority pollutant is present in the effluent above an effluent limitation (e.g., sample results reported as "Detected, but Not Quantified" [DNQ] when the effluent limitation is less than the Method Detection Limit [MDL], sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) and either:

1) A sample result is reported as DNQ and the effluent limitation is less than the Reporting Level (RL); or

2) A sample result is reported as Not Detected (ND) and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP Section 10.B.4.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Colorado River Basin Water Board:

i. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;

iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and

v. An annual status report that shall be sent to the Colorado River Basin Water Board including:

a) All PMP monitoring results for the previous year;

b) A list of potential sources of the reportable priority pollutant(s);

c) A summary of all actions undertaken pursuant to the control strategy; and

d) A description of actions to be taken in the following year.

6.C.3.b.Spill Response Plan

On October 18, 2019, the Discharger submitted to the Colorado River Basin Water Board a Spill Response Plan (SRP). The Discharger shall review and update the existing SRP on an annual basis. The Discharger shall submit the updated SRP with each Annual Report. At a minimum, the SRP shall include sections of spill cleanup and containment measures, public notifications, monitoring, and the procedures to be carried out if floatable material is visible on the water surface near the discharge point. The Discharger shall make the SRP available for staff review during Colorado River Basin Water Board inspections. The Discharger shall ensure that all operating personnel are familiar with the contents of the SRP. A copy of the SRP shall be maintained at the site and shall be accessible to all operating personnel.

6.C.3.c.Stormwater

Enrollment under State Water Board's *General Permit for Storm Water Discharges Associated with Industrial Activities*, Order 2014-0057-DWQ (NPDES No. CAS000001) (Industrial General Permit) is required for facilities used in the storage, treatment, recycling, and reclamation of municipal or

domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of a facility with a design flow of 1 MGD or more, or are required to have an approved pretreatment program under 40 C.F.R. part 403. The Discharger is currently enrolled under the Industrial General Permit (WDID No. 7 13I000034).

6.C.4. Construction, Operation and Maintenance Specifications

6.C.4.a. Treatment Basins

1) A minimum depth of freeboard of two (2) feet shall be maintained at all times in all treatment basins.
2) The treatment basins shall be managed to prevent breeding of mosquitoes, in particular:
   i. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
   ii. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
   iii. Dead algae, vegetation, and debris shall not accumulate on the water surface.
3) The treatment basins shall be maintained so they will be kept in aerobic conditions.
4) Onsite wastes shall be strictly confined to the lands specifically designated for the disposal operation.
5) Public contact with undisinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
6) Objectionable odors originating at the Facility shall not be perceivable beyond the limits of the property boundary.

6.C.4.b. Facility and Treatment Operation

1) The Discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment and control which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance include effective performance measures, 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 the conditions of this Order. All systems, both in-service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Colorado River Basin Water Board upon demand.
2) Temporary power or adequate storage capacity shall be provided to maintain the plant in operation in the event of commercial power failure.
3) Adequate measures shall be taken to ensure that unauthorized persons are effectively excluded from contact with the wastewater disposal facilities.

4) The Discharger shall implement acceptable operation and maintenance at the Facility so that needed repairs and maintenance are performed in a timely manner.

6.C.4.c.Operations Plan for Proposed Plant Expansion

At least 30 days in advance of the operation of an expanded wastewater treatment system, the Discharger shall submit an Operations Plan, in accordance with Water Code section 13385(j)(1)(D). The Operations Plan shall describe the actions the Discharger will take during the period of adjusting or testing, including steps to prevent violations and identification of the shortest reasonable time required for the period of adjusting and testing (not to exceed 90 days for a wastewater treatment unit that relies on a biological treatment process and not to exceed 30 days for any other wastewater treatment unit). Upon receipt of the Operations Plan by the Executive Officer, and if the Executive Officer has not objected in writing to the Operations Plan, Water Code section 13385, subdivisions (h) and (i), shall not apply in accordance with subdivision (j)(1) of section 13385 if a violation is caused by the operation of a new or reconstructed wastewater treatment unit during a defined period of adjusting or testing, as described above.

6.C.5. Special Provisions for Publicly-Owned Treatment Works (POTWs Only)

6.C.5.a. Sludge Requirements

1) This Order does not authorize any act that results in violation of requirements administered by USEPA to implement 40 C.F.R. part 503, Standards for the Use or Disposal of Sewage Sludge. These standards regulate the final use or disposal of sewage sludge that is generated during the treatment of domestic sewage in a municipal wastewater treatment facility. The Discharger is responsible for meeting all applicable requirements of 40 C.F.R. part 503 that are under USEPA's enforcement authority. Attachment H contains biosolids and sludge management requirements.

2) Where applicable, the Discharger shall ensure compliance with the requirements in State Water Board Order No. 2004-12-DWQ, *General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities.*

6.C.5.b.Source Control and Pretreatment Provisions

In the event that the Facility receives influent from Industrial Users (40 C.F.R. § 403.3(j)) which Pass Through (40 C.F.R. § 403.3(p)) or Interfere (40 C.F.R. § 403.3(k)) with the operation of the wastewater treatment facility or are otherwise subject to National Pretreatment Standards (40 C.F.R. § 403.3(l)), then the Facility shall have and enforce an adequate pretreatment program (40

C.F.R. § 403.8) as follows:

1) The Discharger shall be responsible for the compliance with all pretreatment requirements contained in 40 C.F.R. part 403, and shall be subject to enforcement actions, penalties, and other remedies by the USEPA or the Colorado River Basin Water Board, as provided in the Clean Water Act.

2) Within one year of notification that a pretreatment program is required, the Discharger shall submit a formal pretreatment program for approval by the Colorado River Basin Water Board.

3) The Discharger must seek approval of its pretreatment program from the Colorado River Basin Water Board subject to Provision 6.C.1.e. of this Order in the event a pretreatment program is developed.

6.C.5.c. Collection Systems

1) The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system. (40 C.F.R. § 122.41(e).) The Discharger must report any non-compliance (40 C.F.R. § 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 C.F.R. § 122.41(d)). See Standard Provision 6.A.2.j and Attachment D, Sections 1.C, 1.D, 5.E, and 5.H.

2) The Discharger is subject to the requirements of and must comply with State Water Board Order 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order (Sanitary Sewer Order). The Sanitary Sewer Order requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans (SSMPs) and report all sanitary sewer overflows (SSOs) to the State Water Board's online SSO database. The Discharger is enrolled under the SSO Order, and the Discharger's WDID number is 7SSO10516.

6.C.6. Other Special Provisions

6.C.6.a. The Discharger may be required to submit technical reports as directed by the Colorado River Basin Water Board's Executive Officer.

6.C.6.b. The Discharger shall exclude from the wastewater treatment plant any liquid or solid waste that could adversely affect the plant operation or effluent quality. The excluded liquid or solid waste shall be disposed of in accordance with applicable regulations.

6.C.7. Special Provisions Reporting Schedules

6.C.7.a Deliverables and Due Dates. The Discharger shall comply with the following compliance schedule as summarized in Table 5:

Table 5. Compliance Schedule

Activity	Description	Due Date
Spill Response Plan 6.C.3.b	The Discharger must annually update the Spill Response Plan (SRP), which must include sections on spill cleanup and containment measures.	Annual updates submitted yearly with Annual Report.
TRE Workplan 6.C.2.a	The Discharger must review and update the TRE Work Plan. The Work Plan should include a description of steps the Discharger will take in the event toxicity is detected.	Annual updates submitted yearly with Annual Report.
DMR-QA Study 6.C.2.c	The Discharger shall conduct a DMR-QA Study to evaluate the analytical ability of laboratories that routinely perform or support self-monitoring analyses. The Discharger shall ensure that the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board.	Annual updates submitted yearly to the State Water Board's Quality Assurance Officer.
Pollutant Minimization Program (PMP) 6.C.3.a	The Discharger shall develop a PMP when there is evidence a priority pollutant is present in the effluent above an effluent limitation and either: (1) the sample result is reported as DNQ and the effluent limitation is less than the RL; or (2) a sample result is reported as ND and the effluent limitation is less than the MDL.	Within 90 days after receipt of evidence of a priority pollutant effluent exceedance.

7. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section 4 of this Order will be determined as specified below:

7.A. Priority Pollutant Effluent Limitations

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Section 7 of this Order. For purposes of reporting and administrative enforcement by the Colorado River Basin Water Board or the State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the Reporting Level (RL).

7.B. Multiple Sample Data

When determining compliance with an Average Monthly Effluent Limitation (AMEL), Average Weekly Effluent Limitation (AWEL), and Maximum Daily Effluent Limitation (MDEL) for pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or

more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

7.B.1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

7.B.2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle, unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

7.C. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by Section 7.B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month), where no data is available to show compliance. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to AMEL.

7.D. Average Weekly Effluent Limitation (AWEL)

If the average (or when applicable, the median determined by Section 7.B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in seven days of non-compliance where no data is available to show compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week with respect to AWEL.

A calendar week will begin on Sunday and end on Saturday. Partial calendar weeks at the end of the calendar month will be carried forward to the next month in order to calculate and report a consecutive seven-day average value on Saturday.

7.E. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by Section 7.B

above for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day with respect to MDEL.

For multiple samples collected in a calendar day, the maximum daily value is the average of the samples collected in a calendar day, or when applicable, the median as determined by Section 7.B, above.

7.F. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation). There are no mass limits are for instantaneous minimum effluent limitations.

7.G. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation). There are no mass limits for instantaneous maximum effluent limitations.

7.H. Effect of Conducting a Pollutant Minimization Program (PMP)

If a sample result for a priority pollutant, or the arithmetic mean or median of multiple sample results is below the RL, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a PMP for the priority pollutant (as described in Section 6.C.3.a) the Discharger shall not be deemed out of compliance.

7.I. Compliance with Single Constituent Effluent Limitation

Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of a pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

7.J. Mass and Concentration Limitation

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or

DNQ, the corresponding mass emission rate (MER) determined from that sample concentration shall also be reported as ND or DNQ.

7.K. Chronic Toxicity Narrative Effluent Limitation

Compliance with narrative effluent limitations established in the Order are determined from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010). The Discharger must report either a "Pass" or a "Fail" and the Percent Effect as required in the MRP, Section 5. If a result is reported as a "Fail," the Discharger must follow the requirements in MRP, Section 5.A, Chronic Toxicity Testing, to initiate an accelerated monitoring schedule or conduct a TRE.

7.L. Bacteria Effluent Limitations

Compliance with the bacteria effluent limitations established in Section 4.A.1.d of the Order shall be determined and follows:

7.L.1. Six-week Rolling Geometric Mean (GM) for *E. coli* bacteria. The rolling geometric mean shall be calculated using at least 5 sample results over a 6-week period from a site using the following formula:

GM = $n\sqrt{}(x1)(x2)(x3)\cdots(xn)$,

where x is the sample value and n is the number of samples take.

If the weekly calculated six-week rolling geometric mean bacterial concentration for *E.coli* exceeds the bacteria objective summarized in the Effluent Limitations and Discharge Requirements Section 4.A.1.d of this Order, this will represent a single violation of the water quality-based effluent limitation for bacteria and the Discharger will be considered out of compliance for the week in which the GM was reported.

7.L.2. **Statistical Threshold Value (STV) for *E. coli* bacteria**. (1) The data set shall be ranked from low to high, ranking any ND concentrations lowest, followed by quantified values. (2) The number of sample results should then be multiplied by 90 percent then rounded up to the nearest whole number. (3) Count the values in the data set starting from lowest to highest until the number indicated in step (2) is reached. (4) To be compliant with the statistical threshold value in the Effluent Limitations and Discharge Requirements Section 4.A.1.d of this Order, all sample results less than the point described in step 3 must be less than the STV. If a STV was exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner, this will represent a single violation of the water quality-based effluent limitation for bacteria and the Discharger will be considered out of compliance for the month in which the STV was reported**.**

7.M. Single Operational Upset

A Single Operational Upset (SOU) that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Discharger's liability in accordance with the following conditions:

7.M.1. A SOU is defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.

7.M.2. The Discharger may assert a SOU as a limit to liability only for those violations which the Discharger submitted a notice of the upset as required in Section 5.E.2.b. of Attachment D, Standard Provisions.

7.M.3. For purposes of federal law, determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA's Memorandum Issuance of Guidance Interpreting Single Operational Upset (September 27, 1989).

7.M.4. For purposes of state law, determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with Water Code section 13385(f).

7.N. Significant Figures

The Discharger shall report monitoring and calculation results with regard to significant figures consistent with tabulated values in Table 4 (Effluent Limitations).

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)
Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean } (\mu) = \frac{\Sigma x}{n}$$

where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)
The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative
Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic
Pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV)
CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge
Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dilution Credit
Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)
ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as wasteload allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries
Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel,

Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Geometric Mean (GM)
The geometric mean is a type of mean or average that indicates the central tendency or typical value of a set of numbers by using the product of their values (as opposed to the arithmetic mean which uses their sum). The geometric mean is defined as the nth root of the product of n numbers. The formula is expressed as: GM = $n\sqrt{(x1)(x2)(x3)\ldots(xn)}$, where x is the sample value and n is the number of samples take.

Inland Surface Waters
All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation
The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order)

If the number of measurements (n) is odd, then:

$$\text{median} = \frac{X_{(n+1)}}{2}$$

If n is even, then:

$$\text{median} = \frac{X_{\frac{n}{2}} + X_{\frac{n}{2}+1}}{2}$$

(i.e., the midpoint between the (n/2 and ((n/2)+1))).

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 Code of Federal Regulations (CFR). part 136, Attachment B.

Minimum Level (ML)
ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone
Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

Persistent Pollutants
Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Colorado River Basin Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention
Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State

Water Resources Control Board (State Water Board) or Colorado River Basin Water Board.

Reporting Level (RL)
The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Colorado River Basin Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) in a Colorado River Basin Water Board Basin Plan.

Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

$$\text{Standard Deviation } (\sigma) = \frac{\Sigma(X-\mu)^2}{(n-1)^{0.5}}$$

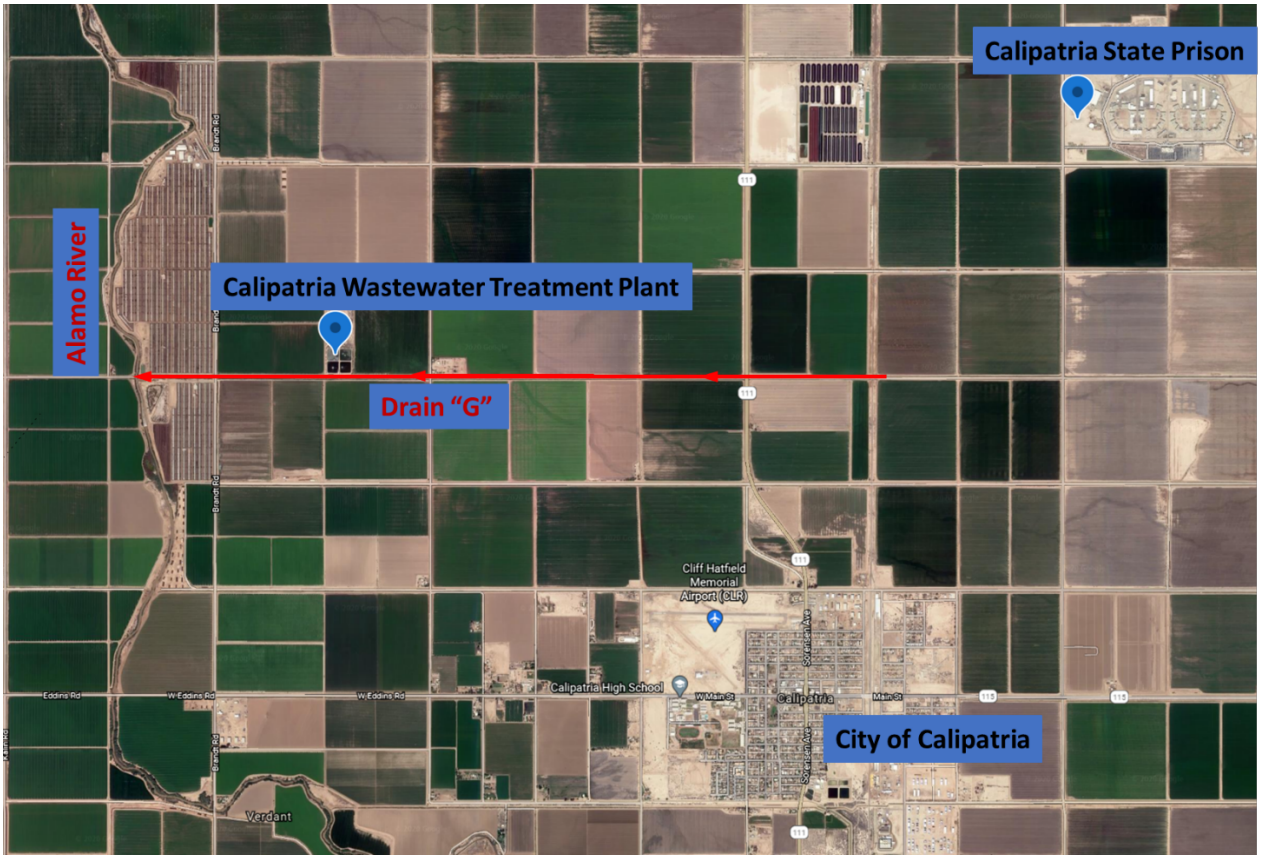
where: x is the observed value; μ is the arithmetic mean of the observed values; and n is the number of samples.

Statistical Threshold Value (STV)
For the bacteria water quality objective, the statistical threshold value is a set value that approximates the 90th percentile of the water quality distribution of a bacterial population. Typically, (1) The data set is be ranked from low to high, ranking any ND concentrations lowest, followed by quantified values. (2) The number of sample results is then be multiplied by 90 percent then rounded up to the nearest whole number. (3) The values in the data set are counted starting from lowest to highest until the number indicated in step (2) is reached. (4) To be compliant with the statistical threshold value, all sample results less than the point described in step 3 must be less than the STV.

Toxicity Reduction Evaluation (TRE)
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to

identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

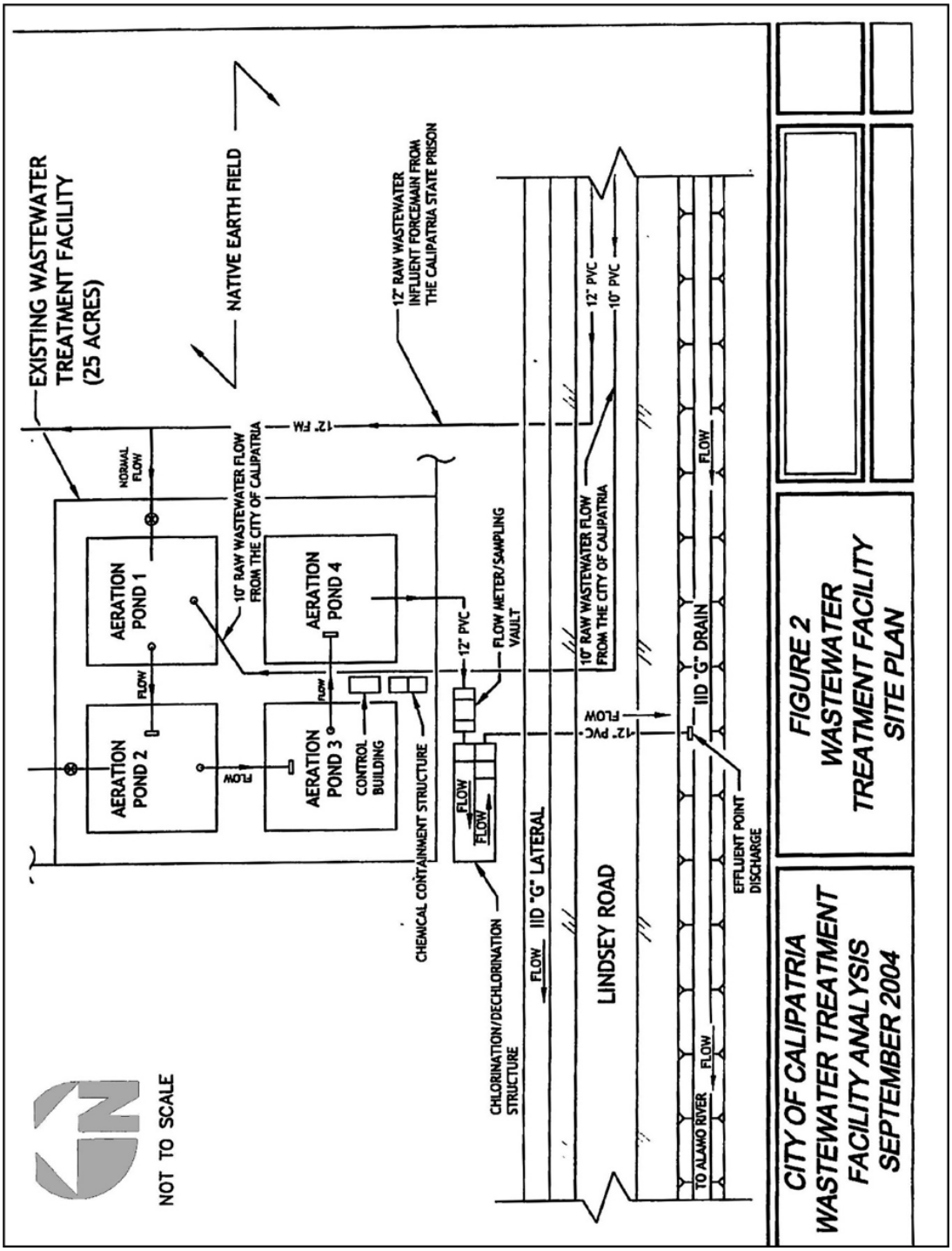
ATTACHMENT B – MAP

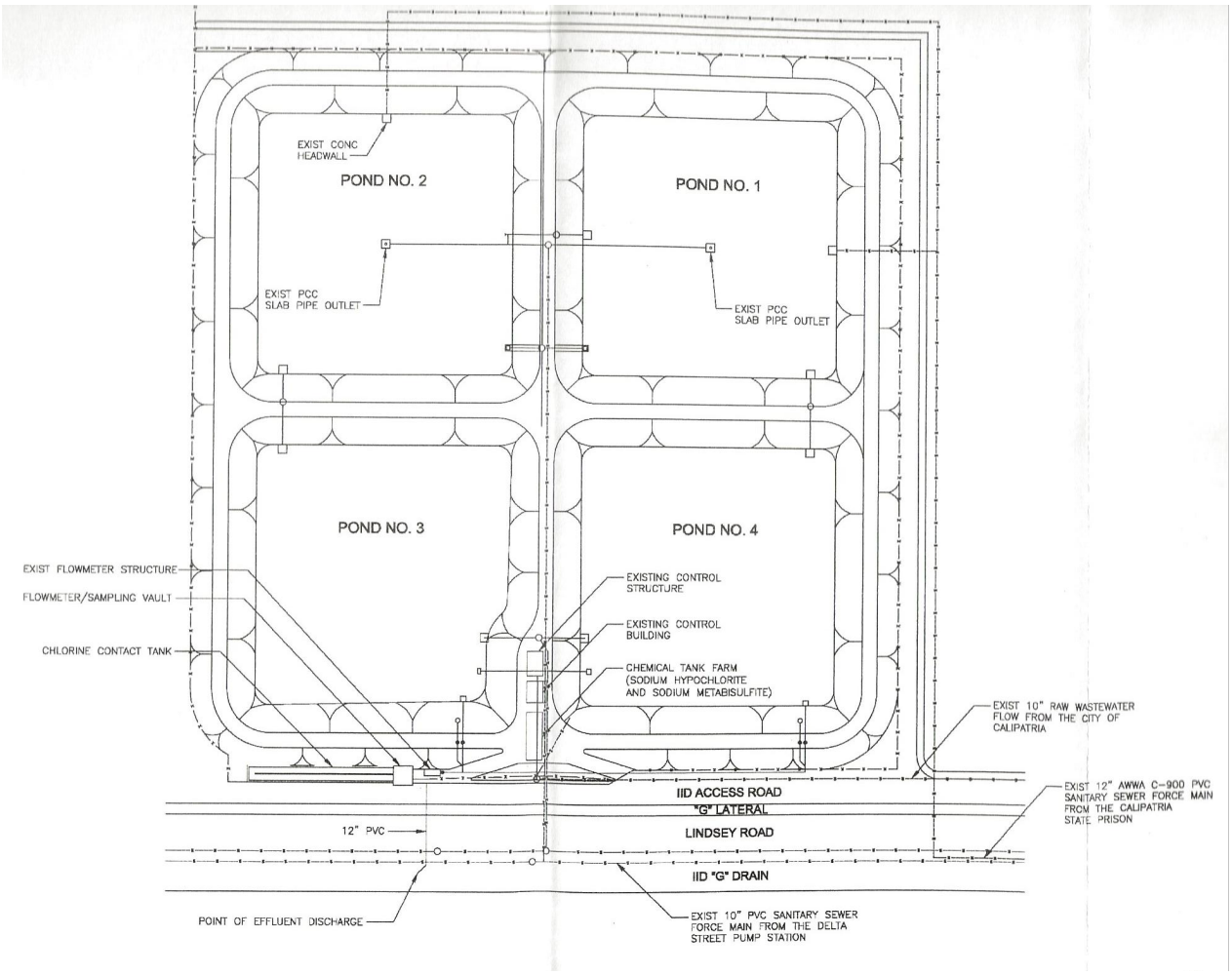


CITY OF CALIPATRIA, OWNER/OPERATOR;
CITY OF CALIPATRIA WASTEWATER TREATMENT PLANT;
Calipatria, Imperial County

Location of Discharge: SW ¼ of SE ¼ of Section 6, T12S, R14E, SBB&M
(Latitude 33° 8' 50.9" N, Longitude 115° 33' 10.02" W)

ATTACHMENT C – FLOW SCHEMATIC





CITY OF CALIPATRIA WASTEWATER TREATMENT PLANT SITE MAP / FLOW DIAGRAM

ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.A. Duty to Comply

1.A.1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 Code of Federal Regulations (C.F.R.) § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

1.A.2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

1.B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

1.C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

1.D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

1.E. Property Rights

1.E.1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

1.E.2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

1.F. Inspection and Entry

The Discharger shall allow the Colorado River Basin Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 13383):

1.F.1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);

1.F.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);

1.F.3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and

1.F.4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the Clean Water Act or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

1.G. Bypass

1.G.1. Definitions

1.G.1.a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

1.G.1.b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

1.G.2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance 1.7.3, 1.7.4, and 1.7.5 below. (40 C.F.R. § 122.41(m)(2).)

1.G.3. Prohibition of bypass. Bypass is prohibited, and the Colorado River Basin Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

1.G.3.a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

1.G.3.b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

1.G.3.c. The Discharger submitted notice to the Colorado River Basin Water Boards required under Standard Provisions – Permit Compliance 1.7.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

1.G.4. The Colorado River Basin Water Board may approve an anticipated bypass, after considering its adverse effects, if the Colorado River Basin Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance 1.7.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

1.G.5. Notice

1.G.5.a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. As of December 21, 2020, all notices must be submitted electronically by the Discharger to the initial recipient, as defined in 40 C.F.R. section 127.2(b), in compliance with this section and 40 C.F.R. part 3 (including, in all cases, subpart D of part 3), section 122.22, and 40 C.F.R. part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by a particular permit or if required to do so by state law. (40 C.F.R. § 122.41(m)(3)(i).)

1.G.5.b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting 5.5 below (24-hour notice). As of December 21, 2020, all notices must be submitted electronically by the Discharger to the initial recipient, as defined in 40 C.F.R. section 127.2(b), in compliance with this section and 40 C.F.R. part 3 (including, in all cases, subpart D of part 3), section 122.22, and 40 C.F.R. part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by a particular permit or if required to do so by state law. (40 C.F.R. § 122.41(m)(3)(ii).))

1.H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1.H.1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance 1.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

1.H.2 Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

1.H.2.a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

1.H.2.b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

1.H.2.c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting 5.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

1.H.2.d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance 1.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

1.H.3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

2. STANDARD PROVISIONS – PERMIT ACTION

2.A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

2.B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

2.C. Transfers

This Order is not transferable to any person except after notice to the Colorado River Basin Water Board. The Colorado River Basin Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the Clean Water Act and the Water Code. (40 C.F.R. §§ 122.41(l)(3), 122.61.)

3. STANDARD PROVISIONS – MONITORING

3.A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

3.B. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

3.B.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

3.B.2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N for the measured pollutant or pollutant parameter. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 C.F.R. part 136, or otherwise required under 40 C.F.R. chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 C.F.R. §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

4. STANDARD PROVISIONS – RECORDS

4.A. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Colorado River Basin Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

4.B. Records of monitoring information shall include:

4.B.1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

4.B.2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

4.B.3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4.B.4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

4.B.5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

4.B.6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

4.C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

4.C.1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

4.C.2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

5.A. Duty to Provide Information

The Discharger shall furnish to the Colorado River Basin Water Board, State Water Board, or USEPA within a reasonable time, any information which the Colorado River Basin Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Colorado River Basin Water Board, State Water Board, or USEPA copies of records required to be kept by this Order.
(40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

5.B. Signatory and Certification Requirements

5.B.1. All applications, reports, or information submitted to the Colorado River Basin Water Board, State Water Board, and/or USEPA shall be signed and certified in

accordance with Standard Provisions – Reporting 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 C.F.R. § 122.41(k).)

5.B.2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

5.B.2.a. All permit applications shall be signed by a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(2).)

5.B.2.b. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).).

5.B.3. All reports required by this Order and other information requested by the Colorado River Basin Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting 5.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5.B.3.a. The authorization is made in writing by a person described in Standard Provisions – Reporting 5.B.2 above (40 C.F.R. § 122.22(b)(1));

5.B.3.b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

5.B.3.c. The written authorization is submitted to the Colorado River Basin Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

5.B.4. If an authorization under Standard Provisions – Reporting 5.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting 5.B.3 above must be submitted to the Colorado River Basin Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5.B.5. Any person signing a document under Standard Provisions – Reporting 5.B.2 or 5.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

5.B.6. Any person providing the electronic signature for documents described in Standard Provisions – 5.2.1, 5.2.2, or 5.2.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting 5.2, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

5.C. Monitoring Reports

5.C.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)

5.C.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Colorado River Basin Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)

5.C.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Colorado River Basin Water Board or State Water Board.
(40 C.F.R. § 122.41(l)(4)(ii).)

5.C.4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

5.D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

5.E. Twenty-Four Hour Reporting

5.E.1. The Discharger shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2023, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Colorado River Basin Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Colorado River Basin Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

5.E.2. The following shall be included as information that must be reported within 24 hours:

5.E.2.a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

5.E.2.b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

5.E.3. The Colorado River Basin Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

5.F. Planned Changes

The Discharger shall give notice to the Colorado River Basin Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

5.F.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

5.F.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).); or

5.F.3. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels 7.1.1). (40 C.F.R. § 122.41(l)(1)(ii).)

5.G. Anticipated Noncompliance

The Discharger shall give advance notice to the Colorado River Basin Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

5.H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting 5.5 above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting 5.5 and the applicable required data in appendix A to 40 C.F.R. part 127. The Colorado River Basin Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(7).)

5.I Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Colorado River Basin Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

5.J. Identification of the Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. section 127.2(b). USEPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. section 127.2(c)]. USEPA will update and maintain this listing. (40 C.F.R. § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.A. The Colorado River Basin Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.A. Non-Municipal Facilities – Not Applicable

7.B Publicly Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Colorado River Basin Water Board of the following (40 C.F.R. § 122.42(b)):

7.B.1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and

7.B.2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)

7.B.3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

TABLE OF CONTENTS

1. GENERAL MONITORING PROVISIONS 3
1.A. Sample Volume and Monitoring Locations. 3
1.B. Instrumentation and Calibration. 3
1.C. Laboratory Certification. 3
1.D. Monitoring Test Procedures. 3
1.E. General Analytical Testing Methods. 4
1.F. Minimum Levels (ML) and Analytical Method Selection. 4
1.G. Analytical Testing Methods for Metals. 5
1.H. Quality Assurance Plan (QAP). 5
1.I. Failure of Continuous Monitoring Instruments/Devices. 5
1.J. Reporting Intervals. 6
1.K. Non-operation of Facility and/or No Discharge. 6
1.L. Electronic Self-Monitoring Reports (eSMRs). 6
1.M. Discharge Monitoring Report – Quality Assurance (DMR-QA) Study. 6
2. MONITORING LOCATIONS 6
3. INFLUENT MONITORING REQUIREMENTS 7
3.A. Monitoring Location INF-001 7
4. EFFLUENT MONITORING REQUIREMENTS 8
4.A. Monitoring Location EFF-001 8
5. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS 10
5.A. Chronic Toxicity Testing 10
5.B. Toxicity Reduction Evaluation (TRE) Process 15
5.C. Reporting of Toxicity Monitoring Results 18
6. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE 18
7. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE 18
8. RECEIVING WATER MONITORING REQUIREMENTS 18
8.A. Monitoring Location RSW-001 18
8.B. Monitoring Location RSW-002 19
8.C. Visual Monitoring 20
9. OTHER MONITORING REQUIREMENTS 21
9.A. Pretreatment Monitoring 21
10. REPORTING REQUIREMENTS 21
10.A. General Monitoring and Reporting Requirements 21
10.B. Electronic Self-Monitoring Reports (eSMRs) 21
10.C. Discharge Monitoring Reports (DMRs) 25
10.D. Other Reports 26

TABLE OF TABLES

Table E-1. Monitoring Station Locations 7
Table E-2. Influent Monitoring 7
Table E-3. Effluent Monitoring (EFF-001A) 8
Table E-4. Effluent Monitoring (EFF-001B) 9

Table E-5. Effluent Monitoring (EFF-001C) 10
Table E-6. Whole Effluent Toxicity Test Species 13
Table E-7. Example of Screening Table for Chronic Test 14
Table E-8. TAC Specified in EPA/821-R-02-013 15
Table E-9. Receiving Water Monitoring Requirements (RSW-001) 19
Table E-10. Receiving Water Monitoring Requirements (RSW-002) 20
Table E-11. Monitoring Periods and Reporting Schedule 24
Table E-12. Operations and Maintenance Report 27

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Section 308 of the federal Clean Water Act and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 C.F.R.) require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Colorado River Basin Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

1. GENERAL MONITORING PROVISIONS

1.A. Sample Volume and Monitoring Locations. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of the Colorado River Basin Water Board.

1.B. Instrumentation and Calibration. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. All flow measurement devices shall be calibrated at least once per year or more frequently as per the factory stipulated requirements, to ensure continued accuracy of the devices. Devices selected shall be capable of measuring flows with a maximum deviation of less than ±10 percent from true discharge rates throughout the range of expected discharge volumes.

1.C. Laboratory Certification. All analyses shall be conducted at a laboratory certified for such analyses by Environmental Laboratory Accreditation Program (ELAP) through the State Water Board, Division of Drinking Water (DDW) in accordance with Water Code section 13176, and must include quality assurance/quality control data with their reports. A copy of the laboratory certification shall be provided in the Annual Report due to the Regional Water Board each time a new certification and/or renewal of the certification is obtained from ELAP.

1.D. Monitoring Test Procedures. The collection, preservation and holding times of all samples shall be in accordance with the test procedures under 40 C.F.R. part 136 (amended May 18, 2012) *Guidelines Establishing Test Procedures for the Analysis of Pollutants*, promulgated by the United States Environmental Protection Agency (USEPA), unless otherwise specified in this MRP. In addition, the Colorado River Basin Water Board and/or USEPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 C.F.R part 136.

1.E. General Analytical Testing Methods. The Discharger must utilize analytical methods as follows:

1.E.1. A test procedure listed in 40 C.F.R. section 136.3; or

1.E.2. An alternative test procedure approved by USEPA as provided in 40 C.F.R. sections 136.4 or 136.5; or

1.E.3. A test procedure listed in 40 C.F.R. part 136, with modifications allowed by USEPA as provided in 40 C.F.R. section 136.6.

Guidance on procedures for approval of alternative and new test procedures can be obtained from the following references: *Protocol for EPA Approval of Alternative Test Procedures for Organic and Inorganic Analytes in Wastewater and Drinking Water* (EPA 821-B-98-002, March 1999); and *Protocol for EPA Approval of New Methods for Organic and Inorganic Analytes in Wastewater and Drinking Water* (EPA 821-B-98-003, March 1999).

1.F. Minimum Levels (ML) and Analytical Method Selection. USEPA published regulations for the Sufficiently Sensitive Methods Rule (SSM Rule), which became effective September 18, 2015. When more than one test procedure is approved under 40 CFR part 136 for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 C.F.R. sections 122.21(e)(3) and 122.44(i)(1)(iv). A USEPA-approved analytical method is sufficiently sensitive where:

a. The ML is at or below both the level of the applicable water quality criterion/objective and the permit limitation for the measured pollutant of pollutant parameter; or

b. In permit applications, the ML is above the applicable water quality criterion/objective, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

c. The method has the lowest ML of the USEPA-approved analytical methods where none of the USEPA-approved analytical methods for a pollutant can achieve the MLs necessary to assess the need for effluent limitations or to monitor compliance with a permit limitation.

The MLs in SIP Appendix 4 of the State Implementation Plan (SIP) remain applicable. However, there may be situations when analytical methods are published with MLs that are more sensitive than the MLs for analytical methods listed in the SIP. For instance, USEPA Method 1631E for mercury is not currently listed in SIP Appendix 4, but it is published with an ML of 0.5 ng/L, which makes it a sufficiently sensitive analytical method. Similarly, USEPA Method 245.7 for mercury is published with an ML of 5 ng/L.

For priority pollutants, the Discharger shall require its testing laboratory to calibrate the analytical system down to the minimum levels (MLs) specified in 40 C.F.R. part

136, unless an alternative minimum level is approved by the Colorado River Basin Water Board's Executive Officer.

1.G. Analytical Testing Methods for Metals. In conformance with 40 C.F.R. section 122.45(c), analyses to determine compliance with the effluent limitations for metals shall be conducted using the total recoverable method. For copper, the dissolved method in conformance with 40 C.F.R. part 136 shall be used to measure compliance with a copper effluent limitation.

For Cyanide,[4] analytical test methods in conformance with 40 C.F.R. part 136 shall be used as acceptable methods to measure Cyanide.[5]

1.H. Quality Assurance Plan (QAP). In accordance with the test procedures under 40 C.F.R. part 136, samples shall be analyzed as soon as possible after collection. The Discharger shall develop and implement a written Quality Assurance Plan (QAP) using USEPA approved instruments and equipment for samples that are analyzed on-site (e.g., pH, dissolved oxygen, temperature, and residual chlorine) for the purposes of reporting compliance with effluent limitations contained in the Order. The QAP shall at a minimum address the following steps:

1.H.1. Provide a description of Standard Operating Procedures (SOPs);

1.H.2. Provide an overview of the task description and objectives;

1.H.3. Identify the sampling process, method and handling;

1.H.4. Identify the instrumentation/equipment testing, inspection and maintenance;

1.H.5. Identify the instrumentation/equipment calibration and frequency;

1.H.6. Identify the sample analysis methods and calibration range; and

1.H.7. Summarize the data review and validation procedures.

1.I. Failure of Continuous Monitoring Instruments/Devices. 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 a period greater than 24 hours, the Discharger shall obtain

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[4] The sample for cyanide measurement shall be collected as a grab sample. Various sample preservation and sample stabilization procedures are available that may resolve analytical interferences associated with cyanide analysis of treated wastewater effluent, ASTM Standard Practice D7365-09a. Further, any technique for removal or suppression of interferences may be employed, provided the laboratory demonstrates that it more accurately measures cyanide through quality control measures described in the analytical test method. Any removal or suppression technique not described in D7365-09a or the analytical test method must be documented with supporting data.

[5] Federal Register, Vol. 77, No. 97, May 18, 2012. Cyanide exists in a variety of forms. It can be free or part of strong or weak complexes with other species. The analytical method employed determines what type of cyanide is measured. Types of cyanide measured include: Total, Available, Amenable to Chlorination, Weak Acid Dissociable, Free, and others.

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.

1.J. Reporting Intervals. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP. Whenever the Discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the regular discharge monitoring reports.

1.K. Non-operation of Facility and/or No Discharge. If the Facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall indicate that there has been no activity during the required reporting period in California Integrated Water Quality System (CIWQS).

1.L. Electronic Self-Monitoring Reports (eSMRs). The Discharger shall submit values in eSMR as required to determine compliance with the permit effluent limit requirements (e.g., AMEL, MDEL, percent removals, geomeans, mass loadings, etc.) in the (CIWQS) Program, as specified below in Section 10.B. The Discharger shall submit the eSMR in the eSMR module in the CIWQS Program.

1.M. Discharge Monitoring Report – Quality Assurance (DMR-QA) Study. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance (WPP) Evaluation Study are submitted annually. The DMR-QA or WPP Evaluation Study should be sent to the State Water Board at the following address:

State Water Resources Control Board;
Quality Assurance Program Officer;
Office of Information Management and Analysis;
1001 I Street, Sacramento, CA 95814

2. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	INF-001	Wastewater influent to the treatment facility. The sampling station shall be located upstream of any in-plant return flows where a representative influent sample to the treatment plant can be obtained.
001	EFF-001	Effluent discharged from the treatment facility into the "G" Drain Latitude: 33°39' 20" N Longitude: 116° 08' 31" W
--	RSW-001	Receiving water ("G" Drain) monitoring location not to exceed 100 feet upstream from the location where the effluent enters "G" Drain
--	RSW-002	Receiving water ("G" Drain) monitoring location not to exceed 200 feet downstream from the location where the effluent enters the "G" Drain, at a point where a plume would be expected.

The North latitude and West longitude information in Table E-1 are approximate for administrative purposes.

3. INFLUENT MONITORING REQUIREMENTS

3.A. Monitoring Location INF-001

3.A.1. The Discharger shall monitor influent at INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow[6]	MGD	Flow Meter (Totalizer) Reading	1x/Day	See Section I.B of the MRP
Biochemical Oxygen Demand (BOD) (5 day @ 20 Deg. C)	mg/L	24-Hr. Composite	2x / Month	See Section 1.D. of the MRP

[6] Currently being measured using flow meter installed for prison facility inflow and total outflow.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Biochemical Oxygen Demand (BOD) (5 day @ 20 Deg. C)	lbs/day	Calculated	2x / Month	See Section 1.D. of the MRP
Suspended Solids, Total (TSS)	mg/L	24-Hr. Composite	2x / Month	See Section 1.D. of the MRP
Suspended Solids, Total (TSS)	lbs/day	Calculated	2x / Month	See Section 1.D. of the MRP

4. EFFLUENT MONITORING REQUIREMENTS

4.A. Monitoring Location EFF-001

The Discharger shall monitor a representative sample of secondary treated wastewater effluent from the discharges from the aerated lagoon system at Monitoring Location EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML:

Table E-3. Effluent Monitoring at EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and Minimum Level
Flow	MGD	Flow Meter (Totalizer) Reading	1x/Day	See Section I.B of the MRP
pH	Standard Units	Grab	1x/Day	See Section 1.D of the MRP
Chlorine, Total Residual or Dechlorinating Agent	mg/L	Recorder	Continuous[7]	See Section 1.D of the MRP
Chlorine, Total Residual or Dechlorinating Agent	lbs/day or gallons	Calculated	Continuous	See Section 1.D of the MRP

[7] Continuous sampling or a minimum of three grab samples performed daily and the average and maximum daily results shall be uploaded into CIWQS.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and Minimum Level
Temperature	Degree F	Grab	1x/Week	See Section 1.D of the MRP
Escherichia Coli (E. Coli)	MPN or cfu/100 ml	Grab	1x/Week[8,9]	See Section 1.D of the MRP
BOD_5	mg/L	24-Hr. Composite[10]	2x/Month	See Section 1.D of the MRP
TSS	mg/L	24-Hr. Composite	2x/Month	See Section 1.D of the MRP
Copper	µg/L	Grab	1x/Month	See Section 1.E of the MRP
Copper	lbs/day	Calculated	1x/Month	See Section 1.E of the MRP
Bis(2-ethylhexyl) Phthalate	µg/L	Grab	1x/Month	See Section 1.E of the MRP
Bis(2-ethylhexyl) Phthalate	lbs/day	Calculated	1x/Month	See Section 1.E of the MRP
Oil and Grease, Total[11]	mg/L	Grab	1x/Month	See Section 1.D of the MRP
Nitrates as N	mg/L	Grab	1x/Quarter	See Section 1.D of the MRP
Nitrites as N	mg/L	Grab	1x/Quarter	See Section 1.D of the MRP
Ammonia as N	mg/L	Grab	1x/Quarter	See Section 1.D of the MRP

[8] Six-week Rolling Geometric Mean. The rolling geometric mean shall be calculated using at least 5 sample results over a 6-week period from a site using the following formula:
GM = $n\sqrt{(x1)(x2)(x3)\ldots(xn)}$, where x is the sample value and n is the number of samples taken.
[9] 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).
[10] 24-hour composite samples shall be time-proportionate composite samples.
[11] Total oil and grease shall include the polar and non-polar fraction of oil and grease materials.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and Minimum Level
Total Nitrogen as N	mg/L	Grab	1x/Quarter	See Section 1.D of the MRP
Total Phosphate as P	mg/L	Grab	1x/Quarter	See Section 1.D of the MRP
Ortho-Phosphate as P	mg/L	Grab	1x/Quarter	See Section 1.D of the MRP
Total Dissolved Solids	mg/L	Grab	1x/Quarter	See Section 1.D of the MRP
Hardness, Total (as $CaCO_3$)	mg/L	Grab	1x/Quarter	See Section 1.D of the MRP
Priority Pollutants[12]	µg/L	24-Hr Composite/Grab	1x/Year	See Section 1.E of the MRP

5. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

5.A. Chronic Toxicity Testing

5.A.1. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity. The chronic toxicity IWC for this discharge is 100 percent effluent.

5.A.2. Sample Volume and Holding Time. The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

5.A.3. Test Methods. The Discharger shall conduct the following chronic toxicity tests on effluent samples at the in-stream waste concentration for the discharge in accordance with species and test protocols in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA 821-R-02-013, 2002).

[12] 24-hour composite samples shall be time-proportionate composite samples. All Priority Pollutants as defined by the California Toxics Rule (CTR) codified at 40 CFR section 131.38.

5.A.4. Test Species. The Discharger shall conduct static renewal toxicity tests, with the fathead minnow (*Pimephales promelas*), (Larval Survival and Growth Test Method 1000.0) and the water flea (*Ceriodaphnia dubia*), (Survival and Reproduction Test Method 1002.0); and static tests with the green alga (*Selenastrum capricornutum*), (Growth Test Method 1003.0). In no case shall these species be substituted with another test species unless written authorization from the Colorado River Basin Water Board is received.

5.A.5. Discharge Collected at Monitoring Stations. The Discharger shall conduct chronic toxicity testing on the final effluent measured at Monitoring Location EFF-001 as follows:

Table E-4. Whole Effluent Toxicity Test Species

Test(s)	Species	Endpoints	Test Length (days)	Reference	Sample Type	Minimum Sampling Freq.
Chronic	[13]Fathead Minnow (*Pimephales promelas*)	Larval Survival and Growth	7	EPA 821-R-02-013 (Chronic) EPA Method 1000.0	24-Hr. Composite	2x/Year[14,15]
Chronic	Water Flea (*Ceriodaphnia dubia*)	Survival and Reproduction	6-8[16]	EPA 821-R-02-013 (Chronic) EPA Method 1002.0	24-Hr. Composite	2x/Year

[13] For the fathead minnow and the water flea, the sample should consist of three samples collected on three separate days as noted in the method. The green algae test uses only one sample, as it is a shorter test.
[14] The screening phase (conducted during the first and fourth years of the permit term) shall be completed after a minimum of one (1) toxicity test has been completed on the three test species. The monitoring phase shall be conducted after the initial screening and during the remaining years (i.e., second, third, and fifth years of the permit term), using the most sensitive species.
[15] The reporting period will match the sampling frequency (e.g., minimum sampling frequency is monthly then the reporting period is monthly, minimum sampling frequency is quarterly then reporting period is quarterly, etc.)
[16] Test duration is determined by production of 3rd brood by control and can be between 6 and 8 days.

Test(s)	Species	Endpoints	Test Length (days)	Reference	Sample Type	Minimum Sampling Freq.
Chronic	Green Alga (*Selenastrum capricornutu)*	Growth	4	EPA 821-R-02-013 (Chronic) EPA Method 1003.0	24-Hr. Composite	2x/Year

5.A.6. Species Sensitivity Screening. During the first and fourth years of the permit term, the toxicity testing shall be conducted in two phases, the screening phase and the monitoring phase.

5.A.6.a. For the screening phase, the Discharger shall split a 24-hour composite effluent sample and conduct concurrent toxicity tests using a fish, an invertebrate and an aquatic plant species. The fathead minnow (*Pimephales promelas*), water flea (*Ceriodaphnia dubia*), and green alga (*Selenastrum capricornutum*) are the test species approved by the Colorado River Basin Water Board's Executive Officer. The screening phase shall be completed after a minimum of one (1) toxicity test has been completed on the three test species.

5.A.6.b. The screening phase is completed by selecting the most sensitive species. The most sensitive species is the fish, invertebrate, or algal species which consistently demonstrates the largest percent effect level at the In-stream Waste Concentration (IWC), where: IWC percent effect level = [(Control mean response − IWC mean response) ÷ Control mean response] × 100.

5.A.6.c. After the screening phase, the Discharger shall then continue to conduct toxicity testing during the monitoring phase using the single, most sensitive species until the next screening phase. An example of a sensitivity comparison is shown in Table E-5.

Table E-5. Example of Screening Table for Chronic Test

Species	Endpoints	Mean Control Response	Mean Response at IWC (100% effluent)	% effect at IWC (100% effluent)	Most Sensitive Species
Fathead Minnow	Larval Survival	10	10	(10 - 10)/10 x 100 = 0%	---
Fathead Minnow	Growth	0.41	0.363	(0.41-0.363)/.41 x 100 =11.5%	---
Water Flea	Survival	10	9	(10-9)/10 x 100 = 10%	---

Species	Endpoints	Mean Control Response	Mean Response at IWC (100% effluent)	% effect at IWC (100% effluent)	Most Sensitive Species
Water Flea[17]	Reproduction	33.4	26.7	(33.4-26.7)/33.4 x 100 =20%	Highest % effect represents most sensitive species
Green Alga	Growth	197.3	170.1	(197.3-170.1)/197.3 x 100 =13.8%	---

5.A.7. Quality Assurance and Additional Requirements. Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are below.

5.A.7.a. The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1 (Chronic Freshwater and East Coast Methods) and Appendix B, Table B-1.

5.A.7.b. The null hypothesis (Ho) for the TST statistical approach is:

Mean discharge IWC response ≤ 0.75 x Mean control response.

A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail."

5.A.7.c. The relative "Percent Effect" at the discharge IWC is defined and reported as:

Percent Effect = ((Mean control response – Mean discharge IWC response) / Mean control response) x 100.

This is a t-test (formally Student's t-Test), a statistical analysis comparing two sets of replicate observations, i.e., a control and IWC. The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control, the test result is "Pass" or "Fail"). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with

[17] In this example, the water flea represents the most sensitive species. Chronic tests for the water flea shall be conducted as required by measuring and reporting the endpoints for survival and reproduction during the monitoring phase.

two samples having unequal variances.

5.A.7.d. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method in EPA/821-R-02-013 (see Table E-8), then the Discharger must resample and re-test within 14 days.

Table E-6. TAC Specified in EPA/821-R-02-013

Species and End Points	EPA/821-R-02-013 Test Method	Test Acceptability Criteria (TAC)
Fathead Minnow *Larval Survival and Growth*	1000.0, Table 1	80% or greater survival in controls; average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg. (required)
Water Flea *Survival and Reproduction*	1000.2, Table 3	80% or greater survival of all control organisms and an average of 15 or more young per surviving female in the control solutions. 60% of surviving control females must produce three broods. (required)
Green Algae *Growth*	1000.3, Table 3	Mean cell density of at least 1 X 106 cells/mL in the controls; and variability (CV%) among control replicates less than or equal to 20%. (required)

5.A.7.e. Dilution water and control water shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.

5.A.7.f. The Discharger shall perform toxicity tests on final effluent samples. Chlorine in the final effluent sample may be removed prior to conducting toxicity tests in order to simulate the dechlorination process at the Facility. However, ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized by the Executive Officer.

5.A.7.g. A pH drift during a toxicity test may contribute to artifact toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in the effluent. To determine whether or not pH drift is contributing to artifact toxicity, the Discharger shall conduct side-by-side toxicity tests as described in section 11.3.6.1 of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002).

The Discharger can confirm toxicity due to pH drift when the Discharger observes no toxicity above the chronic WET permit limit or trigger in the treatments controlled at the pH of the effluent. Upon this confirmation, the Discharger shall request and, upon written approval by the Colorado River Basin Water Board's Executive Officer, the Discharger may use the procedures

outlined in section 11.3.6.2 of the chronic freshwater test methods manual to control effluent sample pH during the toxicity test.

5.A.8. Accelerated Monitoring Requirements. Accelerated monitoring for chronic toxicity is triggered when a chronic toxicity test, analyzed using the TST approach, results in "Fail" and the testing meets all test acceptability criteria.

5.A.8.a. Source of Toxicity is Known. If the chronic WET testing results are reported as "Fail" and the source of toxicity is known (e.g., a temporary plant upset, ammonia, ionic imbalance or elevated total dissolved solids [TDS]), then the Discharger shall conduct one additional toxicity test. The Discharger shall use the same species and test method that failed the WET test. This toxicity test shall begin within 14 days of receipt of a test result as "Fail." If the additional toxicity test result is reported as a "Pass" or it is confirmed that the toxicity is due to temporary plant upset, ammonia, ionic imbalance or elevated TDS, then the Discharger may return to the regular testing frequency.

5.A.8.b Source of Toxicity is Not Known. If the chronic WET testing results are reported as "Fail" and the source of toxicity is not known, then the Discharger shall conduct four additional toxicity tests using the same species and test method, approximately every two weeks, over an eight-week period. This testing shall begin within 14 days of receipt of a test result as "Fail." If none of the additional toxicity test results are reported as "Fail," then the Discharger may return to the regular testing frequency.

5.A.8.c Initiation of Toxicity Reduction Evaluation (TRE). If any accelerated toxicity test results in "Fail," the Discharger shall cease accelerated monitoring and begin a TRE (as specified in Section 5.B below) to investigate the cause(s) of effluent toxicity and to identify corrective actions to reduce or eliminate that toxicity.

5.B. Toxicity Reduction Evaluation (TRE) Process

5.B.1. Preparation of a TRE Work Plan. The Discharger shall prepare and submit a copy of the Discharger's Toxicity Reduction Evaluation (TRE) work plan to the Colorado River Basin Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days, the work plan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. At a minimum, the work plan shall include:

5.B.1.a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

5.B.1.b. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and

5.B.1.c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

5.B.2. Preparation and Implementation of Detailed TRE Work Plan. If one of the accelerated toxicity tests described in Section 5.A.8, above, results in "Fail," the Discharger shall immediately initiate the TRE Work Plan developed pursuant to Section 5.B.1 in accordance with USEPA guidance provided in manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) and, within 30 days, submit to the Colorado River Basin Water Board a Detailed TRE Work Plan, which shall follow the generic TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with any additional conditions set by the Executive Officer:

5.B.2.a. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.

5.B.2.b. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.

5.B.2.c. A schedule for these actions, progress reports, and the final report.

5.B.3. Toxicity Investigation Evaluation (TIE) Implementation. The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test methods and, as guidance, the procedures recommended by the USEPA, which include the following:

5.B.3.a. *Toxicity Identification Evaluations: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992);

5.B.3.b. *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991);

5.B.3.c. *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); and

5.B.3.d. *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993).

1) Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminated the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

2) The Discharger shall continue to conduct routine effluent monitoring for compliance determination purposed while the TIE and/or TRE process is

taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.

3) The Colorado River Basin Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

4) The Board may consider the results of any TIE/TRE studies in an enforcement action.

5.B.4. Evaluation of Ammonia Toxicity. For discharges where ammonia has been identified as a cause of toxicity, the Discharger shall calculate the response threshold on the basis of unionized and total ammonia. The Discharger shall run a parallel test with ammonia in lab water to evaluate if the lab water and the effluent responses are the same (i.e., no matrix effect). In future WET testing, where ammonia toxicity is hypothesized as the cause, the Discharger has the following three options to evaluate whether ammonia is causing the toxicity:

5.B.4.a. If toxicity in lab water is similar to that in the effluent, the Discharger shall conduct a parallel test with ammonia spiked into lab water. Toxicity endpoints are compared on the basis of unionized ammonia. If the endpoints are the same, then the implication is ammonia is responsible for toxicity and no further action is required; or

5.B.4.b. If toxicity in lab water is not similar to that in the effluent, the Discharger shall conduct a parallel test with effluent, maintaining pH at a level that maintains the unionized fraction below the toxic threshold. If no toxicity is observed in the pH-controlled sample, then implication is that ammonia is responsible for toxicity and no further action is required; or

5.B.4.c. Without using comparative tests, calculate toxicity in the sample on the basis of unionized ammonia and compare the result to data generated in the TIE; if the results support the hypothesis that ammonia explains toxicity, then no further action is required.

5.B.4.d. However, if ammonia is not identified as the toxicant, the Discharger shall take action as described in Section 5.A.8 (Accelerated Monitoring Schedule) of this MRP.

5.B.5. Evaluation of Ionic Imbalances or Elevated TDS Toxicity. For discharges where ionic imbalance or elevated TDS has been identified as a cause of toxicity, the Discharger shall conduct the following concurrent tests to characterize the contribution of ionic imbalance or elevated TDS to effluent toxicity. Based on the test results, toxicity should be either quantitatively recovered in synthetic effluent that mimics ionic imbalance or elevated TDS or eliminated by adding selected ions to the effluent to address deficiencies. Thus, in future WET testing, where ionic imbalance or elevated TDS is hypothesized as contributing to toxicity, the Discharger has the following two options to evaluate whether ionic imbalance or elevated TDS is causing the toxicity:

5.B.5.a. Conducting a parallel test with synthetic effluent that mimics the ionic imbalance or TDS concentration; or

5.B.5.b. Conducting a parallel test with effluent spiked with deficient ion(s). Using these approaches, if ionic imbalance or elevated TDS is shown to account for toxicity, the Discharger shall document the results and findings in the monitoring report and no further testing is required. However, if the parallel tests do not account for toxicity, the Discharger shall take action as described in Section 5.A.8. Accelerated Monitoring Schedule of this MRP.

5.C. Reporting of Toxicity Monitoring Results

5.C.1. The Discharger shall submit either a summary page or the full laboratory report for all toxicity testing as an attachment to CIWQS for the reporting period (e.g., monthly, quarterly, semi-annually or annually) and provide the data (i.e., Pass/Fail) in the PET tool for uploading into CIWQS. The laboratory report shall include:

5.C.1.a. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the toxicity IWC for the discharge, the dates of sample collection and initiation of each toxicity test, all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE investigations.

5.C.1.b. The statistical analysis used in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010) Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1.

5.C.1.c. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

5.C.2. TRE/TIE results. The Colorado River Basin Water Board shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. Prior to the completion of the final TIE/TRE report, the Discharger shall provide status updates in the monthly monitoring reports, indicating which TIE/TRE steps are underway and which steps have been completed.

5.C.2.a. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon written request from the Colorado River Basin Water Board.

6. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

7. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

8. RECEIVING WATER MONITORING REQUIREMENTS

8.A. Monitoring Location RSW-001

8.A.1. The Discharger shall monitor "G" Drain at RSW-001 as follows. If no receiving water is present at RSW-001, no receiving water monitoring data is required for station RSW-001.

Table E-7. Receiving Water Monitoring Requirements – RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and
pH	Standard Units	Grab	1x/Quarter	See Section 1.E of the MRP
Temperature	Degree F	Grab	1x/Quarter	See Section 1.E of the MRP
Dissolved Oxygen	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Total Dissolved Solids	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Hardness (as $CaCO_3$)	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Nitrates, as N	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Nitrites, as N	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Ammonia, as N	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Total Nitrogen as N	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Total Phosphate as P	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Priority Pollutants[18]	µg/L	Grab	1x/Year	See Section 1.F of the MRP

8.B. Monitoring Location RSW-002

8.B.1. The Discharger shall monitor "G" Drain at RSW-002 as follows. If no receiving water is present at RSW-002, no receiving water monitoring data is required for station RSW-002.

[18] All Priority Pollutants as defined by the California Toxics Rule (CTR) codified at 40 CFR section 131.38.

Table E-8. Receiving Water Monitoring Requirements – RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and
pH	Standard Units	Grab	1x/Quarter	See Section 1.E of the MRP
Temperature	Degree F	Grab	1x/Quarter	See Section 1.E of the MRP
Dissolved Oxygen	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Hardness	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Nitrates, as N	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Nitrites, as N	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Ammonia, as N	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Total Nitrogen as N	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Total Phosphate as P	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
Total Dissolved Solids	mg/L	Grab	1x/Quarter	See Section 1.E of the MRP
E.coli	MPN or cfu/ 100 ml	Grab	1x/Quarter	See Section 1.E of the MRP

8.C. Visual Monitoring

8.C.1. In conducting the receiving water sampling, a log shall be kept of the receiving water conditions at Monitoring Locations RSW-001 and RSW-002. Notes on receiving water conditions shall be summarized in the monthly monitoring report and when data is submitted electronically via the SMR module in the CIWQS Program, data shall be reported in the “Attachments” section. Attention shall be given to the presence or absence of:

8.C.1.a. Floating or suspended matter;

8.C.1.b. Discoloration;

8.C.1.c. Aquatic life (including plants, fish, shellfish, birds);

8.C.1.d. Visible film, sheen, or coating;

8.C.1.e. Fungi, slime, or objectionable growths; and

8.C.1.f. Potential nuisance conditions.

9. OTHER MONITORING REQUIREMENTS

9.A. Pretreatment Monitoring

In the event that significant industrial wastewater is being discharged to the wastewater treatment facility, the Discharger shall provide the Colorado River Basin Water Board with an annual report describing the pretreatment program activities over the previous twelve (12) month period and it shall include:

9.A.1. A summary of actions taken by the Discharger which ensures industrial-user compliance;

9.A.2. An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders; and

9.A.3. The name and address of each user that received a revised discharge limit.

In the event that an approved pretreatment program is required, the Discharger shall submit a pretreatment program to obtain approval.

10. REPORTING REQUIREMENTS

10.A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

10.A.1. The Discharger shall report the results of chronic toxicity testing, TRE, and TIE as required in Section 5, “Effluent Toxicity Testing”.

10.A.2. The results of any analysis taken more frequently than required using analytical methods and/or monitoring procedures and performed at the locations specified in this MRP shall be reported to the Colorado River Basin Water Board.

10.A.3. The Discharger shall ensure laboratory analytical results are consistent with the requirements contained in 40 C.F.R. part 136 with regard to significant figures. 40 C.F.R. part 136 specifies for some analytical methods, the number of significant figures to which measurements are made.

10.A.4. If there is no discharge during any reporting period, the report shall so state.

10.B. Electronic Self-Monitoring Reports (eSMRs)

10.B.1. The Discharger shall submit electronic Self-Monitoring Reports (eSMRs) using the State Water Board’s CIWQS Program website: http://www.waterboards.ca.gov/ciwqs/index.html. The CIWQS website will

provide additional information for eSMR submittal in the event there will be a planned service interruption for electronic submittal.

10.B.2. The Discharger shall maintain sufficient staffing and resources to ensure it submits eSMRs for the duration of the term of this permit including any administrative extensions. This includes provision of training and supervision of individuals (e.g., Discharger personnel or consultant) on how to prepare and submit eSMRs.

10.B.3. The Discharger shall report in the eSMR the results for all monitoring specified in this MRP under Sections 3 through 9. The Discharger shall submit monthly, quarterly, semi-annual, and annual eSMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. eSMRs are to include all new monitoring results obtained since the last eSMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the eSMR.

10.B.4. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-9. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Beginning	Monitoring Period	SMR Due Date
Continuous	December 1, 2020	All	Submit with monthly eSMR
Daily 1x/Day	December 1, 2020	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly eSMR
Weekly 1x/Week	December 1, 2020	Sunday through Saturday	Submit with monthly eSMR
Monthly 1x/Month	December 1, 2020	1st day of calendar month through last day of calendar month	First day of second month from end of monitoring period
Quarterly 1x/Quarter 4x/Year	December 1, 2020	December 1 through February 31 March 1 through May 30 June 1 through August 30 September 1 through November 31	April 1 July 1 October 1 January 1

Sampling Frequency	Monitoring Period Beginning	Monitoring Period	SMR Due Date
Semiannually 2x/Year	December 1, 2020	December 1 through May 31 June 1 through November 30	July 1 January 1
Annually 1x/Year	December 1, 2020	December 1 through November 30	February 1

10.B.5. Reporting Protocols. The Discharger shall follow the procedure in 40 C.F.R. part 136 when reporting the results of analytical determinations of chemical constituents in a sample using the following reporting protocols:

10.B.5.a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample). For reporting concentration and calculated values in the PET tool follow these instructions:

1) Reporting Concentration - Under the “Qualifier” column select “=” and under the “Result” column report the result (concentration).

2) Reporting Calculated Values - Under the “Qualifier” column select “=” and under the “Result” column report the result (calculated value).

10.B.5.b. Sample results less than the RL, but greater than or equal to the laboratory’s MDL, shall be reported under the “Qualifier” column as “DNQ” (Detected, but Not Quantified). For the purposes of data collection, the laboratory shall write the estimated chemical concentration under the “Result” column next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory. For reporting concentration and calculated values in the PET tool follow these instructions:

1) Reporting Concentration – Under the “Qualifier” column select “DNQ,” under the “Result” column report the estimated chemical concentration. In addition, the MDL shall be reported under the “MDL” column and the ML shall be reported under the “ML” column.

2) Reporting Calculated Values – Under the “Qualifier” column select “<”, under the “Result” column report the calculated value or in the case of mass loading report the average monthly effluent limitation for mass loading.

10.B.5.c. Sample results less than the laboratory’s MDL shall be reported as “ND” (Not Detected). For reporting concentration and calculated values in the PET tool follow these instructions:

1) Reporting Concentration – Under the “Qualifier” column select “ND” and report the MDL under the “MDL” column.

2) Reporting Calculated Values - Under the “Qualifier” column select “<”, under the “Result” column report the calculated value (Flow, MGD x 8.34 x MDL (use correct units)) or in the case of mass loading report the average monthly effluent limitation for mass loading.

10.B.5.d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

10.B.6. Multiple Sample Data. If the Permit an AMEL, AWEL, or MDEL for pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

10.B.6.a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

10.B.6.b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

10.B.7. Formatting of eSMRs. The Discharger shall submit eSMRs in accordance with the following requirements:

10.B.7.a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the Facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

10.B.7.b. The Discharger shall attach a cover letter to the eSMR. 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 for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation. In addition, the Discharger shall add these violations into CIWQS.

10.B.7.c. The Discharger shall upload the Whole Effluent Toxicity Test result page or entire report for the reporting period under the attachment tab for the reporting period.

10.B.7.d. The Discharger shall upload the laboratory reports for the analysis of the priority pollutant for the reporting period under the attachment tab for the reporting period. The Discharger shall evaluate the results with the criteria and notify the Colorado River Basin Regional Board of any exceedance of the criteria.

10.C. Discharge Monitoring Reports (DMRs)

10.C.1. DMRs are USEPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with eSMRs using the Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic eSMR submittal. Information about electronic DMR submittal is available at the DMR website at: (http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring).

10.C.1.a. The Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA study; or

10.C.1.b. The Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from their own laboratories or their contract laboratories.

The Discharger shall submit annually the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study to the State Water Board's Quality Assurance Officer who will send the DMR-QA Study results or the results of the most recent Water Pollution Performance Evaluation Study to USEPA's DMR-QA Coordinator and Quality Assurance Manager.

The key components of the study are listed below.

1) The study period is the entire 12 months of each calendar year. However, participation earlier in the year would allow for extra time in the event that sample retesting is necessary.
2) Laboratories may use the same sample data that is normally generated under their certification/accreditation obligations.
3) Please submit electronic data files along with PDF copies from the approved Proficiency Testing (PT) vendors. The vendor will provide electronic data files (CSV) in the form of the standard EPA data file transfer protocols for uploading into the State Water Board database for this study. You are responsible for ensuring the testing data is received by the State Water Board.

10.D. Other Reports

10.D.1. Special Studies. The Discharger shall report the results of any special studies required by Special Provisions – 6.C.2. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – 6.C.7. The Discharger shall submit reports with reports with the eSMR scheduled to be submitted on or immediately following the report due date.

10.D.2. Operations and Maintenance Report. The Discharger shall report the following as shown in Table E-10:

Table E-10. Operations and Maintenance Report

Activity	Reporting Frequency
The amount of chemical used (i.e., chlorine, de-chlorinating agent, etc) shall be monitored daily and summarized monthly. The Discharger shall provide a certification statement in the annual report that inspections and documentation of inspections and operation/maintenance problems have been completed.	1x/Month
To inspect and document any operation/maintenance problems by inspecting each unit process. The Discharger shall provide a certification statement in the annual report that inspections and documentation of inspections and operations/maintenance problems have been completed.	1x/Year
Calibration of flow meters and mechanical equipment shall be performed in a timely manner and documented. The Discharger shall provide a certification statement in the annual report that the calibration of flow meters and mechanical equipment has been conducted and documentation of such calibrations is maintained.	1x/Year
The Discharger shall maintain documentation of all logbooks (operation and maintenance), chain of custody sheets, laboratory and sampling activities as stated in Standard Provisions Sections 4 and 5 (Attachment D). The Discharger shall provide a certification statement in the annual report that maintenance of logbooks, chain of custody sheets, and laboratory and sampling activities as required is being implemented.	1x/Year
The Discharger shall conduct an annual review and evaluation of priority pollutant sampling results collected each year to evaluate the impact on surface water quality and provide this evaluation in the annual report.	1x/Year

ATTACHMENT F – FACT SHEET

TABLE OF CONTENTS

1. PERMIT INFORMATION 3
2. FACILITY DESCRIPTION 5
2.A. Description of Wastewater and Biosolids Treatment and Controls 5
2.B. Discharge Points and Receiving Waters 5
2.C. Summary of Previous Requirements and Self-Monitoring (SMR) Data 5
2.D. Past Compliance Summary 8
2.E. Planned Changes 9
3. APPLICABLE PLANS, POLICIES, AND REGULATIONS 9
3.A. Legal Authorities 9
3.B. California Environmental Quality Act (CEQA) 9
3.C. State and Federal Laws, Regulations, Policies, and Plans 9
3.D. Impaired Water Bodies on the Clean Water Act Section 303(d) List 12
3.E. Other Plans, Policies and Regulations 13
4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS 14
4.A. General Information 14
4.B. Discharge Prohibitions 14
4.C. Technology-Based Effluent Limitations 16
4.D. Water Quality-Based Effluent Limitations (WQBELs) 18
4.E. Final Effluent Limitation Considerations 28
4.F. Interim Effluent Limitations – Not Applicable 31
4.G. Final Effluent Limitations 31
4.H. Land Discharge Specifications – Not Applicable 33
4.I. Recycling Specifications – Not Applicable 33
5 RATIONALE FOR RECEIVING WATER LIMITATIONS 33
5.A. Surface Water 33
5.B. Groundwater – Not Applicable 33
6. RATIONALE FOR PROVISIONS 33
6.A. Standard Provisions 33
6.B. Special Provisions 34
7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS 36
7.A. Influent Monitoring 36
7.B. Effluent Monitoring 36
7.C. Whole Effluent Toxicity Testing Requirements 37
7.D. Receiving Water Monitoring 38
7.E. Other Monitoring Requirements 38
8. PUBLIC PARTICIPATION 39
8.A. Notification of Interested Persons 39
8.B. Written Comments 40
8.C. Public Hearing 40
8.D. Reconsideration of Waste Discharge Requirements 40
8.E. Information and Copying 41

8.F. Register of Interested Persons 41
8.G. Additional Information 41

TABLE OF TABLES

Table F-1. Facility Information 3
Table F-2. Historic Effluent Limitations and Monitoring Data (EFF-001A) 5
Table F-3. Historic Effluent Limitations and Monitoring Data (EFF-001B) 8
Table F-4. Historic Effluent Limitations and Monitoring Data (EFF-001C) 9
Table F-5. Effluent Characteristics 10
Table F-6. Violations Report Summary 10
Table F-7. Basin Plan Beneficial Uses 10
Table F-8. Summary of Technology-based Effluent Limitations 10
Table F-9. Basis for Limitations 10
Table F-10. Applicable Beneficial Uses and Water Quality Criteria and Objectives 21
Table F-11. Summary of Reasonable Potential Analysis 23
Table F-12. Summary of Water Quality-based Effluent Limitations 28
Table F-13. Summary of Final Effluent Limitations 33

ATTACHMENT F – FACT SHEET

As described in Section 2.B of this Order, the Colorado River Basin Water Board incorporates this Fact Sheet as findings of the Colorado River Basin Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

1. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

Table F-1. Facility Information

WDID	**7A130102041**
Discharger	City of Calipatria
Name of Facility	Calipatria Wastewater Treatment Plant
Facility Address	106 Lindsey Road Calipatria, CA 92233 Imperial County
Legally Responsible Official	Romualdo Medina, City Manager (760) 677-1121; rj_medina@calipatria.com
Facility Contact, Title and Phone	Raul Bernal, Operator (760) 960-1794; rbernalch@live.com
Authorized Person to Sign and Submit Reports	Romualdo Medina, City Manager; Raul Bernal, Operator
Mailing Address	125 North Park Avenue, Calipatria, CA 92233
Billing Address	SAME
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A

WDID	**7A130102041**
Pretreatment Program	N
Recycling Requirements	N
Facility Permitted Flow	1.73 million gallons per day (MGD)
Facility Design Flow	1.73 MGD
Watershed	Brawley H.A. (Hydrologic Unit No. 723.10)
Receiving Water	“G” Drain (a tributary to Alamo River)
Receiving Water Type	Agricultural Drain

1.A. The City of Calipatria (Discharger) is the operator of the Calipatria Wastewater Treatment Plant (Facility), a Publicly-Owned Treatment Works (POTW). The City of Calipatria owns the property at 106 Lindsey Road, Calipatria, CA 92233 on which the Facility is located. For the purposes of this Order, references to the “Discharger” or “Permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

1.B. The Facility discharges wastewater to the “G” Drain, which is tributary to the Alamo River and a water of the United States. The Discharger was previously regulated by Order R7-2015-0005 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0105015, adopted on June 11, 2015. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

1.C. When applicable, state law requires dischargers to file a petition with the State Water Board, Division of Water Rights and receive approval for any change in the point of discharge, place of use, or purpose of use of treated wastewater that decreases the flow in any portion of a watercourse. The State Water Board retains separate jurisdictional authority to enforce any applicable requirements under Water Code section 1211.

1.D. The Discharger filed a report of waste discharge and submitted an application for reissuance of its WDRs and NPDES permit on October 18, 2019. The application was deemed complete on November 15, 2019. A site visit was conducted on September 17, 2020, to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.

1.E. Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. However, pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the discharger

complies with all federal NPDES requirements for continuation of expired permits. The City of Calipatria has complied with these requirements; therefore, although the permit expired on June 30, 2020, it was administratively extended.

2. FACILITY DESCRIPTION

The Discharger owns and operates a wastewater collection, treatment and disposal system (Facility) and provides service to a population of approximately 8,000 located in the City of Calipatria as well as the Calipatria State Prison. The wastewater treatment plant has a treatment capacity of 1.73 MGD and is located in the SE quadrant of Section 6, T12S, R14E, SBB&M.

2.A. Description of Wastewater and Biosolids Treatment and Controls

Wastewater from the City of Calipatria and the Calipatria State Prison is collected at two lift stations. The Delta Lift Station receives all the city's sewage and pumps it to the Facility through a 10-inch diameter, 2-mile long PVC force main. The lift station located at the Calipatria State Prison pumps sewage to the Facility through a 12-inch diameter, 2.5-mile long force main. The Delta Lift Station does not employ preliminary treatment before conveying the city's raw sewage to the Facility. The prison's lift station is equipped with a comminutor and a rotating bar screen to remove large solids and floatable materials before conveying the Calipatria State Prison's raw sewage to the Facility.

The wastewater treatment plant consists of a four-cell aerated lagoon system. Treatment consists of removal of large solids and floatable materials by a comminutor and rotating bar screen at Calipatria State Prison's lift station only (the city's lift station does not undergo preliminary treatment); clarification within the Facility's four aerated lagoon ponds operating in series; and disinfection with sodium hypochlorite and dechlorination with sodium bisulfite. To date, the WWTP has not generated sufficient accumulated solids to warrant removal.

Wastewater is discharged from Discharge Point 001 to the "G" Drain, a tributary to the Alamo River, a water of the United States.

2.B. Discharge Points and Receiving Waters

Final effluent is discharged through Discharge Point 001 at Latitude 33° 8' 50.9" North and Longitude 115° 33' 10" West, to the "G" Drain. The permitted maximum daily flow limitation is equal to the design capacity of the wastewater treatment plant, which is 1.73 MGD. The discharge consists of secondary and equivalent to secondary treated wastewater.

2.C. Summary of Previous Requirements and Self-Monitoring (SMR) Data

Effluent limitations contained in prior Order R7-2015-0005 for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from the term of the prior order are as follows in Table F-2:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Flow	MGD	1.73	--	--	0.831	0.76	0.96
BOD_5	mg/L	45	65	---	---	---	61
TSS	mg/L	30	45	---	---	---	60
pH	s.u.	---	---	6.0 – 9.0[19]	---	---	7.16 – 7.95[20]
Oil and Grease	mg/L	---	---	25	---	---	228
Copper	µg/L	9.2	---	19	---	---	175.3
Zinc	µg/L	86	---	159	---	---	102.2
Bis(2-ethylhexyl) Phthalate	µg/L	5.9	---	12	---	---	19.9
Residual Chlorine	mg/L	0.01	---	0.02	---	---	.02
Escherichia coli (E. coli)	MPN/ 100 ml	126[21]	---	400[22]	---	---	240
Fecal Coliform	*MPN/ 100 mL*	*200*	*--*	*400*[23]	*81*	*--*	*240*
4,4'-DDT	µg/L	---	---	0.001	---	---	< 0.01
Nitrates as N	mg/L	---	---	---	---	---	26.84
Nitrites as N	mg/L	---	---	---	---	---	8.3
Total Nitrogen	mg/L	---	---	---	---	---	49
Ammonia as N	mg/L	---	---	---	---	---	40
Total Phosphate as P	mg/L	---	---	---	---	---	13
Orthophosphate as P	mg/L	---	---	---	---	---	8.61
Total Dissolved Solids (TDS)	mg/L	---	---	---	---	---	1350
Sulfate	mg/L	---	---	---	---	---	93

[19] This range represents the instantaneous minimum and maximum pH limitations, respectively.
[20] This represents the range of reported pH values.
[21] Based on a minimum of not less than five samples for any 30-day period.
[22] No sample shall exceed 400 MPN/100 ml.
[23] No more than ten percent of the total fecal coliform samples collected during any 30-day period shall exceed a MPN of 400 per 100 milliliters.

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Chloride	mg/L	---	---	---	---	---	94
Hardness	mg/L	---	---	---	---	---	700
Temperature	°F	---	---	---	---	---	88
Chronic Toxicity (*Ceriodaphnia dubia*)	TU_c	See footnote # 21	---	---	---	---	1
Chronic Toxicity - Reproduction (*Ceriodaphnia dubia*)	TU_c	See footnote # 21	---	---	---	---	1
Chronic Toxicity - Survival (*Pimephales promelas*)	TU_c	See footnote # 21	---	---	---	---	1
Chronic Toxicity – Growth (*Pimephales promelas*)	TUc	See footnote # 21	---	---	---	---	1

The ROWD described the existing discharge as follows:

Annual Average Effluent Flow – 0.59 MGD

Maximum Daily Effluent Flow – 0.96 MGD

Average Daily Effluent Flow – 0.60 MGD

The ROWD described the effluent characteristics in Table F-5 as follows:

Table F-3. Effluent Characteristics

Parameter	Units	Maximum Daily	Average Daily
pH (Minimum)	s.u.	6.95	--
pH (Maximum)	s.u.	8.09	--
Temperature (Winter)	°F	58.1	56.4
Temperature (Summer)	°F	88.3	85.4
BOD_5	mg/L	37.8	18.42
Fecal Coliform	MPN/100 mL	130	31.63
TSS	mg/L	28.8	19.82

Parameter	Units	Maximum Daily	Average Daily
Ammonia, as N	mg/L	7.28	3.41
Dissolved Oxygen	mg/L	9.6	7.4
Total Kjeldahl Nitrogen, as N	mg/L	28.3	23.62
Nitrate+Nitrite, as N	mg/L	26.8	13.45
Oil and Grease	mg/L	28.7	1.78
Phosphorus, as P	mg/L	9.77	6.26
Total Dissolved Solids	mg/L	1288	1202

2.D. Past Compliance Summary

A review of the available effluent monitoring data, submitted in the Discharger's Self-Monitoring Reports, indicate that the Discharger had reported the following violations:

Table F-4. Violations Report Summary

Date of Exceedance	Violation Type	Parameter	Permit Limitations	Reported Value	Units
11/6/2015	Maximum Daily	Oil and Grease	25	228	mg/L
6/7/2017	Maximum Daily	Bis(2-ethylhexyl) Phthalate	12	19.9	µg/L
11/2/2018	Maximum Daily	Oil and Grease	25	28.7	mg/L
4/3/2019	Maximum Daily	Oil and Grease	25	35.2	mg/L

A staff enforcement letter was sent to the Discharger referencing the bis(2-ethylhexyl) phthalate on August 7, 2017. On October 8, 2018, a conditional settlement offer was extended to the Discharger regarding any noncompliance for oil and grease and bis(2-ethylhexyl) phthalate. On April 11, 2019, the Discharger settled the alleged violations via the expedited payment letter (EPL) process.

2.E. Planned Changes

The Discharger indicated within the Report of Waste Discharge submitted on October 18, 2019, that there are no planned changes at the Facility during the upcoming permit term.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

3.A. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this Facility to waters of the United States**.**

3.B. California Environmental Quality Act (CEQA)

This Order serves as both an NPDES permit for discharges subject to the Clean Water Act and as WDRs for discharges subject to the California Water Code. Pursuant to Water Code section 13389, this action to adopt an NPDES permit is exempt from CEQA (Public Resources Code section 21000 et seq.). Under California Code of Regulations, title 14, section 15301, the Colorado River Basin Water Board's action in approving those parts of the Order that implement state law is also exempt from CEQA, because the Facility is an existing facility with negligible or no expansion of existing use.

3.C. State and Federal Laws, Regulations, Policies, and Plans

3.C.1. Water Quality Control Plan. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), which was adopted on November 17, 1993 and amended most recently on January 8, 2019, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The requirements in this Order implement the Basin Plan and protect existing and potential beneficial uses of the receiving water, which are as follows:

Table F-5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	"G" Drain (Imperial Valley Drains)	Existing: Fresh Water Replenishment (FRSH); Water Contact Recreation (REC-I)[24]; Non-Contact Water Recreation (REC-II); Warm Freshwater Habitat (WARM); Wildlife Habitat (WILD); and Support of Rare, Threatened, or Endangered Species (RARE).[25]

3.C.2. Thermal Plan. The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan) on January 7, 1971 and amended this plan on September 18, 1975. The plan contains temperature objectives for surface waters.

3.C.3. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.

3.C.4. State Implementation Policy. On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and CTR and to the objectives for priority pollutant established by the Colorado River Basin Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

3.C.5. Emergency Planning and Community Right to Know Act. Water Code section 13263.6(a) requires the Colorado River Basin Water Board to prescribe effluent

[24] Unauthorized use.
[25] Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by case basis is upon the California Department of Fish and Wildlife on its own initiative and/or at the request of the Colorado River Basin Water Board; and such substantiation must be provided within a reasonable time frame as approved by the Colorado River Basin Water Board.

limitations for POTWs for all substances that the most recent toxic chemical release data reported to the state emergency response commission pursuant to section 313 of the Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. § 11023) indicate as discharged into the POTW, for which the State Water Board or the Colorado River Basin Water Board has established numeric water quality objectives, and has determined that the discharge is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to, an excursion above any numeric water quality objective.

3.C.6. Stormwater Requirements. USEPA promulgated federal regulations for stormwater on November 16, 1990 in 40 C.F.R. parts 122, 123, and 124. The NPDES Industrial Stormwater Program regulates stormwater discharges from wastewater treatment facilities. Wastewater treatment plants are applicable industries under the stormwater program and are obligated to comply with the federal regulations.

3.C.7. Endangered Species Act Requirements. 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, §§ 2050 to 2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

3.C.8. Sewage Sludge and Biosolids. This Order does not authorize any act that results in violation of requirements administered by USEPA to implement 40 C.F.R. part 503, Standards for the Use or Disposal of Sewage Sludge. These standards regulate the final use or disposal of sewage sludge that is generated during the treatment of domestic sewage in a municipal wastewater treatment facility. The Discharger is responsible for meeting all applicable requirements of 40 C.F.R. part 503 that are under USEPA's enforcement authority.

3.C.9. Antidegradation Policy. 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality of high quality waters be maintained unless degradation is justified based on specific findings. The Colorado River Basin Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

3.C.10. Anti-Backsliding Requirements. Sections 402(o) and 303(d)(4) of the Clean Water Act and federal regulations at 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that

effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

3.C.11. Water Rights. Prior to making any change in the point of discharge, place of use or purpose of use of treated wastewater that results in a decrease of flow in any portion of the surface or subterranean stream, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change from the State Water Board. The State Water Board retains the jurisdictional authority to enforce such requirements under Water Code section 1211.

3.C.12. Statewide Bacteria Provisions. The State Water Board adopted *Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Bacteria Provisions and Water Quality Standards Variance Policy* (ISWEBE) through Resolution No. 2018-0038, which was approved by the Office of Administrative Law (OAL) on February 4, 2019 and became effective upon USEPA approval on March 22, 2019. The plan adopts new statewide bacteria objectives for coastal and non-coastal waters designated for water contact recreation (REC 1) and establishes *E. coli* as the sole indicator of pathogens in freshwater. These numeric water quality objectives are already effective statewide and supersede the objectives currently listed in the Basin Plan, except for site specific objectives and narrative water quality objectives.

3.D. Impaired Water Bodies on the Clean Water Act Section 303(d) List

Section 303(d) of the federal Clean Water Act requires states to identify waterbodies that do not meet water quality standards and are not supporting their beneficial uses after implementation of technology-based effluent limitations on point sources. Each state must submit an updated list, the 303(d) List of Impaired Waterbodies (303(d) List) every 2 years. In addition to identifying the waterbodies that are not supporting beneficial uses, the 303(d) List also identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. On July 15, 2015, the USEPA gave final approval to California's 2012 303(d) List for waters in the Colorado River Basin Region.

3.D.1. "G" Drain

The 303(d) List classifies the Imperial Valley Drains, which includes "G" Drain, as impaired by chlordane, DDT (Dichlorodiphenyltrichloroethane), dieldrin, PCBs (Polychlorinated biphenyls), sedimentation/siltation, selenium, and toxaphene. The Colorado River Basin Water Board developed a Total Maximum Daily Load (TMDL) for sedimentation/siltation that applies to certain Imperial Valley Drains (not including the "G" Drain), as well as a sedimentation/siltation TMDL that applies to the Alamo River and addresses discharges to the "G" Drain, discussed further below.

3.D.2. The Alamo River

The Alamo River, to which the "G" Drain is tributary, is listed as impaired for chlordane, chloride, chlorpyrifos, DDT, diazinon, dieldrin, indicator bacteria

(enterococcus and *E. coli*), malathion, PCBs, sediment/siltation, selenium, toxaphene, and toxicity.

A sedimentation/siltation TMDL for the Alamo River was approved by USEPA on June 28, 2002. The sedimentation/siltation TMDL establishes a Waste Load Allocation (WLA) for the Calipatria Wastewater Treatment Plant for sediment of 491.9 tons per year. The TSS effluent limitations for secondary treatment standards as specified in 40 C.F.R. part 133 are 30 mg/L as a monthly average and 45 mg/L as a weekly average. If the Discharger were to discharge at its maximum design flow rate of 1.73 MGD every day for a year at a concentration equal to the monthly average effluent limitation, the Facility would not exceed the WLA of 491.9 tons per year of sediment.

Calculation of Average Monthly Effluent Limitation (mass-based):

$$30\frac{mg}{L} * 1.73\ MGD * 8.34 = 432.8\ lbs/day$$

Calculation of TSS loading rate:

$$432.8\frac{lbs}{day} * \frac{1\ ton}{2000\ lbs} * \frac{365\ days}{1y\ ear} = 78.8\frac{tons}{year}$$

The technology-based TSS effluent limitations contained in this Order comply with the WLA for sediment established in the Alamo River sedimentation/siltation TMDL.

3.D.3. The Salton Sea

The Alamo River is tributary to the Salton Sea. The 303(d) List classifies the Salton Sea as impaired by arsenic, chloride, chlorpyrifos, DDT, enterococcus, low dissolved oxygen, nitrogen-ammonia (total ammonia), nutrients, salinity, and toxicity. The Colorado River Basin Water Board has not developed TMDLs addressing these impairments to date. TMDLs developed and implemented in the sea's tributaries will positively affect the water quality of the Salton Sea. Tributaries to the Salton Sea, including the receiving water, may be affected by the development of TMDLs for the Salton Sea.

3.E. Other Plans, Policies and Regulations

3.E.1. Stormwater Management. For the control of stormwater discharged from the site of the wastewater treatment facilities, dischargers typically must seek authorization to discharge under and meet the requirements of the State Water Board's Order 2014-0057-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities*. At this time, the Facility is enrolled in the Industrial General Permit.

3.E.2. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ). The Sanitary Sewer Order, adopted on May 2, 2006, is applicable to all "federal and state agencies,

municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the Sanitary Sewer Order is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The Discharger has obtained coverage under the Sanitary Sewer Order, and the Discharger's WDID number is 7SSO10516.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

4.A. General Information

The Clean Water Act requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under Clean Water Act section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 C.F.R. section 122.44(d)(1)(vi).

Effluent and receiving water limitations in this Order are based on the federal Clean Water Act, the Basin Plan, the State Water Board's plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology.

4.B. Discharge Prohibitions

4.B.1. Discharge Prohibition III.A. *(The discharge of waste to land is prohibited unless authorized in a separate waste discharge permit.)*
This prohibition has been retained from Order R7-2015-0005. The limitations and conditions established by the Order are based on specific information provided by the Discharger (including through the ROWD) and gained by the Colorado River Basin Water Board through site visits, monitoring reports, and by other means. Discharges of a character not contemplated by this Order, such as discharges to land, are inconsistent with Clean Water Act section 402's prohibition against discharges of pollutants except in compliance with the Act's

permit requirements, effluent limitations, and other enumerated provisions. This prohibition is also based on the Basin Plan to protect the beneficial uses of the receiving water from unpermitted discharges, and it is in keeping with the intent and requirements of Water Code sections 13260 through 13264.

4.B.2. Discharge Prohibition III.B. *(The discharge of treated wastewater from the Facility at a location or in a manner different from that described in this Order is prohibited.)*
This prohibition has been retained from Order R7-2015-0005. The limitations and conditions established by the Order are based on specific information provided by the Discharger (including through the ROWD) and gained by the Colorado River Basin Water Board through site visits, monitoring reports, and by other means. Discharges to surface waters at locations not contemplated by this Order, or discharges of a character not contemplated by this Order, are inconsistent with Clean Water Act section 402's prohibition against discharges of pollutants except in compliance with the Act's permit requirements, effluent limitations, and other enumerated provisions. This prohibition is also based on the Basin Plan to protect the beneficial uses of the receiving water from unpermitted discharges, and it is in keeping with the intent and requirements of Water Code sections 13260 through 13264.

4.B.3. Discharge Prohibition III.C. *(The discharge of trash from the Facility to the "G" Drain, a tributary to the Salton Sea, is prohibited.)*
This prohibition has been retained from Order R7-2015-0005. The Basin Plan prohibits conditions that create a nuisance.

4.B.4. Discharge Prohibition III.D. *(The bypass or overflow of untreated or partially-treated wastewater or wastes to the "G" Drain is prohibited, except as allowed under Sections 1.G (Bypass) and 1.H (Upset) of Attachment D, Standard Provisions.)*
This prohibition has been retained from Order R7-2015-0005, with minor modifications. The discharge of untreated or partially-treated wastewater from the Discharger's collection, treatment, or disposal facility represents an unauthorized bypass pursuant to 40 C.F.R. section 122.41(m) or an unauthorized discharge which poses a threat to human health and/or aquatic life, and therefore is explicitly prohibited by this Order.

4.B.5. Discharge Prohibition III.E. *(The Discharge of waste in excess of the design treatment or disposal capacity of the system, 1.73 million gallons per day (MGD), is prohibited.)*
This prohibition has been retained from Order R7-2015-0005 and is based on the design capacity of the Facility. Exceedance of this capacity may result in effluent violations and/or the need to bypass untreated effluent blended with treated effluent, which is prohibited by this Order.

4.B.6. Discharge Prohibition III.F. *(The discharge of waste that causes contamination, pollution, or nuisance as defined in Water Code section 13050, subdivisions (k), (l), and (m), respectively, is prohibited.)*

This prohibition has been retained from Order R7-2015-0005, with minor modifications, and is based on section 13050 of the Water Code. The Basin Plan also prohibits conditions that create a nuisance or cause contamination or pollution.

4.C. Technology-Based Effluent Limitations

4.C.1. Scope and Authority

Section 301(b) of the Clean Water Act and implementing USEPA permit regulations at 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on secondary treatment standards at 40 C.F.R. part 133 and Best Professional Judgment (BPJ) in accordance with 40 C.F.R. section 125.3.

4.C.1.a Secondary Treatment Standards.

The federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established minimum performance requirements for POTWs (defined in section 304(d)(1)). Section 301(b)(1)(B) requires that such treatment works must, at a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator.

Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in 40 C.F.R. part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of BOD_5, TSS, and pH. Specifically, section 133.102 allows concentrations of up to 30 mg/L (monthly average) and up to 45 mg/L (weekly average) for BOD_5 and TSS. (40 C.F.R. § 133.102, (a)-(b).) The 30-day average percent removal of BOD_5 and TSS must not be less than 85 percent. (40 C.F.R. § 133.102(a)-(b).) The effluent values for pH must be maintained within the limits of 6.0 to 9.0. (40 C.F.R. § 133.102(c)).

4.C.1.b Equivalent to Secondary Treatment Standards.

Some biological treatment technologies, such as trickling filters or waste stabilization ponds, are capable of achieving significant reductions in BOD_5 and TSS but might not consistently achieve the secondary treatment standards for these parameters. Congress recognized that unless alternate limitations were set for facilities with trickling filters or waste stabilization ponds, which often are in small communities, such facilities could be required to construct costly new treatment systems to meet the secondary treatment standards even though their existing treatment technologies could achieve significant biological treatment. Congress included provisions in the 1981 amendments to the Clean Water Act Construction Grants program (Public Law 97-117, Section 23) that required USEPA to make allowances for alternative biological treatment

technologies, such as a trickling filters or waste stabilization ponds. In response to that requirement, in 1984, USEPA promulgated regulations at 40 C.F.R. section 133.105 that include alternative standards that apply to facilities using "equivalent to secondary treatment."

In order to be eligible for equivalent-to-secondary limitations, a POTW must meet all of the following criteria (40 C.F.R. § 133.101(g)):

i. The principal treatment process must be either a trickling filter or waste stabilization pond.

ii. The effluent quality consistently achieved, despite proper operations and maintenance, is in excess of secondary treatment effluent limits for BOD_5 and/or TSS.

iii. The treatment works provide significant biological treatment (defined as consistently achieving a 30-day average of at least 65 percent removal of BOD_5) of municipal wastewater.

The "equivalent to secondary treatment" standards allow concentrations of *up to* 45 mg/L (monthly average) and *up to* 65 mg/L (weekly average) for BOD_5 and TSS. (40 C.F.R. § 133.105(a)-(b).) There is no change allowed to secondary treatment standards in 40 C.F.R. section 133.102(c) for pH. (40 C.F.R. § 133.105(c)).

4.C.2. Applicable Technology-Based Effluent Limitations

4.C.2.a. This Facility, through use of current system (i.e., aeration lagoons), meets the technology-based regulations for the minimum level of effluent quality attainable through secondary treatment standards for TSS and pH and through equivalent to secondary treatment standards for BOD_5 and removal efficiency for BOD_5 and TSS as summarized in Table F-6, below.

The previous Order R7-2015-0005 established technology-based effluent limitations to meet the applicable equivalent to secondary standards with adjustments for BOD_5 and TSS, removal efficiency for BOD_5, and pH. These effluent limitations have been revised based on evaluation of performance data for the period from July 2015 through June 2020. Federal regulations at 40 C.F.R. part 133.101(f) define the effluent concentrations consistently achievable through proper operation and maintenance as: 1) the 95th percentile value of the 30-day average effluent quality achieved in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions; and 2) a 7-day average value equal to 1.5 times the value derived for the 95th percentile value of the 30-day average. According to analysis of TSS data collected for the period from July 2018 through July 2020, the 95th percentile value of the 30-day average concentrations is 28.9 mg/L. The 7-day average is therefore 43.4 mg/L (1.5 times 28.9 mg/L). The Facility demonstrates the ability to comply with secondary treatment standards for TSS; therefore, this Order establishes an average monthly effluent limitation of 30 mg/L and an average weekly effluent

limitation of 45 mg/L for TSS, based on secondary treatment standards. In addition, an analysis of the influent and effluent TSS monitoring data indicate the Facility is able to meet the equivalent to secondary treatment standards for TSS removal efficiency (minimum of 65 percent); therefore, this Order establishes an average monthly percent removal limitation of a minimum of 65 percent. The mass-based effluent limitations are based on a design flow rate of 1.73 MGD.

Table F-6. Summary of Technology-based Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instant. Minimum	Instant. Maximum
Flow	MGD	1.73	---	---	---	---
BOD_5	mg/L	45	65	---	---	---
BOD_5	lbs/day[26]	649	938	---	---	---
Removal Efficiency for BOD_5	%	65	---	---	---	---
pH	s.u.	---	---	---	6.0	9.0
TSS	mg/L	30	45	---	---	---
TSS	lbs/day	433	649	---	---	---
Removal Efficiency for TSS	%	65	---	---	---	---

4.C.2.b. Basis for Limitations:

Table F-7. Basis for Limitations

Parameters	Basis for Limitations
Flow	BPJ at 40 C.F.R. § 125.3
Biochemical Oxygen Demand (BOD) (5 day @ 20 Deg. C)	40 C.F.R. § 133.105(a)
Total Suspended Solids (TSS)	40 C.F.R. § 133.102(b)
pH	40 C.F.R. § 133.102(c)
Removal Efficiency for BOD_5 and TSS	40 C.F.R. § 133.105(a)-(b)

4.D. Water Quality-Based Effluent Limitations (WQBELs)

4.D.1. Scope and Authority

Clean Water Act section 301(b) and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality

[26] Mass-based effluent limitations are based upon a maximum flow of 1.73 MGD.

standards.

40 C.F.R. section 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under Clean Water Act section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

4.D.2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan establishes the beneficial uses for surface water bodies in the Colorado River Basin Region. The beneficial uses of the "G" Drain and its tributaries the Alamo River and the Salton Sea have been described earlier in the Fact Sheet. The Basin Plan also specifies narrative and numeric water quality objectives applicable to surface water.

The CTR and SIP contain specific numeric objectives for toxic substances and the procedures used to implement the objectives. Table F-8 summarizes the applicable water quality criteria/objectives for priority pollutants reported in detectable concentrations in the effluent or receiving water, as well as those pollutants for which effluent limitations existed in Order R7-2015-0005. The hardness value used to conduct the Reasonable Potential Analysis (RPA) was 400 mg/L, which is the minimum hardness value of the receiving water upstream of Discharge Point 001 (RSW-001). These criteria were used in conducting the RPA for this Order.

Table F-8. Applicable Beneficial Uses and Water Quality Criteria and Objectives

CTR No.	Parameter	Most Stringent Criteria µg/L	Acute (Freshwater) µg/L	Chronic (Freshwater) µg/L	Organisms Only (Human Health) µg/L
1	Antimony	4,300	---	---	4,300
2	Arsenic	150	340	150	---

CTR No.	Parameter	Most Stringent Criteria µg/L	Acute (Freshwater) µg/L	Chronic (Freshwater) µg/L	Organisms Only (Human Health) µg/L
4	Cadmium	5.15	13.04	5.15	Narrative
6	Copper	21.66	35.44	21.66	---
7	Lead	11.16	286.38	11.16	Narrative
9	Nickel	115.54	1,039.21	115.54	4,600
10	Selenium	5.00	20.00	5.00	Narrative
12	Thallium	6.30	---	---	6.30
13	Zinc	276.23	265.72	276.23	---
14	Cyanide	5.20	22	5.20	220,000
68	Bis (2-Ethylhexyl) Phthalate	5.90	---	---	5.90
81	Di-n-Butyl Phthalate	12,000	---	---	12,000

4.D.3. Determining the Need for WQBELs for Priority Pollutants

NPDES regulations at 40 C.F.R. 122.44(d) require effluent limitations to control all pollutants which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard.

The SIP, a statewide policy that became effective on May 22, 2000, establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP include methods to determine reasonable potential (for pollutants to cause or contribute to excursions above state water quality standards) and to establish numeric effluent limitations, if necessary, for those pollutants that show reasonable potential.

Section 1.3 of the SIP requires the Colorado River Basin Water Board to use all available, valid, relevant, and representative receiving water and effluent data and information to conduct a reasonable potential analysis. The reasonable potential analysis was performed based on available priority pollutant monitoring data collected by the Discharger from analyses of annual samples collected during the period from June 2015 through January 2020 for priority pollutants.

Some freshwater water quality criteria for metals are hardness dependent; i.e., as hardness decreases, the toxicity of certain metals increases and the applicable water quality criteria become correspondingly more stringent. The

hardness value used to conduct the reasonable potential analysis (RPA) was 400 mg/L as $CaCO_3$.

To conduct the reasonable potential analysis, the Colorado River Basin Water Board identified the maximum observed effluent (MEC) and background (B) concentrations for each priority pollutant from receiving water and effluent data provided by the Discharger and compared this data to the most stringent applicable water quality criterion (C) for each pollutant from the NTR, CTR, and Basin Plan. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential:

a. Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limit is needed.

b. Trigger 2 – If background water quality (B) > C and the pollutant is detected in the effluent, a limit is needed.

c. Trigger 3 – If other related information, such as a 303(d) listing for a pollutant, discharge type, compliance history, etc., indicates that a WQBEL is required.

Based on the RPA, the discharge demonstrates reasonable potential to cause or contribute to an excursion above the water quality objectives for copper. From July 2015 through June 2020, the Discharger reported three detections of copper in the discharge at concentrations higher than the water quality criteria for freshwater.

The discharge also demonstrates reasonable potential to contribute to an excursion above a water quality standard for Bis(2-Ethylhexyl) Phthalate. For that pollutant, the Discharger reported data for 57 samples collected during the permit term. All results, with the exception of three, were reported as non-detect. The Discharger reported analytical results of 0.73 µg/L, 2 µg/L, and 19.9 µg/L for Bis(2-Ethylhexyl) Phthalate. With these detections, and applicable water criteria of 5.9 µg/L, the Colorado River Basin Water Board has determined that the discharge demonstrates reasonable potential to cause or contribute to an excursion above a water quality standard for Bis(2-Ethylhexyl)Phthalate.

Data evaluated in the RPA for priority pollutants reported in detectable concentrations in both the receiving water and the effluent, including those pollutants for which effluent limitations existed in Order R7-2015-0005, is summarized below.

Table F-9. Summary of Reasonable Potential Analysis

CTR No.	Priority Pollutant	Applicable Water Quality Criteria (C) µg/L	Max. Effluent Concentration (MEC) µg/L	Max. Detected Receiving Water Concentration (B) µg/L	RPA Result – Effluent Limit Required?	Reason
1	Antimony	4,300	<0.2	0.99	No	MEC < C & B
2	Arsenic	150	4.4	18.6	No	MEC < C & B
4	Cadmium	3.73	<0.12	0.56	No	MEC < C & B
5a	Chromium (III)	319.65	1	9.5	No	MEC < C & B
5b	Chromium (VI)	11.43	<0.4	<0.4	No	MEC < C & B is ND
6	Copper	14.68	175.3	22	Yes	MEC > C
7	Lead[27]	6.25	3.1	12	No	MEC < C & B
8	Mercury	0.051	<0.022	<0.022	No	MEC < C & B is ND
9	Nickel	81.72	4.7	19	No	MEC < C & B
10	Selenium[27]	5.00	1.8	46	No	MEC < C & B
13	Zinc	187.83	102.2	56	No	MEC < C & B
26	Chloroform	No Criteria	7	0.8	No	NC
36	Methylene Chloride	1,600	<0.15	< 0.15	No	MEC < C & B
68	Bis(2-ethylhexyl) phthalate	5.9	19.9	7	Yes	MEC > C
108	4,4'-DDT	0.00059	<0.01	< 0.01	No	MEC < C & B

[27] The background concentrations of lead and selenium in the receiving water are above the applicable water quality criteria. The concentrations of these constituents in the effluent is considerably lower than the most stringent applicable water quality criteria and the receiving water concentrations. No WQBELs were therefore calculated for these two constituents.

4.D.4. WQBEL Calculations for Priority Pollutants

Final WQBELs for priority pollutants are based on monitoring results and following the calculation process outlined in Section 1.4 of the SIP. A table providing the calculations for all applicable WQBELs for this Order is provided in Attachment G of this Order.

4.D.4.a. WQBELs Calculation Example

Using copper as an example, the following demonstrates how WQBELs based on an aquatic life criterion were established for Order R7-2020-0010. The process for developing these limits is in accordance with Section 1.4 of the SIP. Attachment G summarizes the development and calculation of all WQBELs for this Order using the process described below.

Step 1: For each constituent requiring an effluent limit, identify the applicable water quality criteria or objective. For each criterion determine the effluent concentration allowance (ECA) using the following steady state equation:

$ECA = C + D(C-B)$ when $C>B$, and

$ECA = C$ when $C<= B$,

Where	C	The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value from the receiving water of 400 mg/L (as $CaCO_3$) was used for development of hardness-dependent criteria, and a pH of 7.84 was used for pH-dependent criteria.
	D	The dilution credit, and
	B	The ambient background concentration

For this Order, dilution was not allowed due to the nature of the receiving water and quantity of the effluent; therefore:

$ECA = C$

For copper, the applicable water quality criteria are:

ECA_{acute}= 51.68

$ECA_{chronic}$= 30.50

$ECA_{human\ health}$= Narrative

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

LTA_{acute}[16.59] = ECA_{acute}[51.68] x $Multiplier_{acute}$[0.321]

$LTA_{chronic}$[16.07]= $ECA_{chronic}$[30.50] x $Multiplier_{chronic}$[0.527]

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6.

Step 3: For the AMEL and MDEL, use the most limited LTA calculated in the previous step.

$AMEL_{aquatic\ life}$[24.9] = LTA[16.07] x AMEL $multiplier_{95}$[1.55]

$MDEL_{aquatic\ life}$[50.1] = LTA[16.07] x MDEL $multiplier_{99}$[3.11]

For copper:

$AMEL_{aquatic\ life}$ = 24.9

$MDEL_{aquatic\ life=}$ 50.1

Step 4: Currently there is no water quality criteria regarding human health for copper. For pollutants that do have applicable human health criteria, additional calculations are done to compare effluent limits for average monthly and max daily effluent limits based on each criterion.

Step 5: Select the lower of the AMEL and MDEL based on aquatic life and human health (If applicable) as the water-quality based effluent limit for the Order.

$AMEL_{aquatic\ life}$	$MDEL_{aquatic\ life}$	$AMEL_{human\ health}$	$MDEL_{human\ health}$
24.9 µg/L	50.1 µg/L	Not Applicable	Not Applicable

The lowest (most restrictive) effluent limits are based on aquatic life and were incorporated into this Order.

4.D.5. WQBELs for Non-Priority Pollutants

Pursuant to 40 C.F.R. section 122.44(d), the Colorado River Basin Water Board must establish effluent limitations to control non-priority pollutants that have the reasonable potential to cause or contribute to an excursion above any state water quality standard.

4.D.5.a. Bacteria

Raw domestic wastewater inherently contains bacteria and human pathogens that threaten human health and aquatic life and constitutes a threatened pollution and nuisance under Water Code section 13050 if discharged untreated to the receiving water. In light of the operational and discharge characteristics of the Facility, there exists reasonable potential for an exceedance of water quality objectives for bacteria and WQBELs are required.

The State Water Board adopted *Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Bacteria Provisions and Water Quality Standards Variance Policy* (ISWEBE) through Resolution No. 2018-0038, which was approved by OAL on February 4, 2019 and became effective upon USEPA approval on March 22, 2019. The plan adopts statewide bacteria objectives for coastal and non-coastal waters designated for water contact recreation (REC 1) and establishes *E. coli* as the sole indicator of pathogens in freshwater. These numeric water quality objectives are already effective statewide and supersede the objectives currently listed in the Basin Plan, except for site specific objectives and narrative water quality objectives. Pursuant to Part 3 of the ISWEBE, the Imperial Valley Drains, which have a REC 1 designated use, must not have bacterial densities in excess of the following:

> ***E. Coli*.** A six-week rolling geometric mean (GM) of Escherichia coli (E. coli) not to exceed 100 colony forming units (cfu) per 100 milliliters (mL), calculated weekly and a statistical threshold value (STV) of 320 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

Effluent limitations for *E. coli* are incorporated in this Order. The bacterial indicator of *E. coli* is used to estimate the presence of pathogens in the wastewater effluent discharged to Discharge Point 001. The effluent limitations for *E. coli* help determine the effectiveness of the municipal wastewater treatment facility's disinfection system. These effluent limitations will ensure that water quality objectives for bacteria will be maintained.

4.D.5.b. Chlorine

Chapter 3 of the Basin Plan contains a narrative water quality objective for surface water that states, "No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses." This narrative objective applies to the chemical chlorine.

Because the wastewater treatment process involves chlorination, the discharge demonstrates a reasonable potential to cause or contribute to an excursion in

the receiving water above the water quality objective. As described above, chlorination is used as an oxidizing biocide.

This Order carries forward the effluent limitations from the previous Order based on USEPA's *National Ambient Water Quality Criteria for the Protection of Freshwater Aquatic Life* (NAWQC) recommend 4-day average (chronic) and 1-hour average (acute) criteria for chlorine of 0.011 mg/L and 0.019 mg/L, respectively. The Colorado River Basin Water Board calculates effluent limitations for CTR and non-CTR parameters using the procedures outlined in the SIP and the USEPA *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001), which contain statistical methods for converting chronic (4-day) and acute (1-hour) aquatic life criteria to average monthly and instantaneous maximum daily effluent limitations based on the variability of the existing data and the expected frequency of monitoring.

The effluent limitations for total chlorine residual are based on the Basin Plan's narrative toxicity objective and USEPA's *NAWQC* (rounded to two significant figures) of 0.01 mg/L as the average monthly maximum and 0.02 mg/L as the instantaneous maximum.

4.D.5.c. Oil and Grease

In the section for Aesthetic Qualities, the Basin Plan states: "All waters shall be free from substances attributable to wastewater of domestic or industrial origin or other discharges which adversely affect beneficial uses not limited to: floating as debris, scum, grease, oil, wax, or other matter that may cause nuisance."

Oil and grease and floating material are pollutants that may be found in sanitary waste from households, businesses, and industries, and POTWs typically are designed to remove these constituents. Oil and grease and floating material removal is typically achieved during primary treatment. Based on information included in self-monitoring reports submitted by the Discharger, effluent samples for oil and grease indicate their presence in the effluent (20 out of 58 detectable concentrations ranging from 1.76 mg/L to 35.2 mg/L). Therefore, the discharge demonstrates a reasonable potential to cause or contribute to a receiving water excursion above the Basin Plan's narrative objective for oil and grease and floating material.

This Order carries forward the effluent limitation for oil and grease from the previous Order R7-2015-0005 and establishes a maximum daily effluent limitation (MDEL) for oil and grease to implement the narrative water quality objective contained in the Basin Plan and protect the beneficial uses of the "G" Drain. The effluent limitation for oil and grease is based on the numeric limitation (MDEL) included in the adopted General Order R7-2015-0006, *NPDES Permit for Low Threat Discharges to Surface Waters Within the Colorado River Basin Region*.

4.D.5.d. Whole Effluent Toxicity (WET)

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to aquatic organisms or that produce other detrimental response(s) in aquatic organisms. A detrimental response includes, but is not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota.

The SIP requires the use of short-term chronic toxicity tests to determine compliance with the narrative toxicity objectives for aquatic life in the Basin Plan. The SIP requires that the Discharger demonstrate the presence or absence of chronic toxicity using tests on the fathead minnow, *Pimephales promelas*, the water flea, *Ceriodaphnia dubia*, and the freshwater alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*). The MRP (Attachment E of this Order) requires toxicity monitoring two times a year to demonstrate compliance with the narrative toxicity objective.

The previous Order contained narrative toxicity language and triggers and established routine monitoring requirements. During the past permit term, the Discharger did not exceed any toxicity triggers during chronic toxicity testing. In addition, this Order establishes thresholds that, when exceeded, require the Discharger to conduct accelerated toxicity testing and/or conduct Toxicity Reduction Evaluation (TRE) studies.

Numeric chronic toxicity effluent limitations have not been included in the Order for consistency with the SIP, which implements narrative toxicity objectives in basin plans. The TST statistical method will be used to evaluate the toxicity data collected.

4.D.6. Summary of Water Quality-based Effluent Limitations

Table F-10. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper	µg/L	25.0	---	50.1	---	---
Copper	lbs/day[28]	0.36	---	0.72	---	---
Bis (2-Ethylhexyl) Phthalate	µg/L	5.9	---	12	---	---
Bis (2-Ethylhexyl) Phthalate	lbs/day	0.085	---	0.17	---	---

[28] The mass-based effluent limitations are based on a design capacity of 1.73 MGD.

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Oil and grease, Total	mg/L	---	---	25	---	---
Oil and grease, Total	lbs/day	---	---	361	---	---
Escherichia Coli (E. Coli)	cfu/100 ml[29]	100 (GM)[30]	---	320 (STV)[31]	---	---

4.E. Final Effluent Limitation Considerations

4.E.1. Anti-Backsliding Requirements

The Clean Water Act specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit, unless a less stringent limitation is justified based on exceptions to the anti-backsliding provisions contained in Clean Water Act sections 402(o) or 303(d)(4), or, where applicable, 40 C.F.R. section 122.44(l).

The effluent limitations for priority pollutants in this Order are at least as stringent as the effluent limitations in the previous Order. The effluent limitation for Bis(2-ethylhexyl) phthalate has been retained, while new limits have been set for copper based on current discharge monitoring data and a reasonable potential analysis.

Effluent limitations for fecal coliform are removed in this Order based on the new statewide water quality objectives for bacterial indicators in REC 1 waters found in Part 3 of the ISWEBE, effective on March 22, 2019. The Part 3 of the ISWEBE establishes *E. coli* as the sole indicator of pathogens in freshwater and sets new numeric water quality objectives for bacterial indicators that supersede the prior objectives for bacteria in the Basin Plan. The new objectives are more stringent than prior objectives and more protective of human health based on a risk protection level of 32 illnesses per 1,000 recreators. The objectives are derived from USEPA's 2012 recommended Clean Water Act section 304(a) criteria for bacteria.

The narrative TDS "effluent" limitation in the previous Order was actually a receiving water limitation, with compliance measured as the discharge not

[29] cfu/100 mL = colony forming units per 100 milliliters

[30] Six-week Rolling Geometric Mean. The rolling geometric mean shall be calculated using at least 5 sample results over a 6-week period from a site using the following formula:

GM = $n\sqrt{(x1)(x2)(x3)\cdots(xn)}$, where x is the sample value and n is the number of samples taken.

[31] STV = statistical threshold value, not to be exceeded by more that 10 percent of samples collected in a calendar month, calculated in a static manner.

causing the concentration of TDS in the receiving water to exceed an annual average concentration of 4,000 mg/L or a maximum daily concentration of 4,500 mg/L. This Order retains the same receiving water requirements in Section 5.A.13. Namely, this Order still requires, as before, that the discharge not cause the concentration of TDS in the Imperial Valley Drains to exceed an annual average concentration of 4,000 mg/L or a maximum daily concentration of 4,500 mg/L. As such, the anti-backsliding requirements do not apply to the removal of the narrative TDS "effluent" limitation, because the removal of this limitation has not resulted in any less stringent requirements in the permit.

This above-described relaxations of effluent limitations are consistent with the anti-backsliding requirements of the Clean Water Act and federal regulations.

4.E.2. Antidegradation Policies

The permitted surface water discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

The discharge from the Facility contains conventional pollutants (BOD_5, TSS, bacteria, oil and grease, and pH) that are controlled through best practicable control technology currently available (BPT) and best available technology economically achievable (BCT) to prevent exceedances of water quality objectives for those pollutants and adverse impacts on the beneficial uses of the "G" Drain. Additionally, the TSS effluent limitations are in compliance with the WLA established in the sedimentation/siltation TMDL for the Alamo River and are protective of beneficial uses. The discharge also contains TDS, but at concentrations significantly below the 4,000 mg/L water quality objective for the receiving water.

Two priority pollutants, copper and bis(2-ethylhexyl) phthalate, have been measured in the effluent. This Order establishes WQBELs for these pollutants based on the water quality criteria established in the CTR and through an RPA. The established WQBELs for copper and bis(2-ethylhexyl) phthalate prevent adverse impacts to the beneficial uses of the "G" Drain and ensure compliance with the Basin Plan.

The Colorado River Basin Water Board has determined that some limited degradation of receiving water from the Facility discharge is consistent with the federal and state antidegradation policies, because any limited 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 measures by the Discharger; (c) is primarily limited to waste constituents typically encountered in similar domestic wastewater; (d) does not unreasonably effect any present or anticipated beneficial uses of surface water prescribed in the Basin Plan, and will not result in the violation of any water quality objective; and (e) is consistent with the maximum benefit to the people of the state.

The discharge from the Facility as permitted herein reflects best practicable treatment and control (BPTC) for the subject wastewater. The control is intended

to ensure that the discharge does not create a condition of pollution or nuisance and that the highest "background" water quality will be maintained. The Facility incorporates:

1) Technology for secondary treated domestic wastewater;
2) Effluent disinfection;
3) Sludge handling facilities;
4) An operation and maintenance manual;
5) Staffing to assure proper operation and maintenance; and
6) A standby emergency power generator of sufficient size to operate the necessary treatment units during periods of loss of commercial power.

Degradation of surface water by some of the typical waste constituents associated with wastewater from POTWs is consistent with the maximum benefit to the people of the state. The discharge is necessary to provide essential public services for the City of Calipatria and surrounding areas by providing wastewater treatment to local businesses and residents, which is an important benefit to the state. The Discharger also supports the economic prosperity of the community by the employment of fulltime and part-time personnel at the plant. Based on the foregoing, the discharge as permitted herein is consistent with the federal and state antidegradation policies.

4.E.3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations on BOD_5,TSS, percent removal, and pH are specified in federal regulations in 40 C.F.R. part 133 and on flow through BPJ under 40 C.F.R. section 125.3. The permit's technology-based pollutant restrictions are no more stringent than those typically required by the Clean Water Act. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The scientific procedures for calculating the individual WQBELs for toxic pollutants are based on the CTR-SIP, which was approved by the USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the Clean Water Act.

4.F. Interim Effluent Limitations – Not Applicable

4.G. Final Effluent Limitations

Table F-11 below summarizes the proposed effluent limitations for the discharge from the treatment system through Discharge Point 001. Proposed effluent limitations are based on secondary and equivalent to secondary treatment standards, the California Toxics Rule, and Colorado River Basin Plan water quality standards.

The previous Order (R7-2015-0005) established TBELs for BOD_5, TSS, and BOD_5 percent removal based on based on equivalent-to-secondary treatment standards with further adjustment for TSS. The effluent limitations for BOD_5 and BOD_5 percent removal, have been included in this Order.

The previous Order contained WQBELs for *E. coli*, oil and grease, chlorine, and bis(2-ethylhexyl) phthalate; they are included in this Order with modifications. A new effluent limitation for copper is established based on the results of the RPA in accordance with requirements of the CTR and SIP.

4.G.1 Mass-based Effluent Limitations

Title 40 C.F.R. section 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and section 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in section 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g., CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water.

Mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)

Where: Mass = mass limitation for a pollutant (lbs/day)

Effluent limitation = concentration limit for a pollutant (mg/L)

Flow rate = discharge flow rate (MGD)

4.G.2. Final Effluent Limitations

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the MRP.

Table F-11. Summary of Final Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instant. Min.	Instant. Max.	Basis
Flow	MGD	---	---	1.73	---	---	BPJ
Biochemical Oxygen Demand (BOD) (5 day @ 20 Deg. C)	mg/L	45	65	---	---	---	40 C.F.R. 133
Biochemical Oxygen Demand (BOD) (5 day @ 20 Deg. C)	lbs/day [32]	649	938	---	---	---	40 C.F.R. 133
Suspended Solids, Total (TSS)	mg/L	30	45	---	---	---	40 C.F.R. 133
Suspended Solids, Total (TSS)	lbs/day	433	649	---	---	---	40 C.F.R. 133
Oil and Grease	mg/L	---	---	25	---	---	Basin Plan
Oil and Grease	lbs/day	---	---	361	---	---	Basin Plan
Residual Chlorine	mg/L	0.01	---	---	---	0.02	Basin Plan
Residual Chlorine	lbs/day	0.14	---	---	---	---	Basin Plan
Copper	µg/L	25.0	---	50.1	---	---	CTR, SIP
Copper	lbs/day	0.36	---	0.72	---	---	CTR, SIP
Bis (2-Ethylhexyl) Phthalate	µg/L	5.9	---	12	---	---	CTR, SIP
Bis (2-Ethylhexyl) Phthalate	lbs/day	0.085	---	0.17	---	---	CTR, SIP

4.G.2.a. Percent Removal: The average monthly percent removal of BOD 5-day 20ºC and TSS shall not be less than 65 percent.

[32] The mass-based effluent limitations are based on a design capacity of 1.73 MGD.

4.G.2.b. Toxicity: There shall be no toxicity in the treatment plant effluent, nor shall the treatment plant effluent cause any toxicity in the receiving water, as defined in Section 5 of the MRP. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or toxicity tests of appropriate duration or other appropriate methods specified by the Colorado River Basin Water Board.

4.G.2.c. Bacteria: The bacterial concentrations in the wastewater effluent discharged to the "G" Drain shall not exceed the following concentrations, as measured by the following bacterial indicator:

E. Coli. A six-week rolling geometric mean (GM) of Escherichia coli (E. coli) not to exceed 100 colony forming units (cfu) per 100 milliliters (mL), calculated weekly and a statistical threshold value (STV) of 320 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

4.H. Land Discharge Specifications – Not Applicable

4.I. Recycling Specifications – Not Applicable

5 RATIONALE FOR RECEIVING WATER LIMITATIONS

5.A. Surface Water

Clean Water Act section 303, subdivisions (a) through (c), require states to adopt water quality standards, including water quality criteria where necessary to protect beneficial uses. The Colorado River Basin Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The Basin Plan includes numeric and narrative water quality objectives for various beneficial uses and water bodies. This Order contains receiving surface water limitations based on the Basin Plan numerical and narrative water quality objectives for biostimulatory substances, color, chemical constituents, dissolved oxygen, oil, grease and floating material, pH, pesticides, settleable substances, tastes and odors, temperature, toxicity, and turbidity.

5.B. Groundwater – Not Applicable

6. RATIONALE FOR PROVISIONS

6.A. Standard Provisions

6.A.1. The Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and

with those additional conditions that are applicable under 40 C.F.R. section 122.42.

6.A.2. Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 C.F.R. section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2), because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

6.B. Special Provisions

6.B.1. Reopener Provisions

This section is based on 40 C.F.R. parts 122 through 124. The Colorado River Basin Water Board may reopen the permit to modify permit conditions and requirements. Causes for modification include, but are not limited to, the promulgation of new regulations, modification in sludge use or disposal practices, or the adoption of new regulations by the State Water Board or Colorado River Basin Water Board, including revisions to the Basin Plan.

6.B.2. Special Studies and Additional Monitoring Requirements

6.B.2.a. TRE Work Plan. This provision is based on the SIP, Section 4, Toxicity Control Provisions.

6.B.2.b. Optional Translator Study. This provision is based on the SIP and allows the Discharger to conduct an optional translator study, based on the SIP and at the Discharger's discretion. This provision is based on the need to gather site-specific information in order to apply a different translator from the default translator specified in the CTR and SIP. Without site-specific data, the default translators are used with the CTR criteria.

6.B.2.c. DMR-QA Study. This provision is based on section 308 of the Clean Water Act (33 U.S.C. § 1318). USEPA requires major and selected minor dischargers under the NPDES Program to participate in the annual DMR-QA Study Program. See Section 7.E.1 below.

6.B.3. Best Management Practices and Pollution Prevention

6.B.3.a. Pollutant Minimization Program. This provision is based on the requirements of Section 2.4.5 of the SIP.

6.B.3.b. Spill Response Plan. This provision is based on the requirements of 40 C.F.R. section 122.41(e) and the previous Order.

6.B.3.c. Stormwater. This provision is based on Water Quality Order 2014-0057-DWQ, NPDES General Permit No. CAS000001, *General Permit for Storm Water Discharges Associated with Industrial Activities*.

6.B.4. Construction, Operation, and Maintenance Specifications

6.B.4.a. Facility and Treatment Operation. This provision is based on the requirements of 40 C.F.R. section 122.41(e) and the previous Order.

6.B.4.b. Treatment Basins. These provisions are included to ensure compliance with requirements established in this Order, and are based on the Clean Water Act, USEPA regulations, the Water Code, and Colorado River Basin Water Board plans and policies.

6.B.4.c. Operations Plan for Proposed Plant Modification. This provision is based on Water Code section 13385(j)(1)(D) in which the Discharger may adjust and test the expansion to the treatment system. This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting or testing, including steps to prevent violations.

6.B.5. Special Provisions for Publicly-Owned Treatment Works (POTWs)

6.B.5.a. Sludge Disposal Requirements. Requirements are based on the previous Order and 40 C.F.R. part 503, 257, and 258.

6.B.5.b. Pretreatment Program Requirements. Requirements are based on the previous Order and 40 C.F.R. part 403. The Clean Water Act requires a discharger to implement a pretreatment program if the facility has a treatment capacity greater than 5 MGD and receives industrial users' pollutants which pass through or interfere with the operation of the POTW. Currently, the Facility has design treatment capacity of 1.73 MGD and only has an informal pretreatment program.

6.B.5.c. Collection Systems. The State Water Board issued *General Waste Discharge Requirements for Sanitary Sewer Systems,* Order 2006-0003-DWQ (Sanitary Sewer Order) on May 2, 2006. The Monitoring and Reporting Requirements for the Sanitary Sewer Order were amended by Water Quality Order WQ 2008-0002-EXEC on February 20, 2008. The Sanitary Sewer Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the order. The Sanitary Sewer Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Further, the Sanitary Sewer Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Inasmuch that the Discharger's collection system is part of the system that is subject to this Order, certain standard provisions are applicable as specified in Provisions, Section 6.C.5. For instance, the 24-hour reporting requirements in this Order are not included in the Sanitary Sewer Order. The Discharger must comply with both the Sanitary Sewer Order and this Order.

The Discharger is enrolled in the Sanitary Sewer Order, and the Discharger's WDID number is 7SSO10516.

6.B.6. Other Special Provisions

Special Provisions 6.C.6.a and 6.C.6.b are included to ensure the compliance with requirements established in this Order, and are based on the previous Order, the Clean Water Act, USEPA regulations, California Water Code, and Colorado River Basin Water Board plans and policies.

6.B.7. Special Provision Reporting Schedules

The reporting schedules specify the deliverables and due dates for the Spill Response Plan, TRE Workplan, DMR-QA Study, and PMP.

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Clean Water Act section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Colorado River Basin Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

7.A. Influent Monitoring

This Order carries forward the treatment plant influent monitoring requirements from Order R7-2015-0005.

7.B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP. This provision requires compliance with the MRP, and is based on 40 C.F.R. sections 122.44(i), 122.62, 122.63, and 124.5. The MRP is a standard requirement in NPDES permits (including this Order) issued by the Colorado River Basin Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the Water Code, and the Colorado River Basin Water Board's policies. The MRP also contains sampling programs specific to the Discharger's wastewater treatment facility. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Section 1.3 of the SIP, periodic monitoring is required for all priority pollutants defined by the CTR, for which the criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to

cause or contribute to an excursion above a water quality standard.

Monitoring for those pollutants expected to be present in the discharge from the Facility, EFF-001, will be required as shown in the proposed MRP and as required by the SIP.

Effluent monitoring requirements are largely unchanged from the previous Order; continuous monitoring for flow and total chlorine residual is continued as well as daily monitoring for pH and temperature, and twice monthly monitoring for TSS and BOD_5. In the previous permit, copper was being monitored once a year, while bis(2-ethylhexyl) phthalate was monthly. Effluent monitoring for bis(2-ethylhexyl) phthalate remains monthly. The increase to monthly monitoring for copper at monitoring location EFF-001 is to control the presence of those pollutants after its detection in the effluent. *E. coli* monitoring has been modified from five times per month to weekly according to the new statewide bacteria water quality objectives in Part 3 of the ISWEBE. Monitoring for oil and grease has been maintained monthly to determine compliance with effluent limitations. Monitoring for nitrite, nitrate, ammonia nitrogen, total nitrogen, total phosphate, ortho-phosphate, and total dissolved solids has been maintained at a monthly frequency.

7.C. Whole Effluent Toxicity Testing Requirements

7.C.1. Whole effluent toxicity (WET) testing requirements establish monitoring of the effluent to ensure that the receiving water quality is protected from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. This permit requires chronic toxicity testing.

7.C.2. This requirement establishes conditions and protocols by which compliance with the Basin Plan narrative water quality objective for toxicity will be demonstrated. Conditions include required monitoring and evaluation of the effluent for chronic toxicity and provide monitoring triggers that, when the test results in “Fail,” require the Discharger to initiate accelerated testing, TRE, and TIE procedures. The WET testing requirements in this Order include a screening phase and a monitoring phase of species testing. Screening is required during the first and fourth years of the permit term, to determine the most sensitive species that the Discharger will continue to use during the monitoring phase. This Order also includes implementation procedures for toxicity caused by ammonia, ionic imbalance, and elevated TDS concentrations.

7.C.3. The WET testing requirements contained in the MRP, Section 5 were developed based on the *Draft National Whole Effluent Toxicity* (WET) Implementation Guidance Under the NPDES Program (EPA 832-B-04-003), the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003), and *Technical Support Document for Water Quality-based Toxics Control* (EPA 833-5-91-100). This is the most current guidance available to the Colorado River Basin Water Board.

7.C.4. USEPA has developed a statistical approach that assesses the WET measurement of wastewater effects on specific test organisms' ability to survive, grow, and reproduce. The approach is called the Test of Significant Toxicity (TST) and is a statistical method that uses hypothesis testing techniques based on research and peer-reviewed publications. The TST approach examines whether an effluent at the critical concentration (e.g., in-stream waste concentration or IWC, as recommended in USEPA's *Technical Support Document* [EPA 833-5-91-100] and implemented under USEPA's WET NPDES permits program) and the control within a WET test differ by an unacceptable amount; i.e., the amount that would have a measured detrimental effect on the ability of aquatic organisms to thrive and survive. This Order requires the Discharger to utilize the TST approach in conducting WET testing.

7.C.5. The TST approach explicitly incorporates test power (the ability to correctly classify the effluent as nontoxic) and provides a positive incentive to generate valid, high quality WET data to make informed decisions regarding WET reasonable potential and permit compliance determinations. Once the WET test has been conducted, the TST approach is used to analyze the WET test results to assess whether the effluent discharge is toxic at the critical concentration. The TST approach is designed to be used for a two-concentration data analysis of the influent water concentration (IWC) or receiving water concentration (RWC) compared to a control concentration. Using the TST approach, permitting authorities like the Colorado River Basin Water Board have more confidence when making determinations as to whether a permittee's effluent discharge is toxic or non-toxic. Use of the TST approach does not result in any changes to USEPA's WET test methods; however, a facility might want to modify its future WET tests by increasing the number of replicates over the minimum required (U.S. EPA 1995, 2002a, 2002b, 2002c) by the approved USEPA WET test method to increase test power, which is the probability of declaring an effluent non-toxic if the organism response at the IWC is truly acceptable.

7.D. Receiving Water Monitoring

7.D.1. Surface Water

Surface water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water pursuant to the Basin Plan. Monitoring requirements for the receiving water are unchanged from the previous Order. Additionally, annual monitoring for priority pollutants in the upstream receiving water has been continued, as required in accordance with the SIP.

7.D.2. Groundwater – Not Applicable

7.E. Other Monitoring Requirements

7.E.1. Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program

Under the authority of section 308 of the Clean Water Act (33 U.S.C. § 1318), USEPA requires major and selected minor dischargers under the NPDES Program to participate in the annual DMR-QA Study Program. The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits. There are two options to satisfy the requirements of the DMR-QA Study Program: (1) the Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) per the waiver issued by USEPA to the State Water Board, the Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from its own laboratories or its contract laboratories. A Water Pollution Performance Evaluation Study is similar to the DMR-QA Study and also evaluates a laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES Program. The Discharger shall ensure that the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board. The State Water Board's Quality Assurance Program Officer will send the DMR-QA Study results or the results of the most recent Water Pollution Performance Evaluation Study to USEPA's DMR-QA Coordinator and Quality Assurance Manager.

7.E.2. Pretreatment Monitoring

The federal Clean Water Act section 307(b) and federal regulations at 40 C.F.R. part 403 require POTWs to develop an acceptable industrial pretreatment program. A pretreatment program is required to prevent the introduction of pollutants which will interfere with treatment plant operations or sludge disposal and prevent pass through of pollutants that exceed water quality objectives, standards, or permit limitations. These monitoring and reporting requirements are established pursuant to 40 C.F.R. part 403 to evaluate the industrial source of constituents in the wastewater.

8. PUBLIC PARTICIPATION

The Colorado River Basin Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the City of Calipatria Wastewater Treatment Plant. As a step in the adoption process, the Colorado River Basin Water Board staff has developed tentative WDRs and has encouraged public participation in the WDRs adoption process.

8.A. Notification of Interested Persons

The Colorado River Basin Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following Notification (7-20-04) was provided through the Colorado River Basin Water Board's website.

The public had access to the agenda and any changes in dates and locations through the Colorado River Basin Water Board's website at:

http://www.waterboards.ca.gov/coloradoriver/board_info/agenda/

8.B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either by:

(1) mail to the Attn: Jose Valle de Leon, Colorado River Basin Water Board at 73-720 Fred Waring Drive, Suite 100, Palm Desert, CA 92260;

(2) email to Jose Valle de Leon at jose.valledeleon@waterboards.ca.gov; or

(3) fax to the Colorado River Basin Water Board office at (760) 341-6820, Attn: Jose Valle de Leon.

To be fully responded to by staff and considered by the Colorado River Basin Water Board, the written comments were due at the Colorado River Basin Water Board office by 5:00 p.m. on November 5, 2020.

8.C. Public Hearing

The Colorado River Basin Water Board held a public hearing on the tentative WDRs during its regular Board meeting at the following date and time, which was held by video and teleconference only:

Date:	November 12, 2020
Time:	9:00 a.m.
Location:	Virtual Meeting via Zoom Video and Teleconference

As a result of the COVID-19 emergency and the Governor's Executive Orders to protect public health by limiting public gatherings and requiring social distancing, the November 12, 2020 Board meeting occurred solely via remote presence. Links for the meeting, including a phone call option, were posted on the Colorado River Basin Water Board's website.

Interested persons were invited to attend. At the public hearing, the Colorado River Basin Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

8.D. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the Colorado River Basin Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

State Water Resources Control Board

Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100
Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a water quality petition for review, see: (http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml)

8.E. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Colorado River Basin Water Board by calling (760) 346-7491.

8.F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Colorado River Basin Water Board**,** reference this Facility, and provide a name, address, and phone number.

8.G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Jose Valle de Leon at (760) 776-8940.

ATTACHMENT G – SUMMARY OF WQBELs CALCULATIONS

The WQBELs developed for this Order are summarized below and were calculated as described in the methodology summarized in Attachment F, Fact Sheet and are contained in Section 4.D.4 of this Order.

Table G-1.Summary of WQBELs Calculations

CTR #	Parameter	AMEL HH = ECA = C HH only µg/L	MDEL/ AMEL multiplier	MDEL HH µg/L	ECA acute = C acute	ECA acute multiplier	LTA acute µg/L	ECA chronic = C chronic µg/L	ECA chronic multiplier	LTA chronic µg/L	Lowest LTA µg/L	AMEL multiplier 95	AMEL aquatic life	MDEL multiplier 99	MDEL aquatic life
6	Copper	---	2.01	---	51.68	0.321	16.60	30.50	0.527	16.09	16.09	1.55	25	3.11	50.1
68	Bis(2-Ethylhexyl) Phthalate	5.9	2.01	11.8	---	---	---	---	---	---	---	1.55	---	3.11	---

Table G-2 Summary of WQBELs Effluent Limitations

CTR #	Parameter	AMEL (µg/L)	MDEL (µg/L)
6	Copper	25	50.1
68	Bis(2-Ethylhexyl) Phthalate	5.9	11.8

ATTACHMENT H – BIOSOLIDS AND SLUDGE MANAGEMENT

1. BIOSOLIDS USE AND DISPOSAL REQUIREMENTS

1.1. All biosolids generated by the Discharger shall be reused or disposed of in compliance with the applicable portions of:

1.1.1. 40 C.F.R. part 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated. 40 C.F.R. part 503, Subpart B (land application) applies to biosolids placed on the land for the purpose of providing nutrients or conditioning the soil for crops or vegetation. 40 C.F.R. part 503, Subpart C (surface disposal) applies to biosolids placed on the land for the purpose of disposal.

1.1.2. 40 C.F.R. part 258: for biosolids disposed of in Municipal Solid Waste landfills.

1.1.3. 40 C.F.R part 257: for all biosolids disposal practices not covered under 40 C.F.R. part 258 or 503.

1.2. The Discharger is responsible for ensuring that all biosolids from the Facility are used or disposed of in accordance with 40 C.F.R. part 503, whether the Discharger reuses or disposes of the biosolids itself or transfers them to another party for further treatment, reuse, or disposal. The Discharger is responsible for informing subsequent preparers, appliers, or disposers of the requirements they must meet under 40 C.F.R. part 503.

1.3. The Discharger shall take all reasonable steps to prevent or minimize any biosolids use or disposal that may adversely impact human health or the environment.

1.4. No biosolids shall be allowed to enter wetland or other waters of the United States.

1.5. Biosolids treatment, storage, and use or disposal shall not contaminate groundwater.

1.6. Biosolids treatment, storage, and use or disposal shall not create a nuisance such as objectionable odors or flies.

1.7. The Discharger shall ensure that haulers who transport biosolids off site for further treatment, storage, reuse, or disposal take all necessary measures to keep the biosolids contained.

1.8. If biosolids are stored for over two years from the time they are generated, the Discharger must ensure compliance with all the requirements for surface disposal under 40 C.F.R. part 503, Subpart C, or must submit a written request to USEPA with the information enumerated in 40 C.F.R. section 503.20(b), requesting permission for longer temporary storage.

1.9. Sewage sludge containing more than 50 mg/kg Polychlorinated Biphenyls (PCBs) shall be disposed of in accordance with 40 C.F.R. part 761.

1.10. Any off-site biosolids treatment, storage, use, or disposal site operated by the Discharger within the Colorado River Basin Region that is not subject to its own WDRs, shall have facilities adequate to divert surface runoff from the adjacent area, to protect the site boundaries from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site to escape from the site. Adequate protection is defined as protected from at least a 100-year storm and from the highest tidal stage that may occur.

1.11. The USEPA or an authorized representative thereof, upon the presentation of credentials, shall be allowed by the Discharger, directly or through contractual arrangements with their biosolids management contractors, to:

1.11.1. Enter upon all premises where biosolids are produced by the Discharger and all premises where such biosolids are further treated, stored, used, or disposed, either by the Discharger or by another party to whom the Discharger transfers the biosolids for further treatment, storage, use, or disposal.

1.11.2. Have access to and copy any records that must be kept under the conditions of this permit or of 40 C.F.R. part 503, by the Discharger or by another party to whom the Discharger transfers the biosolids for further treatment, storage, use, or disposal.

1.11.3. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in the production of biosolids and further treatment, storage, use, or disposal by the Discharger or by another party to whom the Discharger transfers the biosolids for further treatment, storage, use, or disposal.

1.12. Monitoring shall be conducted as follows:

1.12.1. Biosolids shall be tested for the metals required in 40 C.F.R. section 503.16 (for land application) or section 503.26 (for surface disposal), using the methods in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (EPA SW-846), as required in section 503.8(b)(4), at the following minimum frequencies:

Volume (dry metric tons/year)	Frequency
0 – 290	once per year
290 – 1500	once per quarter
1500 – 15000	once per 60 days
> 15000	once per month

For accumulated, previously untested biosolids, the Discharger shall develop a representative sampling plan, which addresses the number and location of sampling points, and collect representative samples. Test results shall be expressed in milligrams of pollutant per kilograms of biosolids on a 100% dry weight basis. Biosolids to be land applied shall be

tested for Organic-N, ammonium-N, and nitrate-N at the frequencies required above.

1.12.2. Prior to land application, the Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 C.F.R. section 503.32. Prior to disposal in a surface disposal site, the Discharger shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.

1.12.3. For biosolids that are land applied or placed in a surface disposal site, the Discharger shall track and keep records of the operational parameters used to achieve vector attraction reduction requirements in 40 C.F.R. section 503.33(b).

1.12.4. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and federal facilities with greater than 5 MGD influent flow shall sample biosolids for pollutants listed under Clean Water Act section 307 (a) (as required in the pretreatment section of the permit for POTWs with pretreatment programs). Class 1 facilities and federal facilities with greater than 5 MGD influent flow shall test dioxins/dibenzofurans using a detection limit of less than 1 pg/g during their next sampling period if they have not done so within the past 5 years and once per 5 years thereafter.

1.12.5. The biosolids shall be tested annually or more frequently if necessary to determine hazardousness in accordance with California law.

1.12.6. If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

1.12.7. Biosolids placed in a municipal landfill shall be tested semi-annually by Method 9095: Paint Filter Liquids Test (EPA SW-846, 2004) to demonstrate that there are no free liquids.

1.13. The Discharger, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following 40 C.F.R. part 503 notification requirements:

1.13.1. A reuse/disposal plan shall be submitted to the USEPA Region IX Coordinator and to the state permitting agency, prior to the use or disposal of any biosolids from the Facility to a new or previously unreported site. The plan shall be submitted by the land applier of the biosolids and shall include, a description and a topographic map of the proposed site(s) for reuse or disposal, names and addresses of the applier(s) and site owner(s), and a list of any state or local permits which must be obtained. For land application sites, the plan shall include a description of the crops or vegetation to be grown, proposed nitrogen loadings to be used for the crops, and a groundwater monitoring plan if one exists.

1.13.2. If the biosolids do not meet 40 C.F.R. section 503.13, Table 3 metals concentration limits, the Discharger must require their land applier to contact the state permitting authority to determine whether bulk biosolids subject to the cumulative pollutant loading rates in 40 C.F.R. section 503.12(b)(2) have been applied to the site since July 20, 1993, and, if so, the cumulative amount of pollutants applied to date, and background concentration, if known. The Discharger shall then notify USEPA Region IX Coordinator of this information.

1.13.3. For biosolids that are land applied, the Discharger shall notify the applier in writing of the nitrogen content of the biosolids, and the applier's requirements under 40 C.F.R. part 503, including the requirements that the applier certify that the requirement to obtain information in Subpart A, and that the management practices, site restrictions, and any applicable vector attraction reduction requirements Subpart D have been met. The Discharger shall require the applier to certify at the end of 38 months following application of Class B biosolids that those harvesting restrictions in effect for up to 38 months have been met.

1.13.4. If bulk biosolids are shipped to another state or to tribal land, the Discharger must send written notice prior to the initial application of bulk biosolids to the permitting authorities in the receiving state or tribal land (the USEPA Regional Office for the area and the state/tribal authorities).

1.13.5. Notification of 40 C.F.R. part 503 non-compliance: The Discharger shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of any noncompliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Discharger shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of the non-compliance in writing within 10 working days of becoming aware of the non-compliance.

1.14. The Discharger shall submit an annual biosolids report to USEPA Region IX Biosolids Coordinator and the Colorado River Basin Water Board by **February 19 of each year** for the period covering the previous calendar year. The report shall include:

1.14.1. The amount of biosolids generated that year, in dry metric tons, and the amount accumulated from previous years.

1.14.2. Results of all pollutant monitoring required in the Monitoring Section above.

1.14.3. Descriptions of pathogen reduction methods, and vector attraction reduction methods, as required in 40 C.F.R. sections 503.17 and 503.27.

1.14.4. Results of any groundwater monitoring or certification by groundwater scientist that the placement of biosolids in a surface disposal site will not contaminate an aquifer.

1.14.5. Names and addresses of land appliers and surface disposal site operators, and volumes applied (dry metric tons).

1.14.6. Names and addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, or for other reuse/disposal methods not covered in N.3, above, and volumes delivered to each.

1.15. The Discharger shall require all parties contracted to manage their biosolids to submit an annual biosolids report to USEPA Region IX Biosolids Coordinator by **February 19 of each year** for the period covering the previous calendar year. The report shall include:

1.15.1. Names and addresses of land appliers and surface disposal site operators, name, location (latitude/longitude), and size (hectares) of site(s), volumes applied/disposed (dry metric tons) and for land application, biosolids loading rates (metric tons per hectare), nitrogen loading rates (kg/ha), dates of applications, crops grown, dates of seeding and harvesting and certifications that the requirement to obtain information in 40 C.F.R. section 503.12(e)(2), management practices in section 503.14 and site restrictions in section 503.32(b)(5) have been met.