NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FACT SHEET June 2025

Permittee Name:	San Carlos Apache Tribe Water Distribution and Wastewater Treatment Facilities Program
Mailing Address:	1 Mesa Drive San Carlos, Arizona 85550
Facility Location:	Coolidge Dam Road Peridot, Arizona 85542
Contact Person(s):	Christabelle Mull General Manager, San Carlos Apache Tribe <u>Christabelle.mull@scat-nsn.gov</u> , (928) 475-1782
NPDES Permit No.:	AZ0024640

Table of Contents

I. STATUS OF PERMIT	- 1 -
II. GENERAL DESCRIPTION OF FACILITY	
III. DESCRIPTION OF RECEIVING WATER	
IV. DESCRIPTION OF DISCHARGE	3 -
V. DETERMINATION OF NUMERICAL EFFLUENT LIMITATIONS	3 -
VI. NARRATIVE WATER QUALITY-BASED LIMITS	11 -
VII. MONITORING AND REPORTING REQUIREMENTS	11 -
VIII. SPECIAL CONDITIONS	14 -
IX. OTHER CONSIDERATIONS UNDER FEDERAL LAW	17 -
X. STANDARD CONDITIONS	23 -
XI. ADMINISTRATIVE INFORMATION	24 -
XII. CONTACT INFORMATION	25 -
XIII. REFERENCES	25 -

I. STATUS OF PERMIT

The San Carlos Apache Tribe (the "permittee") has applied for a new National Pollutant Discharge Elimination System (NPDES) permit to authorize the discharge of treated effluent from the Six Mile Lagoon Wastewater Treatment Facility (the facility) to the San Carlos River located on San Carlos Apache tribal land west of Globe, Gila County, Arizona. A complete application was submitted May 22, 2024. EPA Region IX 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 San Carlos Apache Tribe is a federally recognized Indian Tribe. Currently, U.S. EPA Region 9 is the regulatory authority with responsibility for administering the NPDES permitting program within the San Carlos Apache Reservation. EPA developed this fact sheet based on information provided in the permit application, effluent discharge data, as well as applicable laws and regulations. EPA is issuing a new NPDES permit for wastewater discharges from the Six Mile Lagoon Facility. EPA has classified this permittee as a minor discharger.

II. GENERAL DESCRIPTION OF FACILITY

The Six Mile Lagoon Wastewater Treatment Facility is located on tribal lands within the San Carlos Apache Reservation. The facility serves a total population of approximately 8,000 people and receives domestic wastewater from the nearby communities of Peridot, Gilson Wash District, and Lower Seven Mile. The facility does not receive any contributions from significant industrial users (SIUs) or non-significant categorical industrial users (NSCIUs). The facility has a design flow of 0.61 million gallons per day (MGD). The facility was originally constructed in the early 1980s and wastewater was designed to be fully retained in the lagoons and either infiltrated or evaporated. With the increased population and water usage since the 1980s, the facility has applied for NPDES coverage to discharge intermittently, when the lagoons are full.

The facility treats wastewater in a series of 10 facultative ponds which provide a secondary level of treatment. Wastewater entering the facility is pumped into lagoon 1, followed by lagoon 2 through 6. After wastewater passes through the six lagoons, it is routed to either lagoon 7, 8, 9, or 10. The effluent is then discharged from either lagoon 7, 8, 9, or 10 through the corresponding outfall (Outfall 001, Outfall 002, Outfall 003, Outfall 004). The facility is not equipped with sludge processing equipment and has never removed biosolids from the lagoons.

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Treated Wastewater	33° 16' 15.82"N	110° 27' 21.49"W	San Carlos River
002	Treated Wastewater	33° 16' 16.28"N	110° 27' 16.09"W	San Carlos River
003	Treated Wastewater	33° 16' 15.83"N	110° 27' 20.79"W	San Carlos River
004	Treated Wastewater	33° 16' 8.63"N	110° 27' 15.63"W	San Carlos River

III. DESCRIPTION OF RECEIVING WATER

Effluent will be discharged to the San Carlos River which flows through the Reservation. The San Carlos River is located within the Middle Gila Watershed. From the discharge location, the San Carlos River flows approximately four miles downstream into the San Carlos Reservoir. The San Carlos Reservoir is an impoundment of the Gila River. The Gila River is a tributary of the Colorado River. See Attachment B of the permit for location maps. See Section VI.B.1 of this fact sheet for more information regarding the standards, designated uses, and impairments of the receiving water.

IV. DESCRIPTION OF DISCHARGE

The facility includes a secondary treatment system that is capable of treating effluent with Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS) concentrations below EPA's secondary treatment requirements. The influent to the facility is domestic wastewater. The treatment system consists of a series of lagoon cells. Pollutants of concern for this discharge include ammonia, nitrate, oxygen demand, indicator bacteria, temperature, and nutrients.

Effluent data will be publicly available on EPA's Enforcement and Compliance History Online (https://echo.epa.gov/) after the permittee has begun submitting Discharge Monitoring Reports (DMRs).

V. DETERMINATION OF NUMERICAL EFFLUENT LIMITATIONS

EPA has developed effluent limitations and monitoring requirements in the permit based on an evaluation of the technology used to treat the pollutant (i.e., "technology-based effluent limits") and the water quality standards applicable to the receiving water (i.e., "water qualitybased effluent limits"). EPA has established the most stringent of applicable technology-based or water quality-based standards in the permit, as described below.

A. Applicable Technology-Based Effluent Limitations

Publicly Owned Wastewater Treatment Systems (POTWs)

EPA developed technology-based treatment standards for wastewater treatment plants in accordance with Section 301(b)(1)(B) of the CWA. The minimum levels of effluent quality attainable by secondary treatment for Biochemical Oxygen Demand (BOD₅), Total Suspended Solids (TSS), and pH, as defined in 40 CFR § 133.102, are listed below. Mass limits, as required by 40 CFR § 122.45(f), are included for BOD₅ and TSS.

<u>BOD₅</u> Concentration-based Limits 30-day average – 30 mg/L 7-day average – 45 mg/L Removal Efficiency – minimum of 85%

Mass-based Limits

30-day average – (30 mg/L)(0.61 MGD)(8.345 conversion factor) = 153 lbs/day 7-day average – (45 mg/L)(0.61 MGD)(8.345 conversion factor) = 229 lbs/day

<u>TSS</u>

Concentration-based Limits 30-day average – 30 mg/L 7-day average – 45 mg/L Removal efficiency – Minimum of 85% Mass-based Limits

30-day average – (30 mg/L)(0.61 MGD)(8.345 conversion factor) = 153 lbs/day 7-day average – (45 mg/L)(0.61 MGD)(8.345 conversion factor) = 229 lbs/day

<u>pH</u> 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 facility and discharge) (40 CFR § 125.3(c)(2)).

B. Water Quality-Based Effluent Limitations

Water quality-based effluent limitations (WQBELs) 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. Existing data on toxic pollutants Reasonable Potential Analysis

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

The San Carlos Apache Tribe does not have EPA-approved surface water quality standards. As the discharge may eventually flow into the Gila River, EPA has determined the discharge must meet the downstream standards established by the State of Arizona Water Quality Standards (WQS) found in Title 18, Chapter 11 of the Arizona Administrative Code; therefore, EPA is applying the State of Arizona Water Quality Standards to the wastewater discharges from this facility. The applicable WQS for the nearest downstream section of river has been identified as the Gila River from the San Carlos Indian Reservation boundary to the Ashurst-Hayden Dam in the Middle Gila watershed, as defined in Appendix B [*Surface Waters and Designated Uses*] of the Arizona WQS, effective 2022. The designated uses of the Gila River from the San Carlos Indian Reservation boundary to the Ashurst-Hayden Dam are as follows:

A&Ww - Aquatic & Wildlife, warm water
FBC - Full Body Contact
FC - Fish Consumption
AgI - Agricultural Irrigation
AgL - Agricultural Livestock Watering

And, section R18-11-104D [Designated Uses] states:

"If a surface water has more than one designated use listed in Appendix B, the most stringent water quality criterion applies."

The San Carlos River has not been assessed and is therefore not listed as impaired according to the CWA § 303(d) List of Water Quality Limited Segments. No Total Maximum Daily Loads (TMDLs) have been developed for the San Carlos River. The San Carlos River is a tributary to the Gila River. Approximately 42 miles downstream from the discharge outfall, near the town of Winkelman, the Gila River is listed in ADEQ's 2024 303(d) List as being impaired for suspended sediment. An applicable TMDL has not been established for this impaired water segment. An effluent limit has been established for total suspended solids in this permit. Additionally, this permit contains a provision that allows the permit to be reopened to include any TMDL related requirements from approved TMDLs in the future.

Facilities that discharge to the San Carlos River or the Gila River or its tributaries do not require conformance with the Colorado River Basin Salinity Control Forum policies.

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. Chlorine and turbidity may also be of concern due to treatment plant operations. ID SIC code. For POTWs: The SIC code for this facility is 4952 (Sewerage Systems).

5. Existing Data on Toxic Pollutants and Reasonable Potential Analysis

For pollutants with effluent data available, EPA has 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 using a coefficient of variation of 0.6 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 = $C_e \times reasonable$ 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.

Parameter ⁽¹⁾⁽²⁾	Maximum Observed Concentration	n	RP Multiplier	Projected Maximum Effluent Concentration	Most Stringent Water Quality Criterion	Statistical Reasonable Potential?
E. coli	22.6 MPN/100mL	2	7.4	167.24 MPN/100m L	126 MPN/100 mL (FBC)	Y
Dissolved Oxygen	5.24 mg/L (minimum)	3			6.0 mg/L (minimum) (A&Ww)	Ν
рН	9.4 s.u.	3			6.5 – 9.0 s.u. (FBC/AgL)	Y
Antimony	0.00061 mg/L	2	7.4	0.004514 mg/L	0.03 mg/L (dissolved) (A&Ww – Chronic)	Ν
Arsenic	0.0045 mg/L	2	7.4	0.0333 mg/L	0.03 mg/L (total) (FBC)	Y
Iron	0.074 mg/L	2	7.4	0.5476 mg/L	1 mg/L (dissolved) (A&Ww – Chronic)	Ν
Boron	0.41 mg/L	2	7.4	3.034 mg/L	1 mg/L (total) (AGI)	Y
Total Suspended Solids	86 mg/L	2	7.4	636.4 mg/L	80 mg/L (A&Ww)	Y

Summary	of Reasonable	Potential	Statistical	Analysis:
Sammar		1 Otentiai	Statistical	/ (101 y 51 5 .

Ammonia	1.42 mg/L	2	7.4	10.508	4.7 mg/L ⁽³⁾	Y
				mg/L	(A&Ww - Chronic)	

- (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) Effluent data was collected by the prospective permittee in October and November 2022, as well as May 2024.
- (3) The Arizona Water Quality Standards contain ammonia criteria which are pH and temperature dependent. This criterion is assuming receiving water conditions of 18 °C and 7 s.u.

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 concentrations 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. Monitoring is required continuously, when discharging.

BOD₅ and TSS

Limits for BOD_5 and TSS are established for POTWs as described above and are incorporated into the permit. 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. Effluent monitoring is required monthly, when discharging.

E. coli

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for E. coli. Section R18-11-109A of the Arizona WQS provides requirements for bacteria for the FBC designated use. Arizona WQS requires that the geometric mean of the E. Coli values for effluent samples collected (a minimum of 4 samples in 30 consecutive days) shall not exceed 126 colony forming units (CFU) per 100 mL of water, and that the single sample maximum shall not exceed 235 CFU/100mL of water. The permit sets effluent limits reflecting these WQS. If discharging, then effluent monitoring is required monthly.

Dissolved Oxygen

The applicable water quality standards state that either the percent saturation of dissolved oxygen in surface waters shall be equal to or greater than 90 percent, or a single sample minimum shall not be below 6 mg/L. Dissolved oxygen is designed to protect the A&Ww designated use. Given this is an intermittent discharge and uncertainty about any potential adverse effect of the discharge on the receiving water, EPA is requiring dissolved oxygen

monitoring in the effluent and receiving water. Effluent monitoring is required monthly, when discharging. Receiving water monitoring is required quarterly, regardless of discharge status.

рΗ

The applicable water quality standards establish that pH shall not be below 6.5 s.u. or above 9.0 s.u., which is more stringent than the technology-based effluent limit of 6.0 - 9.0 s.u. EPA sets the effluent limit of 6.5 - 9.0 SU in the permit. Effluent monitoring is required monthly, when discharging.

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 the biological nitrification process, and then nitrate is converted to nitrogen gas through the biological denitrification process. Due to the potential for ammonia to be present in sanitary wastewater at toxic levels and due to the conversion of ammonia to nitrate, effluent limitations are established using the Ammonia Impact Ratio ("AIR") for all facilities.

The AIR is calculated as the ratio of the ammonia value in the effluent to the applicable ammonia water quality standard. Tables 11 and 12 of the Arizona WQS contain ammonia criteria which are pH- and temperature dependent. Therefore, ammonia monitoring is required to be conducted concurrent with pH and temperature monitoring, and temperature monitoring has been added to the permit. 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. AIR limitation values are set to be the value of the dilution granted for ammonia plus one.

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, with consideration of dilution. If the reported value exceeds the AIR limitation, then the effluent ammonia-N concentration exceeded the ammonia water quality criterion after dilution.

Oil and Grease

POTWs have the potential to discharge oil and grease, as oil and grease may be present in the influent and are not removed in the treatment process at this facility. Arizona water quality standards include a narrative standard that states: "... waters shall be free from visible oils, scum, foam, grease and other floating materials and suspended substances of a persistent nature resulting from other than natural causes." Effluent monitoring is required monthly, when discharging.

Arsenic

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for arsenic. Therefore, the permit contains an average monthly effluent limit of 30 μ g/L and a maximum daily effluent limit of 39.3 μ g/L for arsenic in the permit. Monitoring is required monthly, when discharging.

Full Body Contact Criteria ⁽¹⁾ , µg/L	30
No Dilution Credit Authorized	0
WLA (Total Recoverable), μg/L ⁽²⁾	30
AML, μg/L	30 μg/L
MDL/AML Ratio (99 th %)	1.31
MDL, μg/L	39.3 μg/L

WQBEL Limit Calculation for Arsenic

(1) Derivation of permit limit based on Section 5.4.4 of USEPA's TSD

(2) MDL/AML Ratio based on sampling frequency of four times per month per Table 5-3 of USEPA'S TSD.

Boron

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for boron. Therefore, the permit contains an average monthly effluent limit of 1000 μ g/L and a maximum daily effluent limit of 1310 μ g/L for boron in the permit. Effluent monitoring is required monthly, when discharging.

WQBEL LIMIT CALCULATION FOR BOTON					
Agricultural Irrigation Criteria ⁽¹⁾ , μ g/L	1000				
No Dilution Credit Authorized	0				
WLA (Total Recoverable), μg/L ⁽²⁾	1000				
AML, μg/L	1000 μg/L				
MDL/AML Ratio (99 th %)	1.31				
MDL, μg/L	1310 µg/L				

WQBEL Limit Calculation for Boron

(1) Derivation of permit limit based on Section 5.4.4 of USEPA's TSD

(2) MDL/AML Ratio based on sampling frequency of four times per month per Table 5-3 of USEPA'S TSD.

Nitrate + Nitrite

Although the permittee treats the discharge, inadequate or incomplete treatment 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 EPA's nationally recommended human health water quality standard of 10 mg/L for nitrate plus nitrite (measured as N). EPA is relying on the nationally recommended human health water quality standard due to the lack of a nitrate plus nitrite water quality standard in the Arizona water quality standards.

In order to set nitrate + nitrite limits in this permit that are based on the latest scientific knowledge, EPA's "Quality Criteria for Water-1986" has been used. A maximum daily effluent limitation of 10 mg/L is established in the permit for nitrate plus nitrite (measured as N). Monitoring is required monthly, when discharging.

Settleable Solids

The AZWQS state there shall be no discharge of pollutants to the receiving water that settle to form bottom deposits that inhibit or prohibit the habitation, growth, or propagation of aquatic life. To ensure this WQS is incorporated into the permit in a measurable way, settleable solids monitoring in effluent has been included. Monitoring is required monthly, when discharging.

Chlorine

At this time the permittee does not use chlorine in their treatment process. If the permittee does use chlorine, monitoring and reporting are required weekly. If a UV disinfection system is operating and chlorination is not occurring, monitoring for total residual chlorine is not required.

D. Anti-Backsliding

Section 402(o) and 303(d)(4) of the CWA and 40 CFR § 122.44(I)(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.

This facility does not have a previous permit and thus the permit does not establish any effluent limits less stringent than those in the previous permit and does not allow backsliding.

E. Antidegradation Policy

EPA's antidegradation policy under CWA § 303(d)(4) and 40 CFR § 131.12 and Section R18-11-107 of the Arizona WQS require that existing water uses and the level of water quality necessary to protect the existing uses be maintained. Before allowing any lowering of water quality, EPA must find, after an analysis of alternatives, that such a lowering is necessary to accommodate important economic or social development in the area in which the waters are located. The analysis of alternatives shall evaluate a range of practicable alternatives that would prevent or lessen the degradation associated with the proposed activity.

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. Priority pollutant scans and chronic toxicity monitoring are required. Additionally, requirements are included in the permit to ensure impaired downstream waterbodies are not further degraded.

Downstream waterbodies are listed for suspended sediment. EPA determined that the discharge does contain sediment in the form of suspended solids at levels that will cause, have the reasonable potential to cause, or contribute to increases in sediment levels in the downstream waterbodies. EPA has established stringent effluent limitations for TSS to ensure that downstream water quality is not degraded. A narrative temperature standard and temperature monitoring is required in the permit to ensure the discharge is not contributing to temperature increases in downstream waterbodies.

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.

VI. NARRATIVE WATER QUALITY-BASED LIMITS

Section R18-11-108 of the 2016 Arizona WQS contains narrative water quality standards applicable to the downstream receiving water. In addition to the numeric WQBELs summarized in Part I.B, the permit also incorporates narrative limits to implement these standards.

VII. MONITORING AND REPORTING REQUIREMENTS

The permit requires the permittee to conduct monitoring for all pollutants or parameters where effluent limits have been established, at the minimum frequencies 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 permit conditions. The permittee shall perform all monitoring, sampling and analyses in accordance with sufficiently sensitive methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the permit. All monitoring data shall be reported on monthly DMRs and submitted quarterly as specified in the permit. All monitoring data shall be electronically reported via DMR forms on EPA's Central Data Exchange (CDX) and submitted as specified in the permit.

B. Priority Toxic Pollutants Scan

A Priority Toxic Pollutants scan shall be conducted during the second and fourth year of the permit term ensure that the discharge does not contain toxic pollutants in concentrations that may cause a violation of water quality standards. Certain priority pollutants are potential or known carcinogens and therefore monitoring is associated with protecting human health. The permittee must conduct the priority pollutants scan <u>concurrently</u> with a whole effluent toxicity testing. Permit Attachment F provides a complete list of Priority Toxic Pollutants, including identifying the volatile compounds that should be collected via grab sample procedures. The permittee shall perform all effluent sampling and analyses for the priority pollutants scan in accordance with sufficiently sensitive methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the permit or by EPA. A complete list of Priority Toxic Pollutants is provided at 40 CFR § 131.36.

C. Whole Effluent Toxicity (WET) Requirements

The CWA requires that all waters be suitable for aquatic life, which includes the protection and propagation of fish, shellfish, and wildlife. 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 to expose sensitive life stages of a test species (e.g., fish, invertebrate, algae) to both an NPDES effluent sample and a control sample. During the toxicity test, the test organism may show a difference in biological response, such as; 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 limit for the effluent. EPA's WET methods are specified under 40 CFR § 136 and/or in applicable water quality standards.

In the permit, EPA requires the permittee to analyze WET test data using the Test of Significant Toxicity (TST) statistical approach. This statistical approach is described in National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document (EPA 833-R-10-003, 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 Percent Effect (PE)), 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 $\leq 5\%$ —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.

In accordance with 40 CFR § 122.44(d)(1), reasonable potential for chronic toxicity has not been established because chronic toxicity tests have not been previously conducted for the discharge and there are no known toxic parameters in the effluent. No chronic toxicity WQBELs are required for the permitted discharge (40 CFR § 122.44(d)(1)). However, monitoring and reporting for both the median monthly and maximum daily effluent results for the parameter of chronic toxicity are required, so that effluent toxicity can be assessed in relation to CWA requirements for the new permitted discharge (See Part I, Table 2 in the NPDES permit).

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.

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) \leq 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 Numbers 001, 002, 003, and 004 is 100% effluent.

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 \geq 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.

This permit requires a species sensitivity screening for chronic toxicity to determine the most sensitive species for the IWC. Upon results of the species sensitivity screening, the permittee has the option to test only the most sensitive species for WET. WET testing is required in the second and fourth year of the permit term.

D. Receiving Water Monitoring

The permit requires monitoring for pollutants of concern in the receiving water. These pollutants include E. coli, dissolved oxygen, temperature, TSS, and pH. The purpose of this receiving water monitoring is to assess any potential adverse effects of the discharge on water quality in the receiving water. The permit requires receiving water monitoring upstream and downstream of the discharge. The permit sets quarterly receiving water monitoring, with samples to be collected below the water's surface. The permittee shall submit data as part of their regular DMR submissions for each parameter and location.

VIII. SPECIAL CONDITIONS

A. Biosolids

Standard requirements for the monitoring, reporting, recordkeeping, and handling of biosolids in accordance with 40 CFR § 503 are incorporated into the permit.

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.

There are no nondomestic facilities discharging 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. Capacity Attainment and Planning

To ensure EPA is made aware of potential wastewater treatment capacity attainment issues, 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.

D. Development and Implementation of Best Management Practices

Pursuant to 40 CFR § 122.44(k)(4), EPA may impose Best Management Practices (BMPs) which are "reasonably necessary...to carry out the purposes of the Act." The pollution prevention requirements or BMPs in the permit operate as technology-based limitations on effluent discharges that reflect the application of Best Available Technology and Best Control Technology.

E. 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. USEPA published a guide entitled Incorporating Asset Management Planning Provisions into NPDES Permits (December 2014) that directs Municipalities to manage their aging sewer and stormwater systems at a time of urban population growth and more stringent water quality protection requirements. 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. The permittee shall develop an Asset Management Plan that considers short-and long-term vulnerabilities of collection systems, facilities, treatment systems, and outfalls. Intent is to ensure facility operations are not disrupted and compliance with permit conditions is achieved. Asset management requirements have been established in the permit to ensure compliance with the provisions of 40 CFR § 122.41(e).

F. Quality Assurance Plan

The permittee must develop a quality assurance plan (QAP) for all monitoring required by this permit. Any existing QAPs may be modified for compliance with this requirement.

- 1. Within 120 days of the effective date of this permit, the permittee must submit written notice to the EPA that the QAP has been developed and implemented. The permittee shall submit the written notification to R9NPDES@epa.gov. The plan must be retained on site and made available to the EPA upon request.
- 2. The QAP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and in explaining data anomalies when they occur.
- 3. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in EPA Requirements for Quality Assurance Project Plans (EPA/QA/R-5) and Guidance for Quality Assurance

Project Plans (EPA/QA/G-5). The QAP must be prepared in the format that is specified in the permit.

- 4. At a minimum, the QAP must include the following:
 - a. Details on the number of samples, sample collection procedures, type of sample containers, preservation of samples, holding times, analytical methods, procedures for on-site measurements and/or laboratory analysis (including calibration), analytical detection, quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, chain of custody procedures, and laboratory data delivery requirements. Sample containers, preservation techniques and maximum holding times must adhere to the requirements in 40 CFR Part 136 and in accordance with the approved test methods.
 - b. Map(s) indicating the location of each sampling point.
 - c. Qualification and training of personnel and maintenance of the training records.
 - d. Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the permittee.
- 5. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.

G. Emergency Response and Public Notification Plan

The permittee must develop and implement an overflow emergency response and public notification plan that identifies measures to protect public health from overflows that may endanger health and unanticipated bypasses or upsets that exceed any effluent limitation in the permit. At a minimum the plan must include mechanisms to:

- a. Ensure that the permittee is aware (to the greatest extent possible) of all overflows from portions of the collection system over which the permittee has ownership or operational control and unanticipated bypass or upset that exceed any effluent limitation in the permit;
- b. Ensure appropriate responses including assurance that reports of an overflow or of an unanticipated bypass or upset that exceed any effluent limitation in the permit are immediately dispatched to appropriate personnel for investigation and response;
- c. Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
- d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained; and
- e. Provide emergency operations.

The permittee must submit written notice to the EPA that the plan has been developed and implemented within 180 days of the effective date of this permit. Any existing emergency response and public notification plan may be modified for compliance with this requirement.

The permittee shall submit the written notification to R9NPDES@epa.gov. The Plan must be retained on site and made available to the EPA upon request.

IX. OTHER CONSIDERATIONS UNDER FEDERAL LAW

Impact to Threatened and Endangered Species

Section 7 of the Endangered Species Act 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.

Action Area

Under Section 7 of the ESA regulations, the "action area" means all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action (50 CFR § 402.02). The action area for this proposed action includes the facility footprint and the receiving waters from the discharge location to the confluence of San Carlos River and San Carlos Reservoir. The action area for the discharge was set to include the wastewater treatment facility, outfalls, river, and adjacent shoreline. The action area below is approximately 2.5 miles long (starting at the facility and running downstream from the discharge) and approximately 1 mile wide. This area is defined by the blue square in the picture below:



Species and Critical Habitat Considered

On October 2, 2024, EPA accessed U.S. Fish and Wildlife's (USFWS) ECOS-IPaC system to obtain a list of threatened and endangered species in the vicinity of the facility and discharge. The IPaC report provided an official federal species list which included the following species (E = endangered, T = threatened, C = candidate):

Status	Species/Listing Name	Designated Critical Habitat
Е	Southwestern Willow Flycatcher (Empidonax traillii extimus)	No
Е	Gila Topminnow (incl. Yaqui) (<i>Poeciliopsis occidentalis</i>)	No
Е	Razorback Sucker (<i>Xyrauchen texanus</i>)	Yes ⁽¹⁾
Т	Yellow-billed Cuckoo (Coccyzus americanus)	No
Т	Cactus Ferruginous Pygmy-owl (Glaucidium brasilianum cactorum)	No
Т	Mexican Spotted Owl (Strix occidentalis lucida)	No
С	Monarch Butterfly (Danaus plexippus)	No

(1) The San Carlos Reservoir has been designated as critical habitat for the Razorback Sucker. This critical habitat is located within the action area.

The following is an analysis of the effects of the permit action on these species and any associated critical habitat.

Cactus Ferruginous Pygmy-owl (Glaucidium brasilianum cactorum)

The cactus ferruginous pygmy-owl ("pygmy owl") is a small cavity nesting owl which occurs from southern Arizona south through Michoacán, Mexico and from southern Texas south through Nuevo Leon and Tamaulipas, Mexico. The pygmy-owl is a generally found along the edges of semi-open areas of thorny scrub and woodlands in association with giant cacti, scattered patches of woodlands in open landscapes, mostly dry woods, and evergreen secondary. The pygmy-owl is a secondary cavity nester, and nests occur within woodpecker holes and natural cavities in giant cacti and trees. The pygmy-owl's diet includes lizards, large insects, rodents, and birds. The primary impacts to pygmy owl population viability are climate change and climate conditions, habitat loss and fragmentation, and human activities and disturbance.

This species may be exposed to the treated effluent in the San Carlos River directly through drinking or bathing in the treated effluent, while indirect exposure could come from eating prey that have been in frequent contact with the treated effluent or a reduction in prey abundance. These activities are unlikely to cause an adverse response because the species is sufficiently mobile to leave the area of the discharge if desired. Additionally, the permit requires the discharge to meet water quality standards developed to protect aquatic life and to prevent effluent toxicity, meaning pygmy owls, as well as their food sources in these riparian habitats, should be protected during the periods when they are present in the project area. Critical habitat for the pygmy owl does not exist within or immediately downstream of the proposed project area. EPA has therefore determined the action will not affect this species.

Mexican Spotted Owl (Strix occidentalis lucida)

Mexican spotted owls are territorial, and are typically found in old-growth forests with over 40 percent canopy cover near some type of water source. Mexican spotted owls feed mainly on mammals, but may also eat birds, bats, reptiles, and arthropods. The two activities that significantly impact spotted owls are the removal or opening of old-growth forests that results in forest fragmentation and human activity that may cause owls to abandon a foraging, nesting, or roosting area.

This species may be exposed to the treated effluent in the San Carlos River directly through drinking or bathing in the treated effluent, while indirect exposure could come from eating prey that have been in frequent contact with the treated effluent or a reduction in prey abundance. These activities are unlikely to cause an adverse response because the species is sufficiently mobile to leave the area of the discharge if desired. Additionally, the permit requires the discharge to meet water quality standards developed to protect aquatic life and to prevent effluent toxicity, meaning Mexican spotted owls, as well as their food sources in these riparian habitats, should be protected during the periods when they are present in the project area. Critical habitat for the Mexican spotted owl does not exist within or immediately downstream of the proposed project area. EPA has therefore determined the action will not affect this species.

Southwestern Willow Flycatcher (Empidonax traillii extimus)

The southwestern willow flycatcher is a migratory bird that breeds in riparian habitats along the Colorado River during summer breeding months of late April to the end of September. Loss and degradation of dense riparian habitats are the primary habitat threat to the flycatcher. Historically, water developments that altered flows in the rivers and streams were the primary threat. Now, with riparian areas limited and re-growth difficult due to changes in flows, fire is a significant risk to remaining habitats. Human disturbances at nesting sites may result in nest abandonment.

This species may be exposed to the treated effluent in the San Carlos River directly through drinking or bathing in the treated effluent, while indirect exposure could come from eating prey that have been in frequent contact with the treated effluent or a reduction in prey abundance. These activities are unlikely to cause an adverse response because the species is sufficiently mobile to leave the area of the discharge if desired. Additionally, the permit requires the discharge to meet water quality standards developed to protect aquatic life and to prevent effluent toxicity, meaning southwestern willow flycatchers, as well as their food sources in these riparian habitats, should be protected during the periods when they are present in the project area. Critical habitat for the southwestern willow flycatcher does not exist within or downstream of the proposed project area. EPA has therefore determined the action will not affect this species.

Yellow-billed Cuckoo (Coccyzus americanus)

The yellow-billed cuckoo is a migratory bird species that breeds in the United States and is known to occur in Arizona. Yellow-billed cuckoo habitat is characterized by dense vegetation with water nearby (e.g. dense thickets along a stream). In the western United States, nests are often established in willows along streams and rivers. Yellow-billed cuckoos feed on insects, fruits, reptiles, and amphibians. The main cause of decline for this species is habitat destruction due to riparian areas being converted to farmland and housing. As long-distance, nocturnal migrants, yellow-billed cuckoos are also vulnerable to collisions with tall buildings, cell towers, radio antennas, wind turbines, and other structures.

This species may be exposed to the treated effluent in the San Carlos River directly through drinking or bathing in the treated effluent, while indirect exposure could come from eating prey that have been in frequent contact with the treated effluent or a reduction in prey abundance. These activities are unlikely to cause an adverse response because the species is sufficiently mobile to leave the area of the discharge if desired. Additionally, the permit requires the discharge to meet water quality standards developed to protect aquatic life and to prevent effluent toxicity, meaning yellow-billed cuckoos should be protected during the periods when they are present in the project area. Critical habitat for the southwestern willow flycatcher does not exist within or downstream of the proposed project area. EPA has therefore determined the action will not affect this species.

Gila Topminnow (incl. Yaqui) (Poeciliopsis occidentalis)

In its historic range in the Gila River system, the Gila topminnow probably was most common in protected stream shoreline habitats where water velocity was slow, shallow depth, water temperatures warm (typically >20°C), and aquatic vascular plants common. The Gila topminnow feeds on detritus, algae, and aquatic invertebrates when available. The endangered Gila topminnow has steadily declined in distribution and abundance in the past several decades, and currently survives in the United States only in several isolated localities in southern Arizona.

Habitat loss such as stream desiccation, wetland draining, and arroyo cutting contributed considerably to the decline of the Gila topminnow. Competition with introduced fishes, or predation by introduced fishes all have greatly reduced populations of the Gila topminnow.

The San Carlos Apache Tribe has communicated to EPA that based on their experience the Gila topminnow is not present in the San Carlos River. The permit requires the discharge to meet water quality standards developed to protect aquatic life and to prevent effluent toxicity, meaning Gila topminnow should be protected if they are present in the project area. Critical habitat for the Gila topminnow does not occur within or immediately downstream of the proposed project area. EPA has therefore determined the action will not affect this species.

Razorback Sucker (Xyrauchen texanus)

The razorback sucker is a fish endemic to the warm-water portions of the Colorado River basin of the southwestern United States in both lotic (rapidly moving fresh water) and lentic (still fresh water) habitats. They are most common in low-velocity habitats such as backwaters, floodplains, flatwater river reaches, and reservoirs. Lotic adult razorback suckers consume a mixture of benthic invertebrates, algae, detritus, and inorganic materials, but there is little evidence of zooplankton consumption in rivers. Lentic-inhabiting adult razorback sucker diets are dominated by cladoceran zooplankton; some algal and detrital materials have also been found in gut contents. The most influential threats to the razorback sucker include nonnative competition, habitat changes created by changes in flow regime, changes in water temperature, climate change, changes in land use, heavy metals contamination, and reductions in genetic diversity.

This species may be exposed to the treated effluent in the San Carlos River directly through inhabiting the water in the area of the discharge. The species may or may not be sufficiently mobile to leave the area of the discharge if desired. The permit requires the discharge to meet water quality standards developed to protect aquatic life and to prevent effluent toxicity, meaning razorback suckers should be protected during the periods when they are present in the project area. Critical habitat for the razorback sucker was designated in 1994. The Six-Mile Lagoon Facility is located immediately upstream of critical habitat for the razorback sucker, which is located in the San Carlos Reservoir. EPA has determined that the action may affect, but is not likely to adversely affect this species. Additionally, EPA has determined that the action may affect, but is not likely to adversely modify, critical habitat.

Monarch Butterfly (Danaus plexippus)

Monarch butterflies in eastern and western North America represent the ancestral origin for the species worldwide. They exhibit long-distance migration and overwinter as adults at

forested locations in Mexico and California. Adult monarch butterflies feed on nectar from a wide variety of flowers. Reproduction is dependent on the presence of milkweed, the sole food source for larvae. The primary drivers affecting the health of the two North American migratory populations are: loss and degradation of habitat (from conversion of grasslands to agriculture, widespread use of herbicides, logging/thinning at overwintering sites in Mexico, incompatible management of overwintering sites in California, urban development, and drought), continued exposure to insecticides, and effects of climate change.

Candidate species do not have statutory protection under the ESA although USFWS encourages cooperative conservation efforts for these species. The permit is not expected to impact any of the primary drivers affecting the health of the Monarch Butterfly, though the continued existence of the wastewater treatment plant could indirectly affect human development nearby.

Conclusion and Determination of Effects

Pursuant to section 7 of the ESA, EPA has evaluated whether this proposed action may affect federally listed endangered or threatened species and designated critical habitat. Based on a review of the best scientific and commercial data available, EPA has concluded that the discharge from the facility will have "no effect" on most listed species, and "may affect, but is unlikely to adversely affect" the Gila Topminnow as well as the Razorback Sucker and it's critical habitat.

EPA initiated informal ESA consultation with USFWS on December 18, 2024 and received a letter of concurrence on March 6, 2025. If, in the future, EPA obtains information or is provided information that indicates that there could be adverse impacts to federally listed species, EPA will contact the appropriate agency or agencies and initiate consultation to ensure that such impacts are avoided, minimized, and/or mitigated.

A. 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 §§ 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 CZMA applicant certifies that the 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 permit does not affect land or water use in the coastal zone.

B. 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 whether federal actions may adversely impact Essential Fish Habitat (EFH).

The permit does not affect Essential Fish Habitat.

C. 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 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.

The permit does not allow the disturbance of any historic properties.

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

EPA requested certification from the San Carlos Apache Tribe that the permit will meet all applicable water quality requirements. Certification under section 401 of the CWA shall be in writing and shall include the conditions necessary to assure compliance with referenced applicable provisions of sections 208(e), 301, 302, 303, 306, and 307 of the CWA and appropriate requirements of Territory law. EPA cannot issue the permit until the certifying Tribe has granted certification under 40 CFR § 124.53 or waived its right to certify. The Tribe responded on March 24, 2025 and waived certification.

E. Government-to-Government Consultation

EPA's Policy on Consultation and Coordination with Indian Tribes¹ states that consultation could be appropriate when actions and decisions may affect Tribal interests. On October 10, 2024, EPA offered the San Carlos Apache Tribe and the Gila River Indian Community the opportunity to consult on EPA's issuance of the permit. The San Carlos Apache Tribe did not reply to this offer.

X. 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.

¹ https://www.epa.gov/sites/default/files/2013-08/documents/cons-and-coord-with-indian-tribes-policy.pdf

B. Clean Water Act Section 402(k)

The permittee is authorized to discharge from the identified facility at the outfall location(s) specified in the permit, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in the permit. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process. Any discharges not expressly authorized in the Permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to EPA, State, or local authorities after issuance of the Permit via any means, including during an inspection.

Any pollutant loading greater than or different than the proposed discharge (the "proposed discharge" is based on the chemical-specific data and the facility's design flow as described in the permit application, or any other information provided to EPA during the permitting process) is not authorized by this permit.

EPA notes that such other discharge or increases may be allowable, but the Permittee must first submit a request to EPA to authorize such other discharge or increase. This request will allow EPA to conduct an updated reasonable potential analysis to reassess whether a WQBEL is needed for the newly proposed discharge. Permit modification or reissuance may be required before the proposed discharge would be authorized.

C. Standard Provisions

The permit requires the permittee to comply with EPA Region 9 Standard Federal NPDES Permit Conditions.

XI. 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 the EPA website, with a minimum of 30 days provided for interested parties to respond in writing to EPA. The draft permit and fact sheet will be posted on the EPA website for the duration of the public comment period. 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.

XII. CONTACT INFORMATION

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

Bryn Copson (415) 972-3663 Copson.Bryn@epa.gov EPA Region 9 San Francisco, California 94105

XIII. REFERENCES

ADEQ. 2024. 303(d) List of Impaired Waters.

ADEQ. 2016. Arizona Administrative Code, Title 18, Chapter 11. Department of Environmental Quality – Water Quality Standards.

- 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
- 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.
- EPA. 1986. Quality Criteria for Water 1986. "Gold Book." Office of Water, EPA. EPA 440/5/86-001.
- EPA. 1989. *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations*. Office of Water, EPA. EPA/600/2-88/070.
- EPA. 1991. Technical Support Document for Water Quality-based Toxics Control. Office of Water, EPA. EPA/505/2-90-001.
- EPA. 1996. *Regions IX & X Guidance for Implementing Whole Effluent Toxicity Testing Programs*, Interim Final, May 31. 1996.
- EPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. EPA/821/R-02/013.
- EPA. 2010a. National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document (EPA 833-R-10-003) 2010.

EPA. 2010b. U.S. EPA NPDES Permit Writers' Manual. Office of Water, EPA. EPA-833-K-10-001.

- EPA. 2013. National Recommended Water Quality Criteria. Office of Water, EPA. Aquatic Life Criteria Table. https://www.epa.gov/wqc/national-recommended-water-qualitycriteria-aquatic-life-criteria-table#table
- EPA. 2015. National Recommended Water Quality Criteria. Office of Water, EPA. Human Health Criteria Table. <u>https://www.epa.gov/wqc/national-recommended-water-quality-</u> <u>criteria-human-health-criteria-table</u>
- San Carlos Apache Tribe. 2025. Waiver of Certification Under Section 401 of the Clean Water Act for NPDES Permit No. AZ0024640; Six Mile Lagoon Facility. March 24, 2025.

USFWS. IPac Resource List. USFWS. Accessed October 2024.

USFWS. 2025. Concurrence on Informal Consultation for the Six Mile Lagoon Facility NPDES Permit No. AZ0024640. March 6, 2025.