NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT FACT SHEET
October 2020

Permittee Name: Table Mountain Rancheria

Mailing Address: P.O. Box 410
Friant, CA 93626

Facility Location: Table Mountain Rancheria Wastewater Treatment Plant (WWTP) and Wastewater Collection System
8206 Table Mountain Road
Friant, CA 93626

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NPDES Permit No.: CA0084280

I. STATUS OF PERMIT

Table Mountain Rancheria (the "permittee") has applied for the renewal of their National Pollutant Discharge Elimination System (NPDES) permit to authorize the discharge of treated effluent (i.e. tertiary treated wastewater) from the Table Mountain Rancheria wastewater treatment plant (the "facility"). The facility discharges to an unnamed tributary to Little Dry Creek, a tributary to the San Joaquin River, located in Friant, Fresno County, California. A complete application was submitted on January 7, 2020. EPA Region 9 has developed this permit and fact sheet pursuant to Section 402 of the Clean Water Act (CWA), which requires point source dischargers to control the amount of pollutants that are discharged to waters of the United States through obtaining a NPDES permit.

The permittee is currently discharging under NPDES permit CA0084280 issued on June 18, 2015. Pursuant to 40 CFR § 122.6, the terms of the existing permit are administratively extended until the issuance of a new permit.

This permittee has been classified as a Minor discharger.

II. SIGNIFICANT CHANGES TO PREVIOUS PERMIT

Table 1. Significant Changes to Previous Permit

Permit Condition	Previous Permit (2015 – 2020)	Re-issued Permit (2020 – 2025)	Reason for Change
Limit for copper, total recoverable	Average monthly limit of 12 µg/L and maximum daily limit of 18 µg/L	Removes effluent limit for copper	No reasonable potential exists for copper
Monitoring for water	No monitoring for water hardness	Annual monitoring for water hardness	Accurate hardness data enables calculation of appropriate limits

Permit Condition	Previous Permit (2015 – 2020)	Re-issued Permit (2020 – 2025)	Reason for Change
hardness			that depend on water hardness
Priority Pollutants Scan	Monitor once in the 5-year permit term	Monitor annually	Conducting more priority pollutant scans will allow for more accurate reasonable potential analysis for priority pollutants and toxicity
Settleable Solids	Average monthly limit of 1 mL/L and daily maximum limit of 2 mL/L	Removes effluent limits for settleable solids	Meeting settable solids limitations is based on proper operation and maintenance of treatment facilities and are more applicable to wastewater treatment plants providing secondary treatment. However, this facility provides tertiary treatment and has consistently met both settable solids and total suspended solids effluent limits in the previous permit.
Asset Management	No asset management requirement	Asset management required	Asset management is established to ensure compliance with the provisions of 40 CFR § 122.41(e).
Recycled Water Standards	No recycled water standards	Recycled Water Standards	There is a potential for human contact with the effluent, so recycled water standards (California Title 22 Recycled Water Criteria) are applicable to the facility and are incorporated into the permit to protect public health. Implementing recycled water standards (California Title 22 Recycled Water Criteria) is consistent with other NPDES permits issued for facilities located on tribal land in California.
Total Coliform	Average monthly limit of 2 MPN/100mL and daily maximum limit of 6.58 MPN/100mL. Monthly monitoring required.	Average monthly limit of 23 MPN/100mL, average weekly limit of 2.2 MPN/100mL, and daily maximum limit of 240 MPN/mL. Weekly monitoring required.	Limits and monitoring requirements are consistent with CCR Title 22 requirements for recycled water and ensures protection of public health.
Narrative Effluent Limitations	No electrical conductivity or pesticide narrative effluent limitation	Contains electrical conductivity and pesticide narrative effluent limitations	Limits are based on the Regional Water Board's Basin Plan

The permit also contains electronic reporting requirements for discharge monitoring reports (DMRs), which are consistent with EPA's final rule, NPDES Electronic Reporting Rule, effective December 2015.

III. GENERAL DESCRIPTION OF FACILITY

The Table Mountain Rancheria Wastewater Treatment Plant (WWTP) is located on tribal lands, Table Mountain Rancheria. Table Mountain Rancheria is a 200-acre parcel of Chukchansi

Mono tribal land located in Fresno County, California, seven miles east of Friant, California. The WWTP serves a total population of approximately 10,000 people, and receives wastewater from the Table Mountain Casino, 14 private residential connections, and a church. It does not receive wastewater from any industrial facilities. The wastewater generated by the Table Mountain Casino includes sewage, restaurant washwaters, and blowdown from the air conditioning system. Restaurants in the Table Mountain Casino are equipped with grease traps and oil separators to prevent oil and grease from flowing to the WWTP. The SIC code for the facility is 4952 (Sewerage Systems).

The WWTP has a design flow of 0.5 million gallons per day (MGD), and a peak instantaneous flow capacity of 1.5 MGD. Last year, the annual average flow rate was about 0.09 MGD, with a maximum daily flow rate of about 0.1 MGD.

Wastewater entering the facility is pumped through a headworks equipped with trash and grit removal and then pumped into two sequencing batch reactors (SBRs). The SBRs hold approximately 500,000 gallons each, and the average retention time in the SBRs is 57 hours at design flow. Currently, each batch reactor runs for about five to six hours, with about one hour of aeration and two hours of settling time. Approximately 25% of each batch is decanted, pumped to an equalization basin, and then sent to three rapid mix sand filters with polymer addition. Backwash from the sand filters is sent back to the headworks, and effluent from the sand filters is sent to a series of ultraviolet (UV) disinfection units (Trojan System UV 3000 Plus). Sludge is moved to an aerobic digester, dewatered in a rotary drum, and composted offsite. The level of pathogen reduction achieved at the offsite compost facility is Class A.

Final effluent is moved into two 500,000 gallon storage tanks. Chlorine is added after UV disinfection and before storage; residual chlorine in the storage tanks is kept at 0.5 ppm. Effluent in the storage tanks is reused for irrigation, air conditioning, and firefighting. The tanks must always contain at least 640,000 gallons of effluent to use for firefighting. Effluent that is not reused or stored is dechlorinated with tablets, and then discharged from Outfall 005 (N 36°59’05”, W 119°38’10”). The chlorine concentration in the effluent is measured using an AutoCAT 9000 meter prior to discharge. Outfall 005 discharges into an unnamed tributary to Little Dry Creek, which is in the Upper San Joaquin watershed. A backup generator is maintained onsite in case of a power outage at the facility and is tested monthly.

IV. DESCRIPTION OF RECEIVING WATER

Outfall 005 discharges effluent into a 600-foot constructed ditch, which connects to an unnamed tributary to Little Dry Creek. The unnamed tributary originates from a spring located about 300 feet upstream of the discharge point and connects to Little Dry Creek approximately 7.5 miles downstream from Outfall 005. Little Dry Creek runs for about 1 mile before connecting to the San Joaquin River between Friant Dam and Mendota pool.

The Tribe does not have approved water quality standards. The California Central Valley Region Regional Water Quality Control Board (Regional Water Board) has developed water quality standards for the San Joaquin River between Friant Dam and Mendota pool. EPA has applied these water quality standards based on the Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and San Joaquin River Basin – Fifth Edition – Revised May 2018. EPA also has applied the California Toxics Rule and the implementing procedures in the Policy

for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (i.e. State Implementation Policy or SIP).

The 2014 and 2015 Regional Water Board 303(d) lists invasive species and pH as impairments for the San Joaquin River between Friant Dam and Mendota Pool. Invasive species and pH currently don't have developed TMDLs; thus, there are no TMDLs that will be used to establish effluent limits. TMDLs for these parameters are expected to be in written by 2027. The lower reaches of the San Joaquin River are also impaired for salts. On May 31, 2018, as part of the CV-SALTS initiative, the Regional Water Board approved Basin Plan Amendments to incorporate new strategies for addressing the ongoing salt and nitrate accumulation in the Central Valley.[1] This initiative is part of the program to control and permit salt discharges and applies to all surface and ground waters in the Sacramento-San Joaquin River Basins and Tulare Lake Basin.

V. DESCRIPTION OF DISCHARGE

The facility has one outfall, Outfall 005, and discharges from it periodically. The average duration of each discharge is 17 hours, and the average flow of the discharge is 0.127 MGD. The facility periodically discharges for 12 months out of the year, except there was no discharge in June and July of 2019, as the effluent was used for dust control during construction of the new casino.

Over the past three years, the facility has achieved 99% BOD and TSS removal rates every month for the past 3 years. BOD effluent concentrations are typically about 5 mg/L. The facility has achieved 99% TSS removal rates every month with a range from 2mg/L to 10 mg/L. These values are well below the effluent limitations. The facility has achieved non-detect concentrations of total coliform over the three months before the inspection took place in July 2019. The facility has had no effluent violations or reporting violations over the past three years. The facility has achieved non-detect concentrations of total coliform every month over the past three years. The effluent is clear, colorless, free of oil sheen, free of floatables, and free of objectionable odor.

Table 2: Application Discharge Data

Parameter	Units	Discharge Data		
		Maximum Daily Discharge	Average Daily Discharge	Number of Samples
Flow Rate	MGD	0.184	0.127	540
pH	Standard Units	6.65 – 7.32 (min – max)		(1)
Temperature (Summer)	Celsius	29.7	26.24	540
Temperature (Winter)	Celsius	25.6	19.95	540
Ammonia (as N)	mg/L	1.1	0.59	144
Biochemical Oxygen Demand; 5-day (BOD_5)	mg/L	5	3.21	36

[1] Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) is available at https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/whats_new/sncp_accepted_bp_lang_official.pdf .

Fecal Coliform	MPN/100mL	<2	<2	36
Nitrate (as N)	mg/L	2	0.74	144
Total Suspended Solids (TSS)	mg/L	6.63	5.38	36
Total Dissolved Solids (TDS)	mg/L	380	299	144
Total Residual Chlorine	mg/L	0.00	0.00	1,200
Copper, Total Recoverable	mg/L	ND(2)	ND(2)	36

(1) Number of samples for pH was not reported. pH was monitored weekly.
(2) ND = Nondetect. The MDL for total recoverable copper is 0.00073 mg/L.

One safety problem was found in the July 2019 inspection: the self-cleaning system for the UV bulbs was not working properly. This has resulted in a safety issue related to lifting the bulbs in order to clean them. This is a potential safety concern that may interfere with operations, maintenance, and monitoring. There were no other deficiencies or areas of concern identified in the inspection.

Table 3 shows data related to discharge from Outfall 005 based on permittee's discharge monitoring reports (DMRs). More information is available on Enforcement and Compliance History Online (ECHO) at https://echo.epa.gov/detailed-facility-report?fid=110010058043. Pollutants believed to be absent or never detected in the effluent are not included in Table 3. The data does not show elevated concentrations of any parameter above previous permit limits.

Table 3. Discharge Monitoring Report (DMR) Data for Outfall 005 from 2015 to 2019(1)

Parameter	Units(2)	2015 – 2020 Permit Effluent Limitations			Effluent Data			
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly	Highest Average Weekly	Highest Maximum Daily	Number of Samples
Flow Rate	MGD	(3)	--	(3)	0.129	--	0.235	51
Ammonia (as N)	mg/L	(3)	--	(3)	39.75(7)	--	3	51
Ammonia Impact Ratio	Ratio	1.0(4)	--	--	0.71	--	--	51
Biochemical Oxygen Demand; 5-day (BOD_5)	mg/L	10	15	--	5	9	--	51
	lbs/day	42	63	--	6.46	10.8	--	
	Percent Removal	85 % (minimum)(5)			99 % (minimum)			51
Total Coliform	MPN/ 100mL	2	--	6.78	< 2	--	< 2	51
Nitrate + Nitrite (as N)	mg/L	10	--	29.6	2.13	--	3.6	49
Total Suspended Solids	mg/L	10	15	--	6.63	13	--	31
	lbs/day	42	63	--	7.37	15.49	--	

Parameter	Units[2]	2015 – 2020 Permit Effluent Limitations			Effluent Data			
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly	Highest Average Weekly	Highest Maximum Daily	Number of Samples
(TSS)	Percent Removal	85 % (minimum)[5]			98 % (minimum)			51
Total Residual Chlorine	mg/L	0.01	--	0.02	<0.01	--	<0.01	51
Copper, total recoverable	µg/L	12	--	18	ND	--	ND	18
pH	Standard Units	Not < 6.5 SU, Not > 8.5 SU			6.64 – 7.73 (min-max)			51
Chronic Toxicity	Pass or Fail	Pass[6]			Pass			1
Temperature	°C	[3]	--	[3]	29.7	--	32.2	51
Nickel	µg/L	[8]			--	--	2.3	1
Arsenic	µg/L	[8]			--	--	3.1	1
Electrical Conductivity	µmhos/ cm	Shall not exceed 900 µmhos/cm as an annual average			872			51

(1) This table lists DMR data.
(2) Mass based limits calculated using 0.5 MGD flow.
(3) No effluent limits were set, but monitoring and reporting were required.
(4) When monitoring for total ammonia (as nitrogen), pH monitoring must be concurrent. The Ammonia Impact Ratio (AIR) is calculated as the ratio of the ammonia value in the effluent and the applicable ammonia standard from the chronic equation in California's Water Quality Standards. See Attachment D of the permit for a sample log to help calculate and record the AIR values. The AIR is the ammonia effluent limit and must be reported in the DMRs in addition to the ammonia-N and pH effluent values.
(5) Both the influent and the effluent shall be monitored. The arithmetic mean of the BOD_5 values or of the TSS values, by concentration, for effluent samples collected over a calendar month shall not exceed 15 percent of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period (i.e. 85 percent BOD_5 removal; 85 percent TSS removal).
(6) See Part III.C, Special Conditions – Chronic WET Requirements, of this permit for details of the chronic WET test requirement. All chronic WET tests must be "Pass," and no test may be "Fail." "Pass" constitutes a rejection of the null hypothesis. Testing shall be conducted concurrent with testing for all other parameters.
(7) The discharger reported an ammonia concentration of 39.75 mg/L on June 30, 2017. This concentration is 20 times higher than regularly reported data. The facility did have any treatment or maintenance issues during this time. Therefore, the next highest value of 1.9 mg/L is shown here and used in the RPA analysis (see Table 3). The 1.9 mg/L concentration is also in line with the highest daily concentration of 1.1 mg/L reported on the discharger's application.
(8) The 2015 – 2020 permit did not contain effluent limitations for arsenic and nickel.

VI. DETERMINATION OF NUMERICAL EFFLUENT LIMITATIONS

EPA developed effluent limitations and monitoring requirements in the permit based on an evaluation of the technology used to treat the pollutant (e.g., "technology-based effluent limits")

and the water quality standards applicable to the receiving water (e.g., "water quality-based effluent limits"). EPA established the most stringent of applicable technology-based or water quality-based standards, as described below.

A. Applicable Technology-Based Effluent Limitations

Publicly Owned Wastewater Treatment Systems (POTWs)

EPA developed technology-based treatment standards for municipal wastewater treatment plants in accordance with Section 301(b)(1)(B) of the Clean Water Act. The minimum levels of effluent quality attainable by secondary treatment for Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS), and pH, as defined in 40 CFR § 133.102. However, EPA is establishing more stringent technology-based effluent limitations for BOD_5 and TSS based on the capability of tertiary treatment systems. See Part C of this fact sheet for more information. Also, the standards for pH stated in the Basin Plan are more stringent than the limits stated below. See Part C for more details. Mass limits, as required by 40 CFR § 122.45(f), are included for BOD_5 and TSS.

BOD_5

Concentration-based Limits
- 30-day average – 10 mg/L
- 7-day average – 15 mg/L
- Removal Efficiency – minimum of 85%

Mass-based Limits
- 30-day average – (10 mg/L)(0.5 MGD)(8.345 conversion factor) = 42 lbs/day
- 7-day average – (15 mg/L)(0.5 MGD)(8.345 conversion factor) = 63 lbs/day

TSS

Concentration-based Limits
- 30-day average – 10 mg/L
- 7-day average – 15 mg/L
- Removal efficiency – Minimum of 85%

Mass-based Limits
- 30-day average – (10 mg/L)(0.5 MGD)(8.345 conversion factor) = 42 lbs/day
- 7-day average – (15 mg/L)(0.5 MGD)(8.345 conversion factor) = 63 lbs/day

pH

Instantaneous Measurement: 6.0 – 9.0 standard units (S.U.)

Technology-based treatment requirements may be imposed on a case by case basis under Section 402(a)(1) of the CWA, to the extent that EPA promulgated effluent limitations are inapplicable (i.e., the regulation allows the permit writer to consider the appropriate technology for the category or class of point sources and any unique factors relating to the applicant) (40 CFR § 125.3(c)(2)).

B. Water Quality-Based Effluent Limitations

Water quality-based effluent limitations are required in NPDES permits when the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above any water quality standard (40 CFR § 122.44(d)(1)).

When determining whether an effluent discharge causes, has the reasonable potential to cause, or contributes to an excursion above narrative or numeric criteria, the permitting authority shall use procedures which account for existing controls on point and non-point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity) and where appropriate, the dilution of the effluent in the receiving water (40 CFR § 122.44(d)(1)(ii)).

EPA evaluated the reasonable potential to discharge toxic pollutants according to guidance provided in the *Technical Support Document for Water Quality-Based Toxics Control* (TSD) (Office of Water, U.S. EPA, March 1991) and the *U.S. EPA NPDES Permit Writers' Manual* (Office of Water, U.S. EPA, September 2010). These factors include:

1. Applicable standards, designated uses and impairments of receiving water
2. Dilution in the receiving water
3. Type of industry
4. History of compliance problems and toxic impacts
5. Existing data on toxic pollutants - Reasonable Potential Analysis

1. Applicable Standards, Designated Uses and Impairments of Receiving Water

As stated above, Table Mountain Rancheria does not currently have water quality standards. In situations where facilities are discharging into waters on tribal lands, EPA's practice is to apply adjacent or downstream standards to the discharge. The Water Quality Control Plan for the Sacramento river basin and the San Joaquin river basin (Basin Plan) states on page 3-2, section 2.1 that the designated uses "of any specifically identified water body generally apply to its tributary streams." Little Dry Creek is a tributary to the San Joaquin river between Friant Dam and Mendota Pool. The Basin Plan establishes water quality criteria for the following designated uses for the San Joaquin river between from Friant Dam to Mendota Pool.

MUN: Municipal and Domestic Supply
AGR: Irrigation
AGR: Stock Watering
PROC: Process
REC-1: Contact
REC-1: Canoeing and Rafting
REC-2: Other Noncontact
WARM: Warm Freshwater Habitat
COLD: Cold Freshwater Habitat
MIGR: Warm
MIGR: Cold
SPWN: Warm
WILD: Wildlife Habitat

The Basin Plan also lists **SPWN:** Cold as a potential use.

Applicable water quality standards establish water quality criteria for the protection of aquatic wildlife from acute and chronic exposure to certain metals that are hardness dependent, with a "cap" of 400 mg/l. There is no available hardness data for the discharge, so the permit establishes water quality standards for these metals based on a default hardness value of 100 mg/L.[2] The draft permit contains annual monitoring requirements for hardness, which will be used for future RPA analyses and water-quality based effluent limits, as appropriate.

The San Joaquin River between Friant Dam and Mendota Pool is listed as impaired according to the CWA Section 303(d) List of Water Quality Limited Segments for invasive species and pH. TMDLs have not been developed for either of these parameters. Effluent limits for pH are included in this permit in accordance with applicable water quality standards, and this permit contains a provision that allows this permit to be reopened to include any TMDL related requirements. The lower reaches of the San Joaquin River are also impaired for salts. On May 31, 2018, as part of the CV-SALTS initiative, the Regional Water Board approved Basin Plan Amendments to incorporate new strategies for addressing the ongoing salt and nitrate accumulation in the Central Valley.[3] This initiative is part of the program to control and permit salt discharges and applies to all surface and ground waters in the Sacramento-San Joaquin River Basins and Tulare Lake Basin.

2. Dilution in the Receiving Water

The permittee has not requested a mixing zone or provided a dilution study; therefore, no dilution was considered in the reasonable potential analysis or development of water quality-based effluent limits applicable to the discharge.

3. Type of Industry

For POTWs, typical pollutants of concern in untreated and treated domestic wastewater include ammonia, nitrate, oxygen demand, pathogens, temperature, pH, oil and grease, and solids. Most of the influent to the facility comes from sanitary uses at the casino, and no industrial sources discharge to the facility. Chlorine and turbidity may also be of concern due to treatment plant operations. The SIC code for this facility is 4952 (Sewerage Systems).

4. History of Compliance Problems and Toxic Impacts

[2] A recent 2019 NPDES permit (NPDES permit number CA0085235) issued by the California Regional Water Quality Board, Central Valley Region reported that ambient hardness for Little Dry Creek ranged from 32 mg/L to 230 mg/L from 2014 to 2018. This permit used a hardness value of 150 mg/L. However, since the lower the hardness value, the lower the water quality criteria, EPA selected a conservative hardness value of 100 mg/L as opposed to 150 mg/L for the analysis in this permit to ensure that designated uses of the receiving water and downstream waters are protected. See Order R5-2019-0021 at https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/fresno/r5-2019-0021.pdf.

[3] Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) is available at https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/whats_new/sncp_accepted_bp_lang_official.pdf .

The facility has had no effluent violations over the past 4 years. The facility reported their December 2015 DMR data for pH late. Besides that, the facility has had no reporting violations over the past 4 years. The facility completed whole effluent toxicity (WET) testing to evaluate toxic impacts of the effluent. The effluent did not show toxic impacts for any of the three species tested.

5. Existing Data on Toxic Pollutants

For pollutants with effluent data available, EPA conducted a reasonable potential analysis based on statistical procedures outlined in EPA's *Technical Support Document for Water Quality-based Toxics Control* herein after referred to as EPA's TSD (EPA 1991). These statistical procedures result in the calculation of the projected maximum effluent concentration based on monitoring data to account for effluent variability and a limited data set. The projected maximum effluent concentrations were estimated assuming a coefficient of variation (CV) of 0.6 if a CV could not be calculated (i.e. for nickel and arsenic) and the 99 percent confidence interval of the 99th percentile based on an assumed lognormal distribution of daily effluent values (sections 3.3.2 and 5.5.2 of EPA's TSD). EPA calculated the projected maximum effluent concentration for each pollutant using the following equation:

Projected maximum concentration = C_e × *reasonable potential multiplier factor.*

Where, "C_e" is the reported maximum effluent value and the multiplier factor is obtained from Table 3-1 of the TSD.

Table 3: Summary of Reasonable Potential Statistical Analysis

Parameter[(1)]	Maximum Observed Concentration	*n*	CV	RP Multiplier	Projected Maximum Effluent Concentration	Most Stringent Water Quality Criterion	Statistical Reasonable Potential?
Ammonia	3.0 mg/L[(2)]	51	0.52	1.6	4.8 mg/L	1.32 mg/L	Y
Nitrate + Nitrite (as N)	3.6 mg/L	49	0.64	1.8	6.48 mg/L	10 mg/L	N
Electrical Conductivity	872 µmhos/cm	51	0.33	1.4	1,220 µmhos/cm	900 µmhos/cm	Y
Nickel	2.3 µg/L	1	0.6	13.2	30.36 mg/L	52.01[(3)] µg/L	N
Arsenic	3.1 µg/L	1	0.6	13.2	40.92 mg/L	150 µg/L	N
Copper	ND µg/L	18	--	--	--	12 µg/L	N
Total Coliform	<2 MPN/100mL	51	--	--	--	2.2 MPN/100mL	N
pH	6.64 – 7.73 SU	51	--	--	--	6.5 – 8.5 SU at all times	N
Toxicity	Pass (0)	4	--	--	--	Pass (0)	N

Total Residual Chlorine	<0.01 mg/L	51	--	--	--	0.01 mg/L	N

(1) For purposes of RP analysis, parameters measured as Non-Detect are considered to be zeroes. Only pollutants detected are included in this analysis.
(2) The permittee reported an ammonia concentration of 39.75 mg/L on June 30, 2017. This concentration is 20 times higher than regularly reported data. The facility did have any treatment or maintenance issues during this time. Therefore, the next highest value of 1.9 mg/L was for the RPA analysis and resulted in the determination that a WQBEL is needed for ammonia.
(3) The applicable water quality criteria for hardness-dependent metals are based on a hardness value of 100 mg/L.

C. Rationale for Numeric Effluent Limits and Monitoring

EPA evaluated the typical pollutants expected to be present in the effluent and selected the most stringent of applicable technology-based standards or water quality-based effluent limitations. Where effluent concentrations of toxic parameters are unknown or are not reasonably expected to be discharged in concentration that have the reasonable potential to cause or contribute to water quality violations, EPA may establish monitoring requirements in the permit. Where monitoring is required, data will be re-evaluated and the permit may be re-opened to incorporate effluent limitations as necessary.

Flow

No limits established for flow, but flow rates must be monitored and reported. Continuous monitoring is required.

Chlorine

While the effluent is disinfected through filtration and UV disinfection, chlorine is intermittently used to remove bacteria prior to water reuse. Chlorine is known to be toxic for aquatic organisms, even in low concentrations. Therefore, the use of chlorine at the facility could result in toxic amounts even though chlorination is not the primary method of disinfection.

The Basin Plan does not contain any criteria or objectives for chlorine concentrations. However, EPA's National Recommended Water Quality Criteria suggests 0.02 mg/L as a 1-hour average or 0.01 mg/L as a 4-day average for aquatic life protection. The previous permit contained effluent limitations based on these criteria, and EPA is retaining these effluent limits to protect the designated uses associated with aquatic life (i.e. WARM, COLD, MIGR, SPWN, and WILD).

BOD_5 and TSS

EPA retained the more stringent effluent limits for BOD_5 and TSS, which are based on the technical capability of the tertiary treatment process. The principal design parameter for wastewater treatment plants is the daily BOD_5 and TSS loading rates and the corresponding removal rate of the system. The application of tertiary treatment processes results in the ability to achieve lower levels for BOD_5 and TSS than the secondary treatment standards. Therefore, this permit contains the technology-based effluent limits for TSS of 10 mg/L and 15 mg/L, as an AMEL and AWEL respectively, based on the capability of a tertiary treatment system.

Under 40 CFR § 122.45(f), mass limits are also required for BOD_5 and TSS. Based on the design flow, the mass-based limits are included in the permit. Monitoring is required weekly.

Settleable Solids

Settleable solids is an indicator of proper operation and maintenance of treatment facilities and is more applicable to wastewater treatment plants providing secondary treatment as opposed to tertiary treatment. Specifically, EPA Region 9 had a memo dated May 1979 that specified settleable solid effluent limitations for facilities providing secondary treatment. However, this facility provides tertiary treatment. Proper operation and maintenance of the facility is also addressed through the retention of a more stringent TSS limit than secondary treatment standards (i.e. 10 and 15 mg/L as opposed to 30 and 45 mg/L). Furthermore, the facility has not exceeded the previous effluent limit for settleable solids or the total suspended solids effluent limit. Therefore, regulating settleable solids is superfluous, and EPA is removing the previous technology-based settleable solids effluent limit consistent with the anti-backsliding exception related to technical mistakes or mistaken interpretations of law. See section D below.

Bacteria

The permit includes effluent limits for total coliform organisms of 2.2 MPN/100 mL, as a 7-day median; 23 MPN/100 mL, not to be exceeded more than once in a 30-day period; and 240 MPN/100 mL, at any time.

Effluent limits for total coliform organisms in the re-issued permit were established in accordance with the disinfection standards in Chapter 3, Division 4, Title 22 (Title 22), of the California Code of Regulations (CCR).

Based on the nature of wastewater treatment plant effluent, there is a reasonable potential for total coliform bacteria to violate water quality standards.

Effluent from the facility is designed to meet Title 22 disinfection standards for the recycling of wastewater. Title 22 requires that for spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of public access, wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered, and that the effluent total coliform levels not exceed a most probable number (MPN) of 2.2 per 100 mL as a 7-day median; 23 MPN/100 mL, not to be exceeded more than once in a 30-day period; and 240 MPN/100 mL, at any time.

Because the facility's tertiary treatment technology can meet the Title 22 standards for disinfected tertiary recycled water under normal operating conditions, EPA has developed the permit to be consistent with the standards described above and has included effluent limits in the permit consistent with these goals. Weekly monitoring for total coliform has been established in the permit to be consistent with Title 22 requirements.

Whole Effluent Toxicity

The Basin Plan states, "All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal or aquatic life." EPA's *Technical Support Document for Water Quality-Based Toxics Control* recommends a chronic toxicity monthly median limit of 1.0 TUc and a maximum daily limit of 1.6 TUc. The previous permit established a whole effluent toxicity limit based on a measurement of 1.6 TUs measured in September 2014. There have been no exceedances of the whole effluent toxicity limit in the last five-year permit term.

However, reasonable potential has been established for electrical conductivity, and salt is toxic to freshwater organisms because it can cause mortality and affect reproduction in aquatic plants and animals. Additionally, toxic pollutants, specifically arsenic and nickel, are present and detected in the effluent. The concentrations of these toxic pollutants are uncertain as only one priority pollutant scan was required in the last five-year permit term.[4]

Because of the past toxicity and the detection of toxic pollutants, EPA finds that there is reasonable potential to exceed the narrative toxicity standard and is retaining the whole effluent toxicity limit.

Ammonia and Ammonia Impact Ratio

Treated and untreated domestic wastewater may contain levels of ammonia that are toxic to aquatic organisms. Ammonia is converted to nitrate during biological nitrification process, and then nitrate is converted to nitrogen gas through biological denitrification process. Due to the potential for ammonia to be present in sanitary wastewater at toxic levels, the establishment of reasonable potential for ammonia levels to cause an excursion above water quality standards, and due to the conversion of ammonia to nitrate, effluent limitations are established using the Ammonia Impact Ratio ("AIR").

The AIR is calculated as the ratio of the ammonia value in the effluent to the applicable ammonia water quality standard. The 2013 Final Aquatic Life Ambient Water Quality Criteria for Ammonia in freshwater contains ammonia criteria that are pH and temperature dependent. Therefore, pH, temperature, and ammonia sampling must be concurrent. See Attachment D of the permit for a sample log to help calculate and record the AIR values and Attachment E for applicable Water Quality Standards. The AIR effluent limitation value is 1.0.

The permittee also must monitor and report ammonia effluent values in addition to the AIR value. AIR provides more flexibility than a specific, fixed effluent concentration and is protective of water quality standards since the value is set relative to the water quality standard. If the reported value exceeds the AIR limitation, then the effluent ammonia-N concentration exceeded the ammonia water quality criterion.

pH

The *Basin Plan* establishes that pH shall not be below 6.5 SU or above 8.5 SU, which is more stringent than the technology-based effluent limit of 6.0 – 9.0 SU. EPA retains the effluent limit of 6.5 - 8.5 SU in the permit. The San Joaquin River between Friant Dam and Mendota Pool is impaired for pH, but a TMDL had not been developed.

Electrical Conductivity (EC)

Due to water reuse at Table Mountain Rancheria, the discharge may be a source of salt, and the lower reaches of the San Joaquin River are impaired for salt.[5] The Basin Plan for the

[4] Nickel intoxication has been shown to cause hematological effects in aquatic life. These include hyperglycemia, hepatic glycogenolysis, lymphopenia, and erythrocytosis. The toxicity of nickel can be affected by pH, hardness, and presence of other chemicals. Arsenic is toxic to aquatic life as elevated levels of arsenic can cause mortality in aquatic animals and plants. The chemistry of arsenic in water can be affected by environmental conditions such as pH, organic content, suspended solids, and sediment characteristics.

[5] Salinity is a measure of the amount of dissolved particles and ions in water. The two most frequently used analyses for salinity are total dissolved solids (TDS) and electrical conductivity (EC).

Sacramento River Basin and San Joaquin River Basin contains an electrical conductivity (EC) objective of 150 µmhos/cm. Similar objectives for the Feather River are implemented as a 90th percentile and applied over a 10-year rolling average. The permit contains a narrative limit under Part 1.A. of the permit and is consistent with efforts by the Regional Water Board to address salt loading in the Central Valley.[6] In addition to this narrative limit, EPA also evaluated EC using the secondary MCL recommended level since the designated uses include municipal and domestic water supply (MUN) and irrigation (AGR). EPA is retaining the electrical conductivity effluent limit (expressed as a 12-month rolling average) because there is reasonable potential to exceed the secondary MCL of 900 µmhos/cm. Use of salinity limits is also consistent with the CV-SALTS "conservative salinity permitting approach."

Nitrate + Nitrite

Although there is not a statistical reasonable potential, EPA is carrying over the limit from the previous permit. The San Joaquin River has a designated use for municipal drinking water (i.e. MUN) and the concentration in raw domestic wastewater is sufficiently high that the resultant treated wastewater has the reasonable potential to exceed the primary MCL for nitrate plus nitrite.[7] Although, the permittee denitrifies the discharge, inadequate or incomplete denitrification creates the potential for nitrate plus nitrite to be discharged and provides the basis for the discharge to have a reasonable potential to cause or contribute to an exceedance above the primary MCL. Due to the potential for ammonia to be present in sanitary wastewater and due to the conversion of ammonia to nitrate, effluent limitations are established for nitrate plus nitrite (measured as N). Retaining the nitrate plus nitrite effluent limit also is consistent with the Regional Water Board's efforts to address ongoing nitrate accumulation in the Central Valley.

Temperature

There are no numeric water quality standards for temperature, only narrative standards, which have been incorporated into the permit. Effluent monitoring requirements for temperature have been incorporated in the permit to ensure that the applicable narrative standards are not exceeded and to calculate temperature-specific ammonia criteria, as described above.

Hardness

Water hardness monitoring data is needed to calculate appropriate limits for toxic parameters.[8] Thus, it is necessary to have accurate hardness information to create appropriate limits. The permit contains an annual monitoring requirement for water hardness.

D. Anti-Backsliding

Section 402(o) and 303(d)(4) of the CWA and 40 CFR § 122.44(l)(1) prohibits the renewal or reissuance of an NPDES permit that contains effluent limits and permit conditions less stringent than those established in the previous permit, except as provided in the statute and regulation. The permit does not establish any effluent limits less stringent than those in the

[6] See the Regional Water Board's 2017 City of Yuba (CA0079260), 2018 City of Portola (CA0077844), and 2019 Delleker (CA0081744) wastewater treatment plant NPDES permits.

[7] The Primary MCL for nitrate for protection of MUN is 10 mg/L and EPA's Ambient Water Quality Criteria for the Protection of Human Health is also 10 mg/L for non-cancer effects. DDW has also adopted a Primary MCL of 10 mg/L for the sum of nitrate and nitrite (measured as N).

[8] The California Toxics Rule contains water quality criteria for seven metals that vary as a function of hardness. The lower the hardness, the lower the water quality criteria. The metals with hardness-dependent criteria include cadmium, copper, chromium III, lead, nickel, silver, and zinc.

previous permit, except for settleable solids and copper. The establishment of less stringent limits for settleable solids and copper is consistent with anti-backsliding requirements of the CWA and federal regulations.

The statue identifies six exceptions in CWA Section 402(o)(2) where effluent limitations may be relaxed and includes exceptions for technical mistakes or mistaken interpretations of law. See 40 CFR § 122.44(l)(2)(i)(B)(2). Since the previous settleable solids effluent limit was a TBEL as opposed to a WQBEL, EPA can use this exception to justify the removal of the settleable solids effluent limit. The application of the previous settleable solids effluent limit was based on an EPA Region 9 1979 memo related to wastewater treatment facilities providing secondary treatment. This facility provides tertiary treatment.

CWA Section 303(d)(4) specifies exceptions to anti-degredation for attainment waters. Attainment waters are waters that are not listed on the CWA 303(d) list for the parameter for which less stringent effluent limitations are being established. CWA Section (304(d)(4)(B) specifies that if the receiving water is considered an attainment water, a limitation based on a water quality standard may be relaxed where the action is consistent with the anti-degredation policy. The receiving water is considered an attainment water because it is not listed on the CWA Section 303(d) list as impaired for copper. Thus, the removal of the effluent limitations for total recoverable copper meets the exception in CWA 303(d)(4)(B).

E. Antidegradation Policy

EPA's antidegradation policy under CWA Section 303(d)(4) and 40 CFR § 131.12 and the Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and San Joaquin River Basin require that existing water uses and the level of water quality necessary to protect the existing uses be maintained.

As described in this document, the permit establishes effluent limits and monitoring requirements to ensure that all applicable water quality standards are met. The permit does not include a mixing zone, therefore these limits will apply at the end of pipe without consideration of dilution in the receiving water. A priority pollutant scan has been conducted of the effluent, demonstrating that most pollutants will be discharged below detection levels. The waterbody is not listed as an impaired waterbody, except for pH and invasive species under section 303(d) of the CWA.

Therefore, due to the low levels of toxic pollutants present in the effluent, high level of treatment being obtained, and water quality-based effluent limitations, the discharge is not expected to adversely affect receiving water bodies or result in any degradation of water quality.

VII. NARRATIVE WATER QUALITY-BASED EFFLUENT LIMITS

The Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and San Joaquin River Basin contains narrative water quality standards applicable to the receiving water (see section 3 of the Basin Plan). Therefore, the permit incorporates applicable narrative water quality effluent limits in order to implement the water quality standards.

VIII. MONITORING AND REPORTING REQUIREMENTS

The permit requires monitoring for all pollutants or parameters where effluent limits have been established, at the minimum frequency specified. Additionally, where effluent concentrations of toxic parameters are unknown or where data are insufficient to determine reasonable potential, monitoring may be required for pollutants or parameters where effluent limits have not been established.

A. Effluent Monitoring and Reporting

The permittee shall conduct effluent monitoring to evaluate compliance with the draft permit conditions. The permittee shall perform all monitoring, sampling and analyses in accordance with the methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the draft permit. All monitoring data shall be reported on monthly DMRs and submitted quarterly as specified in the draft permit. All DMRs are to be submitted electronically to EPA using NetDMR.

B. Priority Toxic Pollutants Scan

A Priority Toxic Pollutants scan shall be conducted annually to ensure that the discharge does not contain toxic pollutants in concentrations that may cause a violation of water quality standards. The permittee shall perform all effluent sampling and analyses for the priority pollutants scan in accordance with the methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the draft permit or by EPA. 40 CFR § 131.36 provides a complete list of Priority Toxic Pollutants.

C. Whole Effluent Toxicity (WET) Requirements

Aquatic life is a public resource protected in surface waters covered by the CWA. As evidence that CWA requirements protecting aquatic life from chronic and acute toxicity are met in surface waters receiving the NPDES discharge, samples are collected from the effluent and tested for toxicity in a laboratory using EPA's WET methods. These aquatic toxicity test results are used to determine if the NPDES effluent causes toxicity to aquatic organisms. Toxicity testing is important because for scores of individual chemicals and compounds, chemical-specific environmentally protective levels for toxicity to aquatic life have not been developed, or set as water quality standards. In due course, some such chemicals and compounds can eventually make their way into effluents and their receiving surface waters. When this happens, toxicity tests of effluents can demonstrate toxicity due to present, but unknown, toxicants (including possible synergistic and additive effects), signaling a water quality problem for aquatic life.

EPA's WET methods are systematically designed instructions for laboratory experiments that expose sensitive life stages of a test species (e.g., fish, invertebrate, algae) to both an NPDES effluent sample and a negative control sample. During the toxicity test, each exposed test organism can show a difference in biological response; some will be undesirable differences. Examples of undesirable biological responses include, but are not limited to, eggs not fertilized, early life stages that grow too slowly or abnormally, or death. At the end of a toxicity test, the different biological responses of the organisms in the effluent group and the organisms in the control group are summarized using common descriptive statistics (e.g., means, standard deviations, coefficients of variation). The effluent and control groups are then compared using an applicable inferential statistical approach (i.e., hypothesis testing or point estimate model) chosen by the permitting authority and specified in the NPDES permit. The chosen statistical approach is compatible with both the experimental design of the WET method and the applicable toxicity

water quality standard. Based on this statistical comparison, a toxicity test will demonstrate that the effluent is either toxic or not toxic, in relation to the permit's toxicity level for the effluent, which is set to protect the quality of surface waters receiving the NPDES discharge. EPA's WET methods are specified under 40 CFR § 136 and/or in applicable water quality standards.

EPA recommends inferential statistical approaches that a permitting authority chooses from to set a protective level for toxicity in an NPDES discharge. The statistical approach chosen for this permit is based on bioequivalence hypothesis testing and is called the Test of Significant Toxicity (TST) statistical approach. It is described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document* (EPA 833-R-10-004, 2010; TST Technical Document) and Denton DL, Diamond J, and Zheng L. 2011. Test of significant toxicity: A statistical application for assessing whether an effluent or site water is truly toxic. *Environ Toxicol Chem* 30:1117-1126. This statistical approach supports important choices made within a toxicity laboratory which favor quality data and EPA's intended levels for statistical power when true toxicity is statistically determined to be unacceptably high (≥ 25 PE, Percent (%) Effect), or acceptably low (< 10 PE). Example choices are practices supporting healthy test organisms, increasing the minimum recommended replication component of the WET method's experimental design (if needed), technician training, etc. TST results do not often differ from other EPA-recommended statistical approaches using hypothesis testing (Diamond D, Denton D, Roberts J, Zheng L. 2013. Evaluation of the Test of Significant Toxicity for determining the toxicity of effluents and ambient water samples. *Environ Toxicol Chem* 32:1101-1108.). The TST maintains EPA's desired low false positive rate for WET methods—the probability of declaring toxicity when true toxicity is acceptably low ≤ 5%—when quality toxicity laboratories conduct toxicity tests (TST Technical Document; Fox JF, Denton DL, Diamond J, and Stuber R. 2019. Comparison of false-positive rates of 2 hypothesis-test approaches in relation to laboratory toxicity test performance. *Environ Toxicol Chem* 38:511-523.). Note: The false positive rate is a long-run property for the toxicity laboratory conducting a WET method. A low false positive rate is indicted by a low long-run toxicity laboratory control coefficent of variation for the test species/WET method, using a minimum of 30 to 50 toxicity tests.

Following 40 CFR § 122.44(d)(1) and guidance for determining reasonable potential in chapter 3 of *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001, 1991), chapter 2 in *EPA Regions 8, 9 and 10 Toxicity Training Tool* (January 2010), and appendix E in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), reasonable potential for chronic toxicity has been established. *See*, also, *Toxicity Reduction and Toxicity Identification Evaluations for Effluents, Ambient Waters, and Other Aqueous Media* (SETAC 2005). Based on a previous exceedance and elevated levels of Arsenic, Nikel and salinity, a chronic toxicity WQBEL (i.e., WET limit) is required for the permitted discharge. As a result, monitoring and reporting for compliance with median monthly and maximum daily effluent limits for the parameter of chronic toxicity are required, so that effluent toxicity can be assessed in relation to these WQBELs for the permitted discharge (see Part I, Table 2 in NPDES permit). See VI.C. for more information.

In accordance with 40 CFR § 122.44(d)(1)(ii), in setting the permit's levels for chronic toxicity and conditions for discharge, EPA is using a test species/chronic short-term WET method and a discharge Instream Waste Concentration (IWC) representing conservative assumptions for effluent dilution necessary to protect receiving water quality. The IWC is a

discharge-specific term based on the permit's authorized mixing zone or initial dilution. Generally, the dilution model result "S" from Visual Plumes/Cormix is used. S is the volumetric dilution factor, i.e. 1 volume effluent is diluted with S − 1 volumes surface water) = [(Ve + Va) / Ve]. Following the mass balance equation, if the dilution ratio D = Qs / Qe, then [(Qe + Qs) / Qe] = 1 + D = S.

For this discharge, S = 1 (i.e., no authorized dilution). The discharge-specific IWC = 1 to 1 dilution (1:1, 1/1) = 100% effluent. The IWC made by the toxicity laboratory is mixed as 1 part solute (i.e., effluent) to 0 parts dilutant (1: (1 – 1)) for a total of 1 part.

The TST's null hypothesis for chronic toxicity (H_o) is: In-stream Waste Concentration (IWC) mean response (% effluent) ≤ 0.75 Control mean response. The TST's alternative hypothesis is (H_a): IWC mean response (% effluent) > 0.75 Control mean response. For this permit, results obtained from a single chronic toxicity test are analyzed using the TST statistical approach, where the required chronic toxicity IWC for Discharge Point Number 005 is 100% effluent.

For NPDES samples for toxicity testing, the sample hold time begins when the 24-hour composite sampling period is completed (or the last grab sample in a series of grab samples is taken) and ends at the first time of sample use (initiation of toxicity test). 40 CFR § 136.3(e) states that the WET method's 36-hour hold time cannot be exceeded unless a variance of up to 72-hours is authorized by EPA.

For this discharge, EPA has set a median monthly effluent limit and a maximum daily effluent limit (40 CFR § 122.45(d)) for chronic toxicity. These limits are set to restrict the discharge of toxic pollutants in toxic amounts and protect both applicable aquatic life water quality standards, including standards downstream of the discharge, and existing aquatic life designated uses in receiving waters (CWA §§ 101(a)(3), 301(b)(1)(C)). The median monthly WQBEL, of no more than 1 of a maximum of 3 chronic toxicity tests with unacceptably high toxicity declared by the TST statistical approach, ensures a high probability of declaring such discharges toxic. The maximum daily WQBEL, of 1 toxicity test rejecting the TST null hypothesis and an associated chronic biological endpoint PE < 50 (2x the TST's chronic toxicity Regulatory Management Decision (RMD) of 25 PE), ensures the restriction of highly toxic (chronic, acute) discharges. Both effluent limits take in to account that, on occasion, quality toxicity laboratories conducting effluent toxicity tests can incorrectly declare a sample with acceptable toxicity "toxic" (≤ 5% of the time when the true toxicity of the discharge is < 10 PE).

For POTWs, it is not practicable (40 CFR § 122.45(d)) for EPA to set an average (median) weekly effluent limit, in lieu of a maximum daily effluent limit. This is because discharges of unacceptable toxicity—true chronic toxicity ≥ 25 PE, the TST's chronic toxicity RMD—are not adequately restricted by two effluent limits (median weekly and median monthly) each using a median of up to 3 toxicity test results. Under such limits, a highly toxic (chronic, acute) discharge could occur with no restriction. Moreover, using two such median limits further decreases the probability that an effluent with unacceptable toxicity will be caught, resulting in a permitted discharge which under-protects the aquatic life from unacceptable chronic toxicity.

Species sensitivity screening for chronic toxicity is not an automatic requirement in this permit. However, the permit retains a species sensitivity screening condition as an option for the

permitting authority to exercise, particularly when the quality of the permitted discharge has changed, or is expected to change, during the permit term.

IX. SPECIAL CONDITIONS

A. Biosolids

Standard requirements for the monitoring, reporting, recordkeeping, and handling of biosolids in accordance with 40 CFR Part 503 are incorporated into the permit. The permit also includes, for dischargers who are required to submit biosolids annual reports, which include major POTWs that prepare sewage sludge and other facilities designated as "Class 1 sludge management facilities", electronic reporting requirements. Permittees shall submit biosolids annual reports using EPA's NPDES Electronic Reporting Tool ("NeT") by February 19th of the following year.

B. Pretreatment

EPA has established pretreatment standards to prevent the introduction of pollutants into POTWs which will interfere with or pass through the treatment works, and to improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges (Section 307 of the CWA). EPA requires any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 MGD and receiving from nondomestic sources pollutants which pass through or interfere with the operations of the POTW or are otherwise subject to pretreatment standards to establish a pretreatment program.

The POTW has a design flow less than 5 MGD, and no nondomestic facilities discharge pollutants which pass through or interfere with the operations of this POTW, or which are otherwise subject to pretreatment standards. Therefore, there are no pretreatment requirements in this permit.

C. Recycled Water Standards (California Title 22 Recycled Water Criteria)

The criteria contained in CCR, Title 22, Division 4, Chapter 3 are applicable to the use of reclaimed water at the facility. The facility's effluent is recycled and used for irrigation, air conditioning, and firefighting. There is a potential for human contact with the effluent, so Title 22 limits and monitoring requirements for total coliform are applicable to the facility and have been incorporated into the permit to protect public health. This is consistent with other NPDES permits issued for facilities located on tribal land in California.

The facilities or systems shall also be operated by an operator that has training and/or certification equivalent to the requirements of the State of California for operating and maintaining such facilities or systems.

D. Capacity Attainment and Planning

The permit requires that a written report be filed within ninety (90) days if the average dry-weather wastewater treatment flow for any month exceeds 90 percent of the annual dry weather design capacity of the waste treatment and/or disposal facilities.

E. Development of an Initial Investigation TRE Workplan for Whole Effluent Toxicity

The permit requires the permittee to develop and implement a Toxics Reduction Evaluation (TRE) Workplan. This plan shall include steps the permittee intends to follow if a Median

Monthly Effluent result for chronic toxicity is reported as Fail (1) for the reporting month. Within 90 days of the permit effective date, the permittee shall prepare and submit a copy of their Initial Investigation TRE Workplan (1-2 pages) to EPA for review.

F. Asset Management

40 CFR § 122.41(e) requires permittees to properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Asset management planning provides a framework for setting and operating quality assurance procedures and ensuring the permittee has sufficient financial and technical resources to continually maintain a targeted level of service. Asset management requirements have been established in the permit to ensure compliance with the provisions of 40 CFR § 122.41(e).

X. OTHER CONSIDERATIONS UNDER FEDERAL LAW

A. Consideration of Environmental Justice

EPA conducted a screening level evaluation of vulnerabilities in the community posed to local residents near the vicinity of the permitted POTW using EPA's EJSCREEN tool. The purpose of the screening is to identify areas disproportionately burdened by pollutant loadings and to consider demographic characteristics of the population living in the vicinity of the discharge when drafting permit conditions.

In May 2020, EPA conducted an EJSCREEN analysis of the community near the vicinity of the outfall. Of the 11 environmental indicators screened through EJSCREEN, the evaluation determined elevated indicator scores for ozone, NATA cancer risk, and NATA respiratory hazard index. The EJSCREEN for demographic information about the community near the outfall indicates that a high proportion of the population is under 5 years old, relative to the general population. This indicates the local population may be at relatively higher risk if exposed to environmental contaminants than the general population.

As a result of the analysis, EPA is aware of the potential for cumulative burden of the permitted discharge on the impacted community and will issue this permit in consideration of the impacted community and consistent with the CWA, which is protective of all designated uses of the receiving water, including human health.

B. Impact to Threatened and Endangered Species

Section 7 of the Endangered Species Act (ESA) of 1973 (16 U.S.C. § 1536) requires federal agencies to ensure that any action authorized, funded, or carried out by the federal agency does not jeopardize the continued existence of a listed or candidate species, or result in the destruction or adverse modification of its habitat.

The website for the U.S. Fish and Wildlife Service's (USFWS) Sacramento office generated an Official Species list on April 7, 2020, which identifies the following threatened (T) and endangered (E) species and their critical habitat that may occur in the vicinity of Little Dry Creek.

Status	Species/Listing Name	Critical Habitat

Status	Species/Listing Name	Critical Habitat
E	Fresno Kangaroo Rat (*Dipodomys nitratoides exilis*)	No
E	San Joaquin Kit Fox (*Vulpes macrotis mutica*)	No
E	Blunt-nosed Leopard Lizard (*Gambelia silus*)	No
E	Conservancy Fairy Shrimp (*Branchinecta conservatio*)	Yes(1)
E	Hartweg's Golden Sunburst (*Pseudobahia bahiifolia*)	No
T	Giant Garter Snake (*Thamnophis gigas*)	No
T	California Red-legged Frog (*Rana draytonii*)	No
T	California Tiger Salamander (*Ambystoma californiense*)	Yes(2)
T	Delta Smelt (*Hypomesus transpacificus*)	No
T	Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)	No
T	Fleshy Owl's-clover (*Castilleja campestris ssp. succulenta*)	No
T	San Joaquin Orcutt Grass (*Orcuttia inaequalis*)	No

(1) Vernal pool fairy shrimp critical habitat has been designated west of the facility between Table Mountain Rancheria and Friant, CA. This critical habitat is not located in the action area.
(2) California tiger salamander critical habitat has been designated west of the facility between Table Mountain Rancheria and Friant, CA. This critical habitat is not located in the action area.

The action area is defined as the wastewater treatment facility, the stretch of the tributary to little dry creek between Outfall 008 and where the tributary meets little dry creek, and the entirety of little dry creek. The action area does not include the San Joaquin River, as discharge from the facility is limited and the effluent is heavily diluted upon reaching the San Joaquin River. Furthermore, the proposed permit contains limits to protect designated uses of the receiving waters, including protection of aquatic life and wildlife habitat and does not involve physical habitat alteration or change in flow.

The conservancy fairy shrimp (*Branchinecta conservatio*), blunt-nosed leopard lizard (*Gambelia silus*), Fresno kangaroo rat (*Dipodomys nitratoides exilis*), San Joaquin kit fox (*Vulpes macrotis mutica*), delta smelt (*Hypomesus transpacificus*), California red-legged frog (*Rana aurora draytonii*), giant garter snake (*Thamnophis gigas*), and San Joaquin Valley orcutt grass (*Orcuttia inaequalis*) occur only in or adjacent to the lower reaches of the San Joaquin River. These species do not occur within the action area, and thus EPA has made a “no effect” determination.

Hartweg’s Golden Sunburst (*Pseudobahia bahiifolia*), and Fleshy Owl’s Clover (*Castilleja campestris ssp. succulenta*) may occur near the action area. Hartweg’s Golden Starbursts nearly always occur on Mima mounds, which typically border vernal pools. Populations of Hartweg’s Golden Sunburst are found on the eastern edge of the San Joaquin Valley, concentrated in the Friant region of Fresno. Fleshy Owl’s Clover is found only in vernal pools, and occurs in northern Fresno County, with a smaller area of concentration near the “tabletop” mountains around Millerton Lake. Here, the discharge is small and confined to the receiving water, which does not flow through vernal pools or Mima mounds. EPA has made a “no effect” determination because these species do not occur within the action area.

The California Tiger Salamander (*Ambystoma californiense*) and the Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) are restricted to vernal pools and seasonal ponds, and the California Tiger Salamander is also found in constructed stock ponds. Here, the discharge is confined to the receiving water and does not flow through vernal pools or constructed stock ponds. EPA has made a "no effect" determination because these species do not occur within the action area. Additionally, both species have potential critical habitat near the action area. The critical habitat for these species is located west of the facility, between Table Mountain Rancheria and Friant, CA. Here, the discharge is limited to the receiving wash and downstream channels, and the discharge does not flow through vernal pools or stock ponds. The critical habitat is outside of the action area, so EPA has made a "no effect" determination as to the critical habitat.

Conclusions

EPA concludes that the reissuance of the NPDES permit for the Table Mountain Rancheria wastewater treatment plant will have no effect on the Federally-listed endangered or threatened species or critical habitat, as discussed above.

C. Impact to Coastal Zones

The Coastal Zone Management Act (CZMA) requires that Federal activities and licenses, including Federally permitted activities, must be consistent with an approved state Coastal Management Plan (CZMA Sections 307(c)(1) through (3)). Section 307(c) of the CZMA and implementing regulations at 40 CFR § 930 prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State (or Territory) Coastal Zone Management program, and the State (or Territory) or its designated agency concurs with the certification.

The draft permit does not affect land or water use in the coastal zone.

D. Impact to Essential Fish Habitat

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act (MSA) set forth a number of new mandates for the National Marine Fisheries Service, regional fishery management councils and other federal agencies to identify and protect important marine and anadromous fish species and habitat. The MSA requires Federal agencies to make a determination on Federal actions that may adversely impact Essential Fish Habitat (EFH).

The draft permit contains technology-based effluent limits as well as numerical and narrative water quality-based effluent limits as necessary for the protection of applicable aquatic life uses. The draft permit does not directly discharge to areas of essential fish habitat. Therefore, EPA has determined that the draft permit will not adversely affect essential fish habitat.

E. Impact to National Historic Properties

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effect of their undertakings on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. Pursuant to the NHPA and 36 CFR § 800.3(a)(1), EPA is making a determination that issuing this draft NPDES permit does not have the potential to affect any historic properties or cultural properties. As a result, Section 106 does not require EPA to undertake additional consulting on this permit issuance.

F. Water Quality Certification Requirements (40 CFR § 124.53 and § 124.54)

EPA is the Clean Water Act (CWA) Section 401 certifying authority for this permit, because Table Mountain Rancheria has not received authorization to implement section 303(c) of the CWA. As stated in the public notice for this permit, EPA is also seeking public comment on Section 401 certification requirements.

Generally, the permit contains conditions and requirements for the facility discharges to meet water quality standards in the receiving waters. As explained in part III of this factsheet, general facility description, this wastewater treatment plant performs tertiary treatment which yields high quality effluent with low levels of pollutants. The effluent limitations are set at levels such that the discharge will maintain water quality standards in the receiving water. The term water quality standards includes numeric and narrative water quality criteria as well as the designated uses of the receiving water.

XI. STANDARD CONDITIONS

A. Reopener Provision

In accordance with 40 CFR § 122 and § 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.

B. Standard Provisions

The permit requires the permittee to comply with EPA Region IX Standard Federal NPDES Permit Conditions.

XII. ADMINISTRATIVE INFORMATION

A. Public Notice (40 CFR § 124.10)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application.

B. Public Comment Period (40 CFR § 124.10)

Notice of the draft permit will be placed on EPA's website at https://www.epa.gov/npdes-permits/california-tribal-lands-npdes-permits, with a minimum of 30 days provided for interested parties to respond in writing to EPA. After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

C. Public Hearing (40 CFR § 124.12)

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if EPA determines there is a significant amount of interest expressed during the 30-day public comment period or when it is necessary to clarify the issues involved in the permit decision.

XIII. CONTACT INFORMATION

Comments, submittals, and additional information relating to this proposal may be directed to:

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