CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

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WASTE DISCHARGE REQUIREMENTS ORDER R7-2025-0015

ORDER INFORMATION

Order Type(s):	Waste Discharge Requirements (WDRs)
Status:	ADOPTED
Program:	Non-15 Discharges to Land
Discharger(s):	California Department of Corrections and Rehabilitation
Facility:	Ironwood State Prison Wastewater Treatment Facility
Address:	19025 Wiley's Well Road, Blythe, California 92225
County:	Riverside County
APN(s):	879-040-006
GeoTracker ID:	WDR100027546
WDID:	7B330809001
Prior Order(s):	WDRs Order R7-2013-0033 WDRs Order 93-016 WDRs Order 87-055

CERTIFICATION

I, Michael Placencia, 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 June 3, 2025.

Original signed by
MICHAEL PLACENCIA
Executive Officer

GeoTracker ID: WDR100027546
WDID: 7B330809001

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GLOSSARY

Antidegradation Policy .....Statement of Policy with Respect to Maintaining High Quality Waters in California, State Water Resources Control Board Resolution 68-16

Basin Plan.....Water Quality Control Plan for Colorado River Basin Region (inclusive of all amendments)

bgs.....Below Ground Surface

BPTC .....Best Practicable Treatment and Control

CBOD5.....Five-Day Carbonaceous Biochemical Oxygen Demand at 20°C

CEQA.....California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.)

CEQA Guidelines.....Regulations for Implementation of CEQA (Cal. Code Regs., tit. 14, § 15000 et seq.)

DTSC .....California Department of Toxic Substances Control

DWR.....California Department of Water Resources

GPD .....Gallons per Day

MCL[s] .....Maximum Contaminant Level[s] for Drinking Water under Title 22

mg/L.....Milligrams per Liter

MGD.....Millions of Gallons per Day

MRP .....Monitoring and Reporting Program

NPDES.....National Pollutant Discharge Elimination System

ROWD.....Report of Waste Discharge

Title 22.....California Code of Regulations, Title 22

GLOSSARY

Title 23.....California Code of Regulations, Title 23

Title 27.....California Code of Regulations, Title 27

USEPA.....United States Environmental Protection Agency

WDRs.....Waste Discharge Requirements

WQO[s].....Water Quality Objective[s]

(findings begin on next page)

FINDINGS

The Colorado River Basin Regional Water Quality Control Board (Colorado River Basin Water Board) hereby finds as follows:

Introduction

1. This Order prescribes waste discharge requirements (WDRs) for California Department of Corrections and Rehabilitation (Discharger), which owns and operates the Ironwood State Prison Wastewater Treatment Facility (Facility) in Riverside County.

2. On September 5, 2024, the Discharger submitted a Report of Waste Discharge (ROWD) for updated WDRs and a name change for the Facility. Supplemental information was subsequently submitted on February 5, 2025.

3. The Facility and irrigation fields are located approximately 15 miles west of Blythe in Riverside County, Sections 16, 17, and 18, Township 7 South, Range 20 East, Mount San Bernardino Base and Meridian. The Facility is located within a 1,720-acre area owned by the Discharger. The Facility's location is also depicted on the map in **Attachment B**.

4. Regulatory coverage under this Order is strictly limited in scope to those waste discharges, activities and processes described and expressly authorized herein.

5. Pursuant to Water Code section 13264, subdivision (a), the Discharger is prohibited from initiating the discharge of new wastes (i.e., other than those described herein), or making material changes to the character, volume and timing of waste discharges authorized herein, without filing a new Report of Waste Discharge (ROWD) per Water Code section 13260. Failure to file a new ROWD before initiating material changes to the character, volume or timing of discharges authorized herein, shall constitute an independent violation of these WDRs.

6. This Order is also strictly limited in applicability to those individuals and/or entities specifically designated above as "Discharger," subject only to the discretion to designate or substitute new parties in accordance with this Order.

Facility

7. The Facility is a wastewater treatment and disposal facility (WWTF) that provides sewage service to Ironwood State Prison (ISP).

8. The Discharger also owns the wastewater collection system for the Facility that is regulated separately by State Water Board Order 2022-0103-DWQ for Sanitary Sewer Systems.

9. Key Facility features and design elements include preliminary treatment, primary treatment, secondary treatment, disinfection, effluent disposal, solids handling, and backup power.

10. The Facility is located at 19025 Wiley's Well Road, Blythe, CA 92225.

11. The Discharger produces its domestic water supply from six (6) on-site supply wells (two wells are currently inactive). Groundwater at the site is high in fluoride, arsenic, iron, and total dissolved solids. The Discharger operates an on-site water treatment plant (WTP), which has three (3) reverse osmosis (RO) units and two (2) activated aluminum units (AAU) to provide water treatment for domestic water supply.[1] In addition, there are five (5) cooling towers used for temperature control at the Facility.

12. The Facility has a secondary treatment design capacity of 2.70 million gallons per day (MGD). The process flow is shown in **Figure 2**, made part of this Order by reference. The treatment system consists of the following processes:

    a. Preliminary Treatment: ISP and Chuckawalla Valley State Prison (CVSP) each have its own headworks. The CVSP headworks is located within the Facility and the ISP headworks is located northeast of ISP. Effluent from the CVSP and ISP headworks comingle at the Facility at the influent splitter box located near the oxidation ditch. The ISP headworks consist of a grinder with perforated plate screen with an integral auger and washer/compactor. The bypass channel has a mechanically cleaned bar screen with a separate washer/compactor that is only used during high flows or when maintenance is required on the other screen. The screens remove debris from the wastewater to protect downstream equipment and prevent debris from getting into the wastewater treatment facility sludge.

[1] The waste streams from the RO and AAU processes were previously discharged to two (2) lined brine storage ponds. Because these waste streams were considered "Designated Waste" for the purposes of Water Code section 13173, they were required to be discharged to lined surface impoundments regulated under California Code of Regulations, title 27, section 20005 et seq. (Title 27). In lieu of compliance with Title 27 prescriptive standards, the Discharger elected to blend these waste streams with the Facility's treated effluent. The brine ponds were thereafter decommissioned.

Directly downstream of the ISP screens are the ISP influent pumps, which force influent flow from the headworks through a flowmeter through two parallel force mains to the oxidation ditch influent splitter box. The CVSP headworks are set up similarly to ISP headworks. CVSP's headworks has two mechanical screens, each with its own washer/compactor. The CVSP pumps are also directly downstream of the screens and pump influent from the CVSP headworks through a flow meter and into the oxidation ditch influent splitter box. CVSP has closed and only minimal wastewater from the WWTF office restrooms and the nearby fire station restrooms flows through CVSP headworks.

b. Primary Treatment: Effluent from the influent splitter box then goes through two carousel oxidation ditches that operate in parallel. The oxidation ditches contain alternating oxic and anoxic zones. The oxidation ditches provide biological nutrient removal as well as nitrification/denitrification to remove nitrogen from wastewater. Each oxidation ditch has an effluent structure that allows the flow to leave the ditch. From each effluent structure, the mixed liquor goes to a secondary splitter box.

c. Secondary Treatment: The secondary splitter box splits the mixed liquor from the oxidation ditch between four secondary clarifiers. The secondary clarifiers provide settling, thickening, and solids removal. Sludge that accumulates at the bottom of the clarifier is either sent to the oxidation ditch as return activated sludge (RAS) or wasted to the digester as waste activated sludge (WAS). The secondary clarifier effluent goes over the weirs and then to the chlorine contact basin.

d. Disinfection: The waste streams from the RO, AAU, and cooling tower processes are combined and piped to the head of the chlorine contact basin where the waste streams are comingled with secondary treated domestic wastewater. The chlorine contact basin provides disinfection with sodium hypochlorite.

e. Solids Handling: WAS from the secondary clarifiers is digested in an aerobic digester prior to being discharged to four sludge drying beds. The dried sludge is placed on a concrete lined sludge storage pad with runoff containment. Aged sludge is stored on the north side of the Facility for eventual removal by a legally permitted biosolids hauling contractor.

f. Back-up power: Back-up power is available for all collection system pump stations. All pump stations have both duty and standby pumps.

13. Disinfected wastewater is then retained in evaporation/percolation unlined storage ponds. A portion of the disinfected wastewater is disposed of by percolation and evaporation in the storage ponds. From the storage ponds the final effluent is pumped to the spray fields where it is used to irrigate grass fields. The disposal area is 217 acres of land for irrigation. For the purposes of this Order, the three evaporation/percolation ponds and the irrigation fields are collectively referred to as the "**Designated Disposal Area**."

14. The quantity of wastewater treated has declined from approximately 2.03 MGD in 2000 to approximately 0.69 MGD in 2024. Since the closure of CVSP in October of 2024, the average quantity of wastewater treated is 0.51 MGD.

15. The Discharger's Self-Monitoring Reports (SMRs) from January 2020 through December 2024 characterize the Facility influent as summarized in **Table 1**:

Table 1. Influent Characterization.

Constituent	Units	Average	Maximum	Minimum
cBOD5	mg/L	142	368	51
Total Suspended Solids (TSS)	mg/L	136	390	12

16. The Facility has been regulated by the Colorado River Basin Water Board since construction in 1987. On February 20, 2007, the Board issued Time Schedule Order R7-2007-0041 (TSO) to address chronic violations of WDRs Order 93-016 (1993 WDRs Order). Of particular concern was the Discharger's management of the RO and AAU waste streams, which was considered a "Designated Waste" for the purposes of Water Code section 13173. The Discharger ultimately elected to blend these waste streams with the Facility's treated effluent—thereby allowing the combined effluent to be land-applied rather than discharged to lined class II surface impoundments subject to California Code of Regulations, title 27, section 20005 et seq. (Title 27) prescriptive standards. The TSO was subsequently rescinded on August 2, 2018.

Proposed Changes at Facility

17. Previously, the Facility was named Chuckawalla Valley State Prison (CVSP) Wastewater Treatment Facility and received wastewater flows from both CVSP

and ISP. The Discharger closed CVSP on October 31, 2024 and only ISP remains open.

18. Due to the closure of CVSP, the headworks for the closed prison is only used for the WWTF office restrooms and the nearby fire station restrooms. The collected wastewater from the CVSP comingles with the wastewater in the headworks of the ISP. The headworks for ISP will continue to operate at its previous capacity.

19. As a result of the closure of CVSP, the estimated maximum flow is expected to decrease to approximately 0.706 MGD, based on the number of inmates at ISP.

20. Changes in the influent waste characterization are not currently anticipated. The Discharger's ROWD does not identify discharges from industrial sources subject to federal categorical Pretreatment Standards into its collection system. The Discharger will be required to provide a routine assessment of its industrial discharges to determine whether a pretreatment program becomes necessary.

21. The Discharger's Self-Monitoring Reports (SMRs) from January 2020 through December 2024 characterize the Facility effluent as summarized in **Table 2:**

Table 2. Effluent Characterization.

Constituent	Units	Average	Maximum	Minimum
Flow	MGD	1.08[2]	1.54	0.49
cBOD	mg/L	0.6	8.5	ND[3]
TSS	mg/L	2.1	5.0	ND
Settleable Solids	ml/L	ND	ND	ND
pH	s.u.	7.4	7.8	6.6
TDS	mg/L	990	1794	589.5

[2] Since the closure of CVSP, the average flow is 0.51 MGD, the maximum flow is 0.52 MGD, and the minimum flow is 0.49 MGD.

[3] Non-Detect

Constituent	Units	Average	Maximum	Minimum
Sulfate	mg/L	256	610	72
Fluoride	mg/L	7.2	19	1.45
Nitrate as N	mg/L	1.17	7.76	ND
Total Nitrogen	mg/L	2.07	9.62	ND
Arsenic	µg/L	31.6	95.7	ND
Total Coliform	MPN/ 100 mL	364	2420	ND
Chlorine Residual	mg/L	0.12	0.91	ND

General Site Conditions

22. The site elevation is approximately 450 feet above sea level. The site is on a north sloping alluvial plain. Typical surface elevations range from 440 to 460 feet above sea level.

23. There are no surface waters in the vicinity of the Facility. Stormwater runoff in the region flows to the northeast to the depression known as Ford Dry Lake.

24. A soils investigation performed in May 2010 reports that soils range from poorly graded sand to silt. Field saturation percentage ranged from 4.9 to fully saturated. Saturated hydraulic conductivity ranged from $1.1x10^{-5}$ to $5.3x10^{-8}$ cm/s. Hydraulic conductivity of soil at field water content ranged from $1.1x10^{-5}$ to $1.1x10^{-11}$ cm/s.

25. The site is located in a seismically active desert region.

26. Based on data from the nearest weather station (BLYTHE CAA AIRPORT), the Facility has an annual average precipitation of 3.55 inches, and a mean pan evaporation of 71.4 inches per year.

27. According to National Oceanic and Atmospheric Administration (NOAA) Precipitation Frequency Atlas 14, Vol. 6 (rev. 2014), 100-year and 1,000-year,

24-hour rainfall events are estimated to result in 3.92 and 6.06 inches of precipitation, respectively.[4]

28. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (https://msc.fema.gov/portal), the Facility is not located within a 100-year floodplain.

29. Land uses in the vicinity include industrial and recreational uses.

30. There are six (6) on-site domestic wells located at distances ranging from approximately 3,000 feet to 8,700 feet from the evaporation/percolation ponds. The wells are screened at depths varying from 180 to 1200 feet. Water in the upper aquifer is not used for domestic supply. Higher quality water encountered from 625 feet below ground surface (bgs) to about 1,100 feet bgs is used for water supply. Domestic water supply to the facility, after treatment, has a TDS range of 25.6 to 1045 mg/L with an average of 284 mg/L. Raw domestic water supply to the facility was sampled in the past and had an average TDS of 854 mg/L from 2013 to 2017.

Table 3—Domestic Water Supply

Untreated Well Water (Deep Aquifer, 625-1,100 ft. bgs)	After Reverse Osmosis Treatment
854 mg/L	284 mg/L

Groundwater and Subsurface Conditions

31. The site is underlain by Quaternary alluvium consisting of well sorted sand, interbedded clay, and gravelly, alluvial fan deposits.

32. The depth to groundwater at the Facility ranges from approximately 48 feet bgs to approximately 213 feet bgs. Regional groundwater flow in the area is to the northeast.

[4] Source: NOAA Precipitation Frequency Data Server (https://hdsc.nws.noaa.gov/hdsc/pfds)

33. Prior to construction of the Facility, a groundwater investigation was performed to establish the availability and usability of groundwater for domestic supply in the area. The results of the investigation are summarized in a report titled *Phase II Groundwater Investigation, Wiley Well Area, September 24, 1986*. The investigation concludes that the groundwater in the upper aquifer to about 625 feet bgs is of lesser quality than in the deeper aquifer from 625 feet bgs to about 1,200 feet bgs. Groundwater in the deeper aquifer is higher in fluoride and iron concentrations but lower in chloride and electrical conductivity (EC) correlating with lower TDS. Groundwater in the deeper aquifer is used for domestic supply at ISP. The 1986 groundwater investigation, which occurred prior to the site's development, indicates that the elevated TDS in shallow and deeper groundwater is non-anthropogenic.

34. The Dischargers SMRs provide groundwater monitoring data for three wells in the vicinity of the discharge. **Figure 3,** incorporated herein and made part of this Order by reference, shows the location of the groundwater monitoring wells.

35. Static groundwater depth in groundwater monitoring well PM-1 (Pond Monitoring Well) in the vicinity of the effluent storage ponds is approximately 48 feet.

36. Regional groundwater flow in the area is to the northeast; however, in the area of the Facility, it is likely that mounding caused by wastewater percolation from the evaporation/percolation ponds and drawdown caused by domestic supply wells causes a reverse in groundwater gradient. The groundwater gradient derived from groundwater elevation measurements suggests perched water or mounding occurs beneath the evaporation/percolation ponds.

37. The Facility's groundwater monitoring network currently consists of the monitoring wells identified in **Table 4**.

Table 4—Groundwater Monitoring Network

Monitoring Well	Depth to Groundwater/ Location
FMW-1	213 ft bgs / 33.555104° N 114.890568° W
FMW-2	78 ft bgs / 33.559039° N 114.904024° W
PMW-1	48 ft bgs / 33.5662210° N 114.904655° W

38. PMW-1 is located approximately 200 feet southwest of the wastewater evaporation/percolation ponds; this well monitors groundwater under the

evaporation/percolation ponds. FMW-1 is located in the southeast corner of the site as far removed from the irrigation fields as possible while still on the property and monitors “background” groundwater conditions. FMW-2 is located 1,100 feet west of the irrigation spray field expansion area and monitors cross-gradient groundwater between the on-site supply wells and the Designated Disposal Area. The groundwater wells were installed in 2011 to satisfy conditions set forth in the TSO R7-2007-0041.

39. A review of the groundwater monitoring data for the background well, FMW-1, indicates that total nitrogen is below the MCL of 10 mg/L and the average TDS is 2,294 mg/L. Background groundwater quality monitored at FMW-1 is summarized in **Table 5**.

Table 5—Background Groundwater Quality

Constituent	Units	FMW-1
TDS	mg/L	2,294
Arsenic	mg/L	8.02
Fluoride	mg/L	2.8
pH	s.u.	7.8
Nitrate (as Nitrogen)	mg/L	0.03
Nitrite (as Nitrogen)	mg/L	ND
Total Nitrogen	mg/L	0.14

40. Groundwater monitoring data is collected from PMW-1 (located near the evaporation/percolation ponds) and FMW-2 (cross-gradient of the irrigation spray field expansion area and the Designated Disposal Area). Average downgradient and cross-gradient groundwater quality is summarized in **Table 6**.

Table 6—Downgradient Groundwater Quality

Constituent	Units	PMW-1	FMW-2
TDS	mg/L	1,412	11,125
Arsenic	mg/L	2.42	6.13
Fluoride	mg/L	7.7	0.6
pH	s.u.	7.9	7.3
Nitrate (as Nitrogen)	mg/L	8.8	5.57
Nitrite (as Nitrogen)	mg/L	0.17	0.4
Total Nitrogen	mg/L	9.04	5.79

41. Historical groundwater quality data from 2013 to 2024 from the monitoring wells indicate that groundwater quality varies across the area and may be under the influence of sources of TDS other than the Facility's effluent discharge. Given that the average historical TDS concentration of effluent is generally below 1,500 mg/L and concentrations exceeding 13,000 mg/L have been observed in the groundwater wells indicate that TDS concentrations in shallow local groundwater have been influenced by sources other than the Facility's effluent (or any other human impacts).

42. The Discharger's average effluent concentration from January 2020 to December 2024 was 2.07 mg/L for total nitrogen and 990 mg/L for TDS. Both average effluent concentrations are under the average concentrations found in the downgradient groundwater monitoring wells.

Regulatory Considerations

Waste Discharge Permitting Authority

43. This Order is issued pursuant to Water Code section 13263, subdivision (a), which provides that "[t]he regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge…, with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed."

44. The statute further provides that WDRs "shall implement … water quality control plans, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance,[5] and the provisions of Section 13241." (Wat. Code, § 13263, subd. (a).)

45. The ability to discharge wastewater is a privilege, not a right. The adoption of this Order shall not be construed as establishing a vested right in the continuance of discharge activities. (Wat. Code, § 13263, subd. (g).)

46. For the purposes of waste discharge fees under California Code of Regulations, title 23 (Title 23), section 2200, the Facility has a threat-complexity rating of **2-B**.

    a. Threat Category "2" reflects waste discharges that can impair receiving water beneficial uses, cause short-term water quality objective violations, cause secondary drinking water standard violations, and cause nuisances.

    b. Complexity Category "B" reflects any discharger not included in Category A, with either (1) physical, chemical or biological treatment systems (except for septic systems with subsurface disposal), or (2) any Class II or Class III WMUs.

Basin Plan Implementation

47. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) designates beneficial uses of groundwater and surface water within the region, establishes numeric and narrative water quality objectives (WQOs) protective of such uses, and incorporates applicable State Water Resources Control Board (State Water Board) plans and policies.

48. This Order prescribes WDRs for discharges to groundwater within the Hayfield Planning Area, Chuckawalla Hydrologic Unit (717.00), for which the designated beneficial uses of groundwater are as follows:

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[5] "Nuisance" is defined by statute as a condition that: "(1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property[;] [¶] (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons…[;] [and] [¶] (3) Occurs during, or as a result of, the treatment or disposal of wastes." (Wat. Code, § 13050, subd. (m).)

a. Municipal and Domestic Supply (MUN);

b. Agricultural Supply (AGR); and

c. Industrial Supply (IND).

49. The Basin Plan establishes the following WQOs for MUN-designated groundwater:

a. Tastes and Odors (Narrative): Groundwater shall not contain taste or odor-producing substances that adversely affect beneficial uses as a result of human activity (Ch. 3, § IV.A);

b. Coliform Bacteria (Numeric): Groundwater shall not contain coliform organisms in exceedance of the limits specified in California Code of Regulations, title 22 (Title 22), section 64426.1 (Ch. 3, § IV.B); and

c. Chemical Constituents (Numeric): Groundwater shall not contain organic and inorganic chemical constituents in concentrations exceeding the Primary Maximum Contaminant Levels (MCLs) established for drinking water per Title 22, sections 64431, 64444 and 64678 (Ch. 3, § IV.C).

50. Although they are not universally incorporated into the Basin Plan as numeric WQOs for MUN-designated groundwater, the Secondary MCLs, established for drinking water per Title 22, section 64449, are appropriate in most cases for use as site-specific numeric limits supporting the narrative WQO for groundwater tastes and odors.

51. With respect to the narrative WQO for chemical constituents, specifically the objective for Total Dissolved Solids (TDS), the Title 22 Secondary MCL specifies a recommended limit of 500 mg/L, an upper limit of 1,000 mg/L, and a short-term limit of 1,500 mg/L.[6] The site-specific numeric limit is normally within this range, with a preference towards the lower recommended limit. Further, the numeric limit should be somewhat reflective of existing background groundwater conditions and municipal/domestic beneficial uses in the area.

52. The Basin Plan also incorporates State Water Board Resolution 88-63 (*Sources of Drinking Water Policy*), which provides that groundwater with TDS in excess of

[6] Salinity may alternatively be expressed in terms of microsiemens per centimeter (µS/cm) of Electrical Conductivity (EC). As a Secondary MCL, Title 22 specifies a recommended limit of 900 µS/cm, and an upper limit of 1,600 µS/cm.

3,000 mg/L cannot reasonably be expected to supply a public water system. However, the *Sources of Drinking Water Policy* also provides that all groundwaters shall remain designated for MUN beneficial uses until they are affirmatively de-designated by a Basin Plan Amendment—even if the specified TDS threshold is exceeded. The *Sources of Drinking Water Policy* nevertheless provides a firm outer limit for TDS of 3,000 mg/L for use in determining whether local groundwater is suitable or potentially suitable for MUN beneficial uses.

53. As discussed in Finding 39, the underlying shallow background groundwater at the Facility is nearly 2,300 mg/L, which is short of the 3,000 mg/L outer limit under the Sources of Drinking Water Policy, but well beyond the Short-Term Secondary MCL of 1,500 mg/L under Title 22.

54. The Facility's water supply comes from wells screened within the deeper aquifer (625 to 1,100 feet bgs). Prior to treatment through reverse-osmosis, the well water has a TDS concentration of approximately 854 mg/L. After treatment, it has a concentration of 284 mg/L for domestic use. The incremental increase contributed by domestic use, and in addition, the RO and AAU systems waste streams blended with treated wastewater result in an effluent with a TDS concentration of 990 mg/L. Under the circumstances, it is appropriate to set the site-specific numeric threshold at 1,500 mg/L.

Table 7—Comparison of TDS Averages in Shallow Aquifer

Background Groundwater (FMW-1, 213 ft. bgs)	Effluent	Downgradient Shallow Groundwater (PMW-1, 78 ft bgs)	Cross-Gradient Shallow Groundwater (MW-2, 48 ft bgs)
2,294 mg/L	990 mg/L	1,142 mg/L	11,125 mg/L

Antidegradation Policy

55. The Basin Plan incorporates the State Water Board's *Statement of Policy with Respect to Maintaining High Quality Waters in California*, Resolution 68-16 (Antidegradation Policy), which prohibits the Colorado River Basin Water Board from authorizing discharges that will result in the degradation of "high quality waters," unless it is demonstrated that any such degradation in water quality:

a. Will not unreasonably affect beneficial uses,[7] or otherwise result in water quality less than that prescribed in applicable plans and policies (e.g., violation of WQOs);

b. Will be mitigated through best practicable treatment and control (BPTC);

c. Is consistent with maximum benefit to the people of the state of California.

56. The baseline for determining whether waters are "high quality" under the Antidegradation Policy is the highest quality achieved since the policy was established in 1968. If the subject waters have not achieved the minimum quality necessary to meet WQOs since 1968, the waters are considered "poor quality," which means the Antidegradation Policy does not apply. This determination is made on a constituent-by-constituent basis, meaning that waters may be considered "high quality" with respect to some constituents but not others.

57. Based on experiences with similar facilities, Colorado River Basin Water Board staff have identified the following constituents with the potential to degrade groundwater in the Facility's effluent:

a. Total Nitrogen (Nitrate plus Nitrite),

b. TDS (Salinity), and

c. Coliform Organisms.

58. **Nitrogen:** The Primary Maximum Contaminant Level (MCL) (i.e. WQO) for nitrate plus nitrite as nitrogen is 10 mg/L. According to the Discharger's SMRs from 2020 through 2024, the Facility's effluent had total nitrogen concentrations ranging between non-detect and 9.62 mg/L with an average of 2.07 mg/L. Additionally, groundwater monitoring wells had an average total nitrogen concentration of 4.99 mg/L. Accordingly, the wastewater discharges authorized under this Order will not likely result in groundwater quality exceeding the applicable WQO for Nitrate plus Nitrite.

59. **TDS (Salinity):** As discussed above in Finding 53, this Order recognizes a site-specific TDS numeric threshold of 1,500 mg/L—corresponding to the Short-Term MCL under Title 22. It should be noted that this numeric limit is still substantially

[7] The Water Code defines "Pollution" in relevant part as the "alteration of the quality of the waters of the state by waste to a degree which unreasonably affects … [¶] [t]he waters for beneficial uses." (Wat. Code, § 13050, subd. (l)(1)(A).)

lower than background water quality at the Facility (approximately 2,300 mg/L). Because the high TDS in background shallow groundwater does not appear to be anthropogenic and based on natural hydrologic conditions (see Finding 33), TDS concentrations in shallow groundwater likely exceeded the site-specific threshold limit prior to 1968. Accordingly, shallow groundwater is determined to be "poor quality" for purposes of the Antidegradation Policy, at least with respect to TDS.[8] Further, the Discharger's groundwater monitoring data establishes that the Facility's wastewater discharges are actually diluting TDS concentrations in downgradient and cross-gradient groundwater. This Order nevertheless prescribes a 1,150 mg/L effluent limit for TDS, which will be determined per a rolling 12-month average. This limit was selected based on a performance target of 300 mg/L increase over the raw source water (using data from 2013 to 2017).

60. **Coliform Organisms:** The most probable number (MPN) of coliform organisms in untreated domestic wastewater is typically 10^7 to 10^8 per 100 mL, and in secondary-treated wastewater, an MPN of 10^5 to 10^6 organisms per 100 mL (USEPA, Design Manual: Municipal Wastewater Disinfection, EPA/625/1-86/021, Oct. 1986.). Additionally, sodium hypochlorite provides further disinfection of wastewater to Title 22, disinfected secondary-23 recycled water standards. As such, wastewater in the evaporation/percolation ponds is disinfected. The depth to groundwater ranges from 48 to 213 feet in the monitoring wells around the Facility; it is not likely that a significant number of pathogen-indicator bacteria will reach groundwater (due to significant attenuation and removal in the soils in the vadose zone). Effluent has been analyzed for bacteria with results ranging from non-detect to 2,420 MPN/100 mL for total coliforms. It is not expected that the discharge from the Designated Disposal Area will degrade any beneficial use of groundwater in the vicinity of the Facility. Consequently, no groundwater degradation is anticipated.

61. Notwithstanding implementation of BPTC, a degree of groundwater quality degradation may occur as a result of the Facility's operation—specifically in terms of nitrate/nitrite and TDS (and possibly total coliform). However, such degradation nevertheless is consistent with the maximum benefit to the people of the state of California. The Discharger provides a valuable service to the community that is protective of human health and the environment. These factors

[8] Although the deeper aquifer is considerably higher quality than the shallow aquifer, it is unlikely that the Facility's discharges to shallow groundwater will result in any degradation in the deeper aquifer, which begins at approximately 625 feet bgs. Further, the average TDS concentration in Facility effluent (990 mg/L) is still relatively comparable to the source water extracted from deeper wells (854 mg/L).

are consistent with maximum benefit to the people of the state and provide sufficient justification for allowing the limited groundwater degradation that may occur under this Order.

62. Based on the foregoing considerations, the wastewater discharges authorized under this Order are consistent with the Antidegradation Policy.

Stormwater

63. On July 1, 2015, the State Water Board adopted Water Quality Order 2014-0057-DWQ (National Pollutant Discharge Elimination System Permit No. CAS000001), *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit). Facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage with a design flow of one million gallons per day or more, or that are required to have an approved pretreatment program under 40 Code of Federal Regulations part 403, must enroll under the Industrial General Permit, unless there is no discharge of industrial stormwater to waters of the United States (WOTUS).[9] This Order makes no determination as to the Discharger's need for enrollment under the Industrial General Permit.

64. This Order does not authorize discharges of stormwater to WOTUS.

Additional Water Quality Considerations

65. This Order, which prescribes WDRs in accordance with the Basin Plan, for wastewater that does not need to be managed as "hazardous waste," is exempt from the prescriptive requirements of California Code of Regulations, title 27 (Title 27), section 20005 et seq. (Cal. Code Regs., tit. 27, § 20090.)

66. Water Code section 106.3, subdivision (a) provides that it is "the established policy of the state that every human being has the right to safe, clean, affordable,

[9] USEPA regulations for stormwater discharges were promulgated on November 16, 1990 (40 C.F.R. parts 122, 123, and 124) to implement the Clean Water Act's stormwater program set forth in Clean Water Act section 402(p) (33 U.S.C. §1342(p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to WOTUS to obtain National Pollutant Discharge Elimination System (NPDES) permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.

and accessible water adequate for human consumption, cooking, and sanitary purposes." Although subdivision (a) does not apply directly to the prescribing of WDRs (see Wat. Code, § 106.3, subd. (b)), this Order nevertheless furthers the stated policy by requiring that the receiving groundwater comply with WQOs protective of MUN beneficial uses.

67. Water Code section 13149.2, subdivision (d) requires that the Colorado River Basin Water Board, "[w]hen issuing … individual waste discharge requirements … that regulate activity or a facility that may impact a disadvantaged[10] or tribal community,[11] and that includes a time schedule in accordance with subdivision (c) of Section 13263 for achieving an applicable water quality objective, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance…," must include finding(s) regarding "potential environmental justice,[12] tribal impact, and racial equity considerations" that are relevant to the permitting action. This Order does not incorporate a time schedule for compliance with applicable WQOs, or any of the other provisions described in Water Code section 13149.2, subdivision (d). Accordingly, no additional findings are necessary under section 13149.2.

California Environmental Quality Act

68. The adoption of this Order is categorically exempt from the procedural requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), as the Facility is "an existing facility" with negligible or no expansions in use. (See Cal. Code Regs., tit. 14, 15301.)

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[10] For the purposes of this requirement, a "disadvantaged community" is defined as a "community in which the median household income is less than 80 percent of the statewide annual median household income level." (Wat. Code, § 13149.2, subd. (f)(1).)

[11] For the purposes of this requirement, a "tribal community" is defined as a "community within a federally recognized California Native American tribe or nonfederally recognized Native American tribe on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004." (Wat. Code, § 13149.2, subd. (f)(2).)

[12] Water Code section 13149.2 incorporates the general definition of "environmental justice" in Public Resources Code section 30107.3, subdivision (a): "the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." (Wat. Code, § 13149.2, subd. (f).)

Monitoring and Reporting Requirements

69. This Order is also issued pursuant to Water Code section 13267, subdivision (b)(1), which provides that the Colorado River Basin Water Board may require that persons discharging waste within the region "shall furnish, under penalty of perjury, technical or monitoring program reports…," provided that the discharger's burdens of compliance, including costs, is reasonable relative to the need for the submittals and the benefits to be obtained.

70. The various notifications, technical reports and monitoring program reports required under this Order, including those contained within the Monitoring and Reporting Program (MRP) in **Attachment A**, are necessary to ensure compliance with the WDRs.

71. In accordance with section 13267, the burdens of monitoring and reporting imposed on the Discharger under this Order and the separately adopted MRP, are reasonable relative to the need for compliance described above.

72. The Executive Officer may issue a Revised MRP as a standalone order, pursuant to their delegated authority under Water Code section 13267. Upon issuance, the Revised MRP shall supersede the provisions of **Attachment A**.

Scope of Order

73. This Order applies only to the discharge of nonhazardous wastewater to land in accordance with the Basin Plan, is exempt from the prescriptive standards for solid waste disposal set forth in California Code of Regulations, title 27 (Title 27), section 20005 et seq. (Title 27, § 20090, subd. (b).)

74. Nothing in this Order shall be construed as preempting or superseding otherwise applicable regulatory requirements issued by local, state, or federal agencies.

Public Participation

75. In developing these WDRs, Colorado River Basin Water Board staff have complied with Water Code section 189.7, subdivision (a)(1), which requires "equitable, culturally relevant community outreach to promote meaningful civil engagement from potentially impacted communities of proposed discharges of waste that may have disproportionate impacts on water quality in disadvantaged communities or tribal communities…."

76. The Dischargers and other interested public agencies and persons were notified of the Board's intent to prescribe the WDRs in this Order, and provided an opportunity to submit their written views and recommendations at a public hearing. (Wat. Code, § 13167.5.)

77. The Colorado River Basin Water Board, in a public meeting, heard and considered all timely comments pertaining to this discharge.

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, that Order R7-2013-0033 is rescinded (except for enforcement purposes), and that the Discharger shall comply with the following requirements.

A. Prohibitions

1. Waste classified as "hazardous," as defined in Title 27, section 20164, or constituting "designated waste," as defined in Water Code section 13173, shall not be discharged at the Facility.

2. The storage, treatment, or disposal of waste at the Facility shall not cause conditions constituting a "contamination," "pollution," or "nuisance," as defined per subdivisions (k), (l), and (m) of Water Code section 13050.

3. Wastewater shall not be permitted to bypass the treatment units relied upon for compliance with this Order, or otherwise be permitted to overflow from its designated containment structures.

4. Waste shall not be discharged at a location other than the Designated Disposal Area specified in Finding 13, or in a manner other than as described in the findings generally.

5. Wastewater shall not be discharged from the Facility into surface waters or surface drainage courses.

6. The discharge of wastewater to land not controlled by the Discharger, or not authorized for such use, is prohibited.

7. Objectionable odors, originating from the Facility and associated with the generation, treatment, storage or disposal of waste, shall not be perceivable beyond the boundaries of the Facility or areas not owned/controlled by the Discharger.

8. The Discharger shall not accept waste in excess of the treatment capacity of the disposal system.

9. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.

10. Irrigated areas shall be properly managed to minimize ponding. All applied water shall infiltrate completely within a 48-hour period.

B. Discharge Specifications

1. Wastewater shall be discharged to the Designated Disposal Area, as described in Finding 13.

2. All Facility systems and equipment shall be operated to optimize the quality of the effluent.

3. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

4. Public contact with wastewater at the Facility shall be prevented through such means as fences, signs, or acceptable alternatives.

5. The Discharger shall design, construct, operate, and maintain all Facility impoundments sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. The operating freeboard in any impoundments shall never be less than two feet (measured vertically from the lowest possible point of overflow).

6. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

7. As of 1 October of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications B.5 and B.6.

8. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically:

    a. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.

    b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.

    c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

    d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.

9. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.

10. Wastewater contained in any unlined pond shall not have a pH less than 6.0 or greater than 9.0.

11. Beginning in 2025, the Discharger shall monitor sludge accumulation in each Facility impoundment at least every five years, and periodically remove sludge as necessary to maintain adequate storage capacity. Specifically, if the estimated volume of sludge in the reservoir exceeds five percent of the permitted reservoir capacity, the Discharger shall complete sludge cleanout within 12 months after the date of the estimate.

12. The evaporation/percolation ponds shall be maintained so that they continuously operate in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of the aeration/percolation ponds shall be equal to or greater than 1.0 mg/L. If there is little or no water in the ponds, the monitoring report shall state “No standing water in ponds and/or not sufficient water in the ponds to sample safely” in place of reporting dissolved oxygen concentration.

C. Effluent Limitations

The Facility's wastewater (effluent), following treatment, shall comply with the Effluent Limitations below in **Table 8**.

Table 8. Effluent Limitations.

Parameter	Units	Limitation	Determination
Average Daily Flow	MGD	2.7	30-Day Avg Dry-Weather Flow
pH	Std. Units	≥ 6.00 ≤ 9.00	--
cBOD	mg/L	30 20	7-Day Average 30-Day Average
TSS	mg/L	45 30	7-Day Average 30-Day Average
Settleable Matter	ml/L	0.5 0.3	7-Day Average 30-Day Average
TDS	mg/L	1,150	12-Month Rolling Average

D. Groundwater Limitations

Discharge of wastewater from the Facility shall not cause groundwater to:

1. Exceed applicable WQOs;
2. Acquire taste, odor, toxicity, or color that create nuisance conditions;
3. Impair beneficial uses; or
4. Contain constituents or organisms in excess of applicable Title 22 MCLs (see, e.g., Title 22, § 64426.1 [bacteriological constituents], § 64431 [inorganics], § 64444 [organics], § 64678 [lead, copper]).

E. Solids Disposal Requirements[13]

1. Sludge and Solid Waste shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal plant operation.

2. Residual sludge, biosolids, and solid waste shall be permanently disposed of offsite at a landfill permitted under Title 27.

F. Monitoring, Reporting and Notification Requirements

1. **Compliance with Monitoring and Reporting Program.** The Discharger shall comply with the Monitoring and Reporting Program (MRP) in Attachment A, or in the event of a subsequently issued Revised MRP, the provisions of that Revised MRP, which shall supersede the provisions of Attachment A as the operative MRP.

2. **Noncompliance Notifications.** Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Colorado River Basin Water Board office and the Office of Emergency Services (OES) within 24 hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the Colorado River Basin Water Board's office voicemail.

   A written report shall also be provided within five business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. A final certified report must be submitted through online GeoTracker. Additional information may be added to the certified report, in the form of an attachment, at any time.

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[13] For the purposes of this section: "sludge" means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes; "solid waste" includes grit and screenings generated during preliminary treatment at the Facility; "residual sludge" means sludge that will not be subject to further treatment at the Facility; and "biosolids" refers to sludge that has been treated and tested and shown to be capable of being beneficially used as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities pursuant to federal and state regulations.

All other forms of noncompliance shall be reported with the next scheduled Self-Monitoring Report (SMR), or earlier if requested by the Executive Officer.

3. **General Reporting Requirements.** The Discharger shall comply with the following General Reporting Requirements:

   a. **Electronic Submittal.** All materials shall be submitted electronically via the GeoTracker Database (https://geotracker.waterboards.ca.gov).[14] After uploading, Dischargers shall notify Colorado River Basin Water Board staff via email to RB7_WDRs_paperless@waterboards.ca.gov, or another address specified by staff. The following information shall be included in the body of the email:

Attention:	Land Disposal Unit
Report Title:	[Report Title]
Upload ID:	[Number]
Facility:	Ironwood State Prison Wastewater Treatment Facility
County:	Riverside County
GeoTracker ID:	WDR100027546

   b. **Qualified Professionals.** All technical reports[15] submitted under this Order shall be prepared by, or under the direct supervision of, a competent licensed civil engineer or engineering geologist (Qualified Professional). The submittal shall be signed and stamped by the Qualified Professional, and contain a brief summary of the Qualified Professional's qualifications.

   c. **Data Presentation and Formatting.** In reporting monitoring data, the Discharger shall arrange data in tabular form so that the date, the constituents, the concentrations, and the units are readily

[14] Large files must be split into appropriately labelled, manageable file sizes and uploaded into GeoTracker.

[15] A "technical report" is a one incorporating the application of scientific or engineering principles.

discernible. Additionally, data shall be summarized in a manner that clearly illustrates compliance/noncompliance.

d. **Non-Detections / Reporting Limits.** Unless reporting limits (RL) are specified in the same table, non-detections and sub-RL concentrations shall be reported as "< [limit]" (e.g., "< 5 µg/L").

e. **Units.** Absent specific justification, all monitoring data shall be reported in the units specified herein.

f. **Certification.** All submittals under this Order shall be accompanied by a transmittal containing the following certification that is signed by either the Required Signatory or their Authorized Representative:

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

i. The Required Signatory shall be the individual identified in **Table 9** below.

ii. To act as an Authorized Representative for a Required Signatory (Table 9), an individual must be identified[16] and duly authorized in writing by the Required Signatory; this written authorization shall be provided to the Board beforehand, or concurrently with the first submittal signed by the Authorized Representative.

[16] This identification may be in reference to the Authorized Representative's title or position, provided it is one that customarily has the responsibility of supervising the Facility's overall operation (e.g., facility manager, superintendent).

Table 9. Required Signatories for Submittals.

Category of Discharger	Required Signatory
Corporations	Senior Vice President or Equivalent Principal Executive
Limited Liability Companies (LLCs)	Manager
General Partnerships and Limited Partnerships (LPs)	General Partner
Sole Proprietorships	Sole Proprietor
Public Agencies	Principal Executive or Ranking Elected/Appointed Official

G. Other Provisions

1. **Facility Inspection.** Dischargers and their agents shall permit Board staff to inspect the Enrolled Facility during business to verify compliance with WDRs. Failure to consent to a reasonable request for inspection constitutes a violation of this Order.

2. **Facility Operation and Maintenance.** The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment, and control installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes, but is not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained and made available to the Colorado River Basin Water Board on request.

3. **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.

4. **Disposal Capacity.** The Discharger shall provide a report to the Colorado River Basin Water Board when it determined that the Facility's average dry-weather flow rate for any month exceeds 80 percent of the design disposal capacity. The report shall indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater disposal capacity necessary when the plant reaches design capacity.

5. **Material Changes.** Prior to any modifications 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. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing the necessary expertise in the operation and maintenance of the wastewater treatment system.

7. **Onsite Physical Copies of Order.** Physical copies of this Order, as well as of the operative Monitoring and Reporting Program, shall be maintained onsite at the Facility, and shall be identified to all operating personnel; the Discharger shall ensure that such personnel are familiarized with these materials.

8. **Records Retention.** The Discharger shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended in writing by the Executive Officer.

9. **Changes in Ownership.** Prior to any change in ownership of this operation, the Discharger shall notify the Executive Officer in writing at least 30 days in advance. The notice shall include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement shall contain a specific date for transfer of responsibility for compliance with this Order, and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Board may require modification or revocation and reissuance of this Order to formally substitute the permitted parties, and to incorporate other requirements as appropriate.

LIST OF ATTACHMENTS

Attachment A—Monitoring and Reporting Program
Attachment B—Maps and Facility Diagrams

ENFORCEMENT

If, in the opinion of the Executive Officer, the Dischargers fail to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Colorado River Basin Water Board reserves its right to take any enforcement actions authorized by law.

ADMINISTRATIVE REVIEW

Any person aggrieved by this Colorado River Basin Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. To be timely, the petition must be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the State Water Board website (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will also be provided upon request.

ATTACHMENT A—MONITORING AND REPORTING PROGRAM

A. General Requirements

1. **Testing and Analytical Methods.** The collection, preservation, and holding times of all samples shall be in accordance with U.S. Environmental Protection Agency (USEPA)-approved procedures. All analyses shall be conducted in accordance with the latest edition of either the USEPA's Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act (40 C.F.R. part 136) or Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium (SW-846), unless otherwise specified in the MRP or approved by the Colorado River Basin Water Board's Executive Officer.

2. **Laboratory Certification.** All analyses shall be conducted by a laboratory certified by the State Water Resources Control Board (State Water Board), Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP), unless otherwise approved by the Colorado River Basin Water Board's Executive Officer.

3. **Reporting Levels.** All analytical data shall be reported with method detection limits (MDLs) and with either the reporting level or practical quantitation limits (PQL) according to 40 Code of Federal Regulations part 136, Appendix B. The laboratory reporting limit for all reported monitoring data shall be no greater than the PQL.

4. **Sampling Location(s).** Samples shall be collected at the location(s) specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.

5. **Representative Sampling.** All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the chain of custody form for the sample. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Colorado River Basin Water Board staff.

6. **Instrumentation and Calibration.** All monitoring instruments and devices used by the Discharger shall be properly maintained and calibrated to ensure their continued accuracy. Any flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices. In the event that continuous monitoring equipment is out of service for a period greater than 24 hours, the Discharger shall obtain

representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

7. **Field Test Instruments.** Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:

    a. The user is trained in proper use and maintenance of the instruments;

    b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;

    c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and

    d. Field calibration reports are submitted.

8. **Records Retention.** 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, for a minimum of five (5) years from the date of the sampling or measurement. This period may be extended by request of the Colorado River Basin Water Board's Executive Officer at any time. Records of monitoring information shall include:

    a. The date, exact place, and time of sampling or measurement(s);

    b. The individual(s) who performed the sampling or measurement(s);

    c. The date(s) analyses were performed;

    d. The individual(s) who performed the analyses;

    e. The analytical techniques or method used; and

    f. All sampling and analytical results, including:

i. units of measurement used;

ii. minimum reporting limit for the analyses;

iii. results less than the reporting limit but above the method detection limit (MDL);

iv. data qualifiers and a description of the qualifiers;

v. quality control test results (and a written copy of the laboratory quality assurance plan);

vi. dilution factors, if used; and

vii. sample matrix type.

9. **Inoperative Facility.** If the Facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Colorado River Basin Water Board indicating that there has been no activity during the required reporting period.

B. Monitoring Requirements

1. Influent to the Facility shall be monitored in accordance with **MRP Table 1**.

MRP Table 1. Influent Monitoring Schedule.

Constituent	Units	Sample	Monitoring Freq.	Reporting Freq.
cBOD	mg/L	24-Hr. Composite	Semi-Weekly[17]	Quarterly
TSS	mg/L	24-Hr. Composite	Semi-Weekly	Quarterly

[17] Once every two weeks.

2. Effluent from the Facility shall be monitored in accordance with **MRP Table 2**.

MRP Table 2. Effluent Monitoring Schedule.

Constituent	Units	Type	Monitoring Freq	Reporting Freq
Flow	MGD	Flow measurement	Daily	Quarterly
Total Coliforms	MPN/100 mL	Grab	Weekly	Quarterly
Chlorine Residual	mg/L	Grab	Weekly	Quarterly
cBOD	mg/L	24-Hr. Composite	Semi-Weekly	Quarterly
TSS	mg/L	24-Hr. Composite	Semi-Weekly	Quarterly
Settleable Solids	ml/L	Grab	Daily	Quarterly
pH	Std. Units	Grab	Daily	Quarterly
TDS	mg/L	Grab	Weekly	Quarterly
Sulfate	mg/L	Grab	Monthly	Quarterly
Fluoride	mg/L	Grab	Monthly	Quarterly
Nitrate as N	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
Arsenic	µg/L	Grab	Monthly	Quarterly
VOCs	µg/L	Grab	Annually	Annually

3. The domestic water supply shall be monitored in accordance with **MRP Table 3**. Samples shall be collected from the on-site water treatment plant prior to AAU and RO filtration and after AAU and RO filtration.

MRP Table 3. Source Water Monitoring Schedule.

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
TDS	mg/L	Grab	Weekly	Quarterly

4. Groundwater monitoring constituents and schedule may be revised based on a request from the Division of Drinking Water (DDW), by the Colorado River Water Board's Executive Officer for cause, including request by the Discharger. The groundwater monitoring network shall be monitored according to **MRP Table 4**.

MRP Table 4. Groundwater Monitoring Schedule.

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Depth to Groundwater	ft	Measurement	Quarterly	Quarterly
TDS	mg/L	Grab	Quarterly	Quarterly
Arsenic	µg/L	Grab	Quarterly	Quarterly
Fluoride	mg/L	Grab	Quarterly	Quarterly
pH	mg/L	Grab	Quarterly	Quarterly
Nitrate as N	mg/L	Grab	Quarterly	Quarterly
Nitrite as N	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
General Minerals[18]	mg/L	Grab	Annually	Annually
Metals[19]	µg/L	Grab	Annually	Annually
VOCs	µg/L	Grab	Annually	Annually

5. Prior to offsite disposal, sludge generated at the Facility shall be sampled and analyzed in accordance with **MRP Table 5**. If no sludge is disposed of during the year being reported, the Discharger shall state "No Sludge Removed" in the annual monitoring report.

MRP Table 5. Sludge Monitoring Schedule.

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Arsenic	mg/kg	Composite	Annually	Annually
Cadmium	mg/kg	Composite	Annually	Annually
Chromium	mg/kg	Composite	Annually	Annually
Copper	mg/kg	Composite	Annually	Annually
Lead	mg/kg	Composite	Annually	Annually
Mercury	mg/kg	Composite	Annually	Annually

[18] General Minerals analysis to include: Sodium, Calcium, Magnesium, Potassium, Alkalinity, Carbonate, Bicarbonate, Chloride, Sulfate, Total Phosphorus, Iron, Manganese, Boron, Anions, and Cations.

[19] Metals analysis to include: Aluminum, Barium, Copper, Cadmium, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, and Zinc

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Molybdenum	mg/kg	Composite	Annually	Annually
Nickel	mg/kg	Composite	Annually	Annually
Selenium	mg/kg	Composite	Annually	Annually
Zinc	mg/kg	Composite	Annually	Annually
Fecal Coliform	MPN/gram	Composite	Annually	Annually

C. Reporting Requirements

1. **Quarterly Reporting.** Daily, weekly, monthly, and quarterly monitoring shall be included in the Quarterly Self-Monitoring Reports (SMRs). Quarterly SMRs shall be submitted by **January 31st, April 30th, July 31st, and October 31st**. Each report shall include, at a minimum, the following:

    a. **Cover Letter.** A transmittal letter summarizing the essential points in the report.

    b. **Maps.** Maps depicting the Facility layout and the location of sampling points.

    c. **Tabulated Monitoring Data.** Tables of the data collected. Each row shall be a monitoring event and each column shall be a separate parameter at a single location (or a single average, as appropriate).

    d. **Compliance Summary.** Identification of any violations found since the last report was submitted, and actions taken or planned for correcting each violation. If the Discharger previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. If no violations have occurred since the last submittal, this shall be stated.

2. **Annual Reporting.** In addition to the above requirements, the 4th Quarter SMR (due January 31) shall contain the following:

    a. **Tabulated Summary of All Previous Monitoring Data.** Tables of the data collected. The tables shall include all of the data collected to-date at each monitoring point, organized in chronological order, with the oldest data in the top row and progressively newer data in rows below the top row. Each row shall be a monitoring event and each column shall be a separate parameter at a single location (or a single average, as appropriate).

    b. **Graphical Display.** Graphs depicting monitoring parameters through time, with the concentrations being the y-axis and time being the x-axis. Logarithmic scales can be used for values that vary by orders of magnitude. Individual graphs can combine multiple locations or multiple chemicals if that allows the data to be compared more easily.

    c. **Operation and Maintenance Summary.** Information concerning operation and maintenance of the facility, including documentation showing the calibration of flow meters and equipment, modifications to the Operation and Maintenance Manual, and any modifications or updates to the Discharger's wastewater rules and/or regulations.

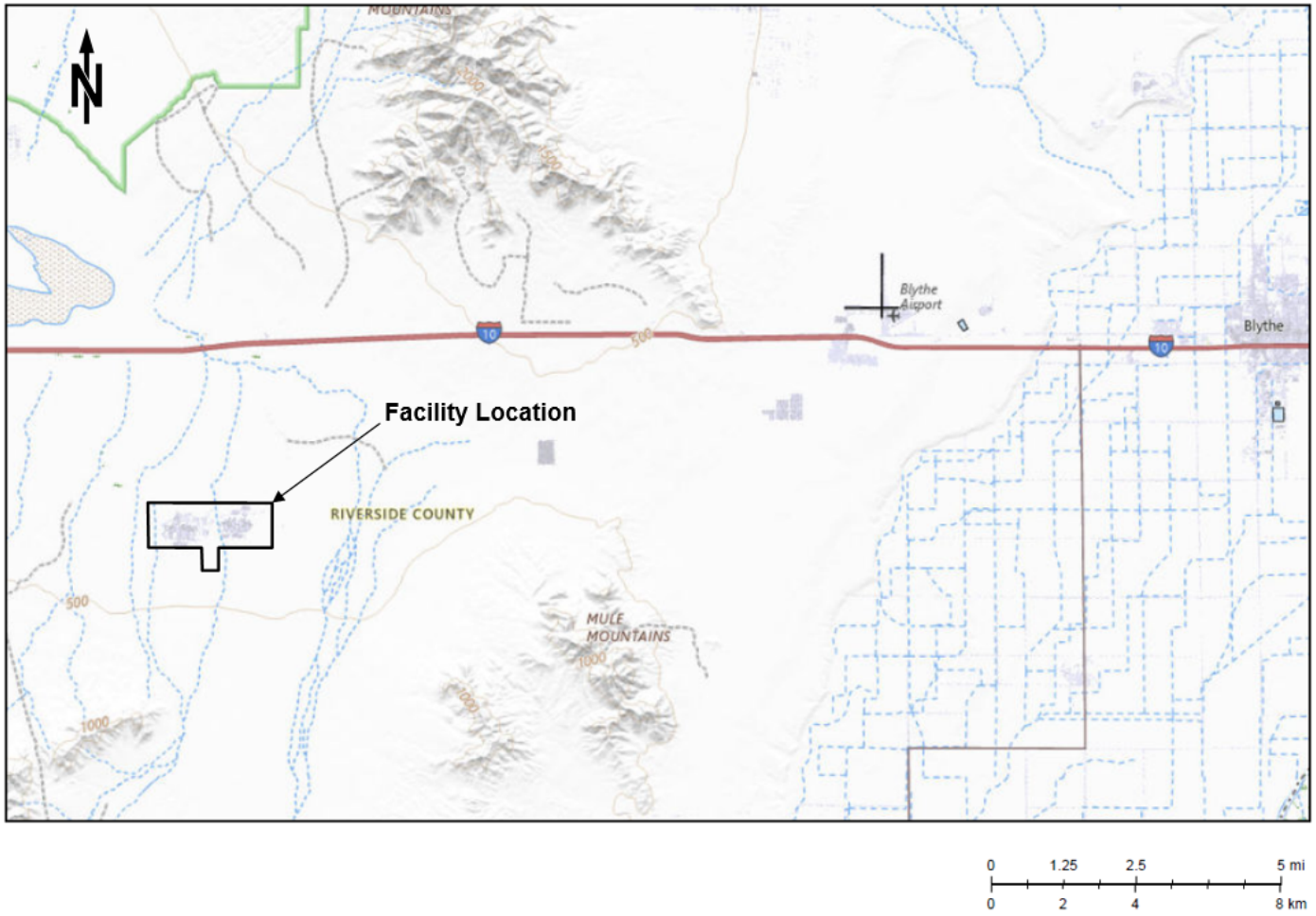
    d. **Compliance Summary.** Identification of any violations found since the last report was submitted, and actions taken or planned for correcting each violation. If the Discharger previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. If no violations have occurred since the last submittal, this shall be stated.

    e. **Summary of Sludge Disposal Activities.** The quantity, location, and method of disposal of all sludge and similar solid materials being produced at the Facility. If no sludge is disposed of during the subject year, the Discharger shall indicate "No Sludge Removed."

3. **Supplemental Monitoring.** The results of any analyses or monitoring activities conducted in addition to those specified herein, or conducted on more frequent basis than otherwise required herein, shall be reported to the Colorado River Basin Water Board in the next regularly submitted SMR.

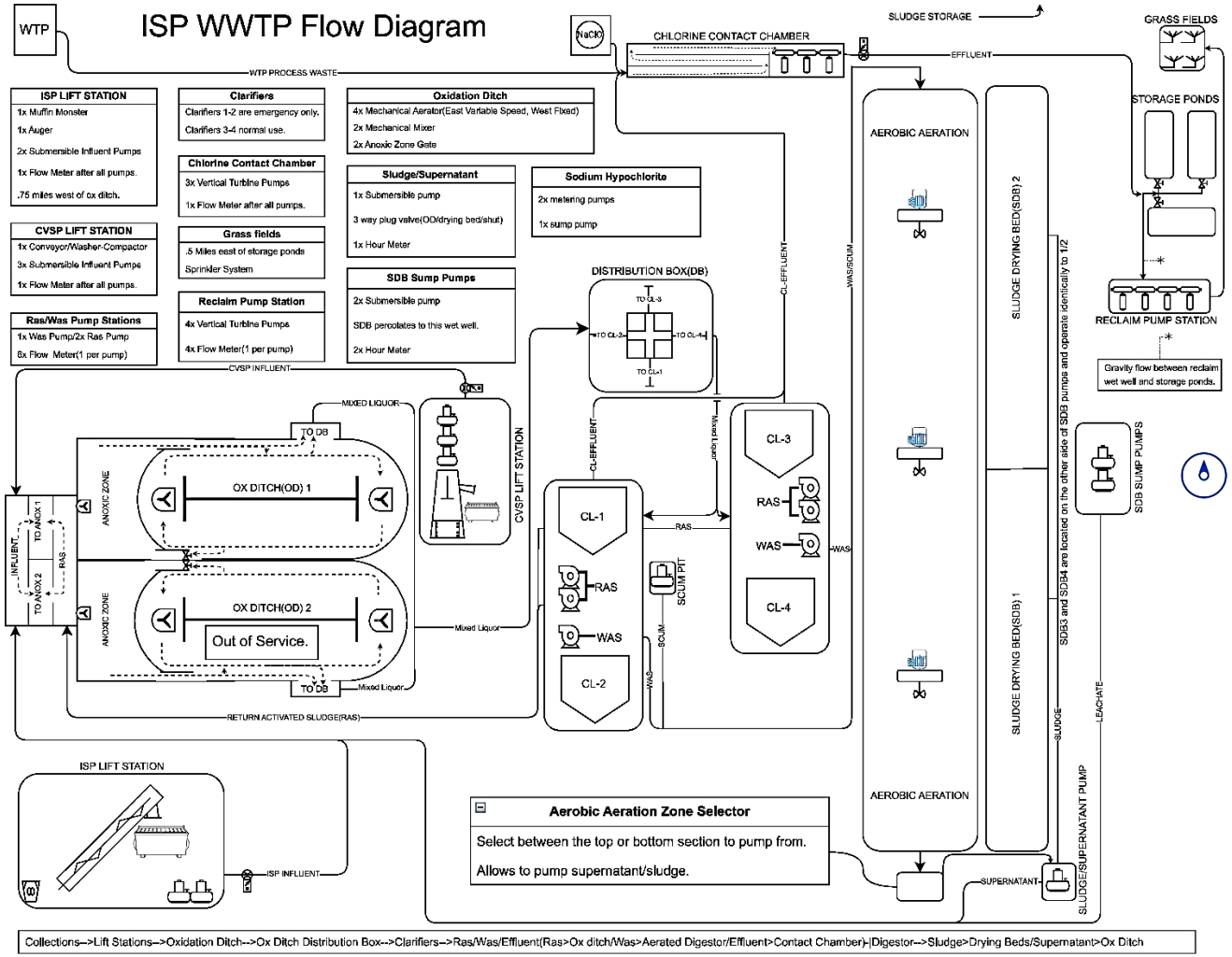
ATTACHMENT B—MAPS AND FACILITY DIAGRAMS

Figure 1. Map with Facility Location.



ATTACHMENT B – MAPS AND FACILITY DIAGRAMS

Figure 2. Process Flow Diagram.



GeoTracker ID: WDR100027546
WDID: 7B330809001

Figure 3. Monitoring Well Locations.