

US EPA ARCHIVE DOCUMENT

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**  
**FACT SHEET**

Permittee Name: Whiteriver Sewage Lagoons

Mailing Address: P.O. Box 517  
Whiteriver, AZ 85941

Facility Location: Canyon Day  
Whiteriver, AZ 85941

Contact Person(s): Gerard J. Charnholm, Manager of Development

NPDES Permit No.: AZ0024058

## **I. STATUS OF PERMIT**

The White Mountain Apache Tribe (the “permittee”) has applied for the renewal of their National Pollutant Discharge Elimination System (“NPDES”) permit to allow the discharge of treated effluent from the Whiteriver Sewage Lagoons to the white river located in Navajo County, Arizona. A complete application was submitted on June 7, 2007. EPA Region IX has developed this permit and fact sheet pursuant to Section 402 of the Clean Water Act, 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 AZ0024058 issued on January 19, 2003. Pursuant to 40 CFR 122.21, the terms of the existing permit are administratively extended until the issuance of a new permit.

This permit has been classified as a Minor discharger.

## **II. GENERAL DESCRIPTION OF FACILITY**

The Whiteriver Sewage Lagoons treat wastewater in a series of facultative ponds. The treatment process produces effluent that is roughly equivalent to secondary treatment. This facility has a design capacity of 0.7 million gallons per day (2,649.8 m<sup>3</sup> per day). The annual average of daily flow has been 0.60, 0.70, and 0.80 mgd in the previous 3 years and maximum daily flow rate through the outfall has been 0.75, 0.80, and 0.90 mgd in those same years. The outfall is located at 33° 45' 45" N Latitude and 110° 03' 00" W Longitude in Navajo county.

Wastewater influent is received from the nearby towns of Whiteriver, East Fork, and Canyon Day, a total population of roughly 14,400 people, and is almost entirely residential in origin (no industrial discharges). The facility’s initial operating plan was oriented towards wastewater reuse with occasional discharge during periods of low irrigation demand and low evaporation, however

it has been operated as a more continuous-flow treatment system from prior to the beginning of the most recent permit cycle.

### III. DESCRIPTION OF RECEIVING WATER

In order to protect the designated uses of surface waters, the White Mountain Apache Tribe (WMAT) of the Fort Apache Indian Reservation has adopted water quality standards for different stream segments depending on the level of protection required. The WMAT Water Quality Protection Ordinance lists the White River as a perennial stream with warmwater habitat. Designated uses of the White River include irrigation, domestic/industrial water supply, groundwater recharge, livestock & wildlife, primary contact, ceremonial primary contact, gathering of plants, and cultural significance.

### IV. DESCRIPTION OF DISCHARGE

#### A. Process Description

After passing through a bar screen, the influent to the wastewater lagoon system enters its series of 8 cells; 6 lagoons and 2 holding ponds respectively. Residence and treatment times are dependent on manual adjustment as discharge is from the second holding pond via a pipe fitted with a manually operated valve; this pipe is also the sampling location. The system does not have disinfection capabilities.

#### B. Discharge Monitoring Report (DMR) Data and Permit Compliance

The existing permit requires the permittee to sample at the outfall for flow, temperature, biochemical oxygen demand (BOD), suspended solids, an indicator microorganism (fecal coliform bacteria for October 1<sup>st</sup> through April 30<sup>th</sup>, *E. Coli* for May 1<sup>st</sup> through Sept 30<sup>th</sup>), total phosphorous, total nitrogen, pH, and total ammonia at the start and immediately prior to the end of each discharge event or once a month, whichever is sooner; and to report results monthly. The permit also requires once-annual monitoring and reporting of the levels of Kjeldahl nitrogen, nitrate/nitrite, dissolved oxygen, oil and grease, TDS, cyanide, aluminum, arsenic (inorganic), barium, boron, cadmium, dissolved chromium (sum of ionization states III+VI), cobalt, copper, lead, molybdenum, selenium, silver, uranium, vanadium, radium, tritium, and zinc, in accordance with the White Mountain Apache Tribe Water Quality Protection Ordinance, but this annual monitoring has not been performed. DMR data for the period between January 2003 and October 2007 was reviewed for the purpose of developing this permit. The following summarizes the DMR data for the discharge from the facility:

**Flow:** Reported flow values prior to December 2007 were estimated based on influent flow measured via a Parshall flume. A meter for direct measurement of effluent flow was installed in the December 2007/January 2008 period. The 38 values reported by the earlier method (out of 54 DMRs in the 57 months of the analysis period, including the 2 dissimilar DMR's submitted for January 2005) range from 0.4 to 0.7 MGD, remaining at or below the design capacity of the plant, but values provided in the new permit reapplication, namely annual average daily flow rates of 0.70 MGD for 2006 and 0.80 MGD for 2007, provide a more accurate flow rate than previous estimations.

**Temperature:** Effluent temperature was reported for 35 of the 57 months in the reviewed period; these values ranged from 3.3° Celsius to 26° Celsius. Note that several of the older temperature values were incorrectly reported on the Fahrenheit scale despite being labeled as °C- for example, the improbably high “ 64 °C ” reported for September and October 2003. Once converted from °F to °C, none of the corrected values approach the WMAT warmwater habitat standard of 32.2° C.

**BOD:** Average concentration values ranged from 14.7 to 109 mg/L in the 54 reported values, including the June 2004 case where a copy of a laboratory results sheet was submitted without an associated DMR, but excluding the February 2004 DMR which reported “BOD not analyzed by the lab”. The average monthly permit limitation of 30 mg/L was exceeded in 23 reports and the average weekly concentration of 45 mg/L in 9 reports. Average mass flow values were reported for most of the months in which discharge flow was measured, with the exception of August 2005 and May 2006, resulting in a total of 36 values; these values ranged from 27.8 to 206 kg/day, exceeding the average monthly limit of 11 kg/day and the weekly average mass limitation of 17 kg/day in all DMRs. BOD removal percentage could not be calculated for February/March 2005 and all months of the monitoring period prior to January 2005 because no values were given for influent BOD; the 32 calculable values ranged between negative 24% and 86%, and did not meet the 85% removal standard in 31 of the 32 submitted values. The concentration values for influent BOD only ranged from 33 to 160 mg/L, suggesting that the consistent difficulty in meeting the percent removal criterion may be due to the already low influent BOD.

**Total Suspended Solids:** Average concentration values ranged between 10 and 65 mg/L in the 55 reported values, exceeding the average monthly permit limitation of 30 mg/L on 36 occasions and the average weekly concentration limit of 45 mg/L on 16 occasions. Average mass flows were only reported for 36 monitoring periods (as for BOD) and fell between 30.3 and 143 kg/day; exceeding the average monthly limitation of 11 kg/day and the average weekly mass limitation of 17 kg/day for all reported values. Suspended solids removal ranged between 41% and 85%; removal of less than the required 85% occurred in 29 of the 30 months for which influent TSS was measured and percentage removal could thus be calculated. 21 of the 28 cases of insufficient removal are associated with failure to meet the concentration limits, suggesting that low influent TSS was generally not the cause of low removal percentages.

**Effluent E. Coli Bacteria (indicator organism from May 1 through Sept. 30):** Only 15 values of this indicator organism were reported, out of 25 monthly monitoring periods for which it applied. There appeared to be repeated confusion over which organisms to test for through October 2005. The reported values range from 7.5 to 690 colony forming units (CFUs) per 100 mL, and 6 of the values exceed the WMAT maximum monthly geometric mean of 47 CFU/100 mL; 4 values also exceed the WMAT single sample maximum of 88 CFU/100 mL.

**Fecal Coliform Bacteria:** Values ranged between 10 and 480 CFU (colony forming units) per 100 mL in the 36 reported counts (although the February 2007 count reported only as “>200” must be suspected of being the true highest value). The monthly average permit limit of 100 cfu per 100 mL sample was exceeded in 3 of the reports and the daily maximum effluent limit of 200 cfu per 100 mL sample was exceeded in those same 3 reports. Note that thru

October 2005 there were several instances of Fecal Coliform being reported during months when E. Coli was the appropriate indicator.

**Total Nitrogen:** Reported values over the 55 monitored months (DMRs were not submitted for March, May, June, and August 2004, but a laboratory analysis results sheet for June was received) ranged from 0.23 mg/L to 14.2 mg/L; exceeding the WMAT daily maximum standard of 2.0 mg/L in 54 of the 55 DMRs. The current design of the Whiteriver Sewage Lagoons appears to have difficulty removing nutrients to the required level, which the Tribe is attempting to address through the installation of Solar Bee aerators in the lagoons.

**Total Phosphorous:** Reported values over the 55 monitored months (DMRs were not submitted for March, May, June, and August 2004, but a laboratory analysis results sheet for June was received) ranged from 0.9 mg/L to 2.2 mg/L; exceeding the daily maximum standard of 0.8 mg/L established in the permit in all DMRs. The current design of the Whiteriver Sewage Lagoons has great difficulty removing nutrients to the required level which the Tribe is currently attempting to address through the installation of Solar Bee aerators in the lagoons.

**pH:** Values ranged between 7.1 and 8.9 in the 53 values reported (pH was listed as “not sampled” in May 2003 and DMRs were not submitted for March, May, and August 2004; only a laboratory results sheet was received for June 2004). All the reported values were within the tribal water quality standards range of 6.5 to 9.0 pH units.

**Total ammonia:** Reported values ranged between 0.12 and 8.96 mg/L in 55 months (again, the 3 missing months are due to the lack of DMRs for March, May, and August 2004). The existing permit does not contain effluent limitations for total ammonia, but it does contain a requirement to monitor and report monthly. 29 of the values exceed the applicable White Mountain Apache Tribe acute-exposure standards for warmwater habitat; 42 exceed the parallel standards for chronic exposure levels in warmwater habitat.

**Whole Effluent Toxicity Testing:** Testing was required once during the term of the existing permit, but this testing was not conducted.

**Annual Monitoring:** The permit also required once-annual monitoring and reporting of the levels of Kjeldahl nitrogen, nitrate/nitrite, dissolved oxygen, oil and grease, TDS, cyanide, aluminum, arsenic (inorganic), barium, boron, cadmium, dissolved chromium (sum of ionization states III+VI), cobalt, copper, lead, molybdenum, selenium, silver, uranium, vanadium, radium, tritium, and zinc. This testing was not performed during the course of the previous permit issuance.

## 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(s) (technology-based effluent limits) and the water quality standards applicable to the receiving water (water quality-based effluent limits). For discharges from the Whiteriver Sewage Lagoons into the White River, it is additionally required that these discharges comply with the water quality standards limitations set forth in the White Mountain Apache Tribe's Water Quality Protection Ordinance. EPA has established the most stringent of applicable technology based or water quality based standards in the proposed permit, 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 applicable technology-based standards for a pond system such as that used at the Whiteriver Sewage Lagoons are those of the category known as "Equivalent to Secondary Treatment". The minimum levels of effluent quality attainable by equivalent-to-secondary treatment for Biochemical Oxygen Demand (BOD<sub>5</sub>), Total Suspended Solids (TSS), and pH, as defined in 40 CFR 133.105, are listed below and are incorporated into the permit:

Concentration Based Effluent Limits			
	30-day Average	7-day Average	30-day average Removal Efficiency
BOD <sub>5</sub>	45 mg/l	65 mg/L	65 % minimum
TSS	45 mg/l	65 mg/L	65 % minimum
Mass Based Effluent Limits (based on 400,000 GPD flow)			
BOD <sub>5</sub>	119.24 kg/day	172.24 kg/day	
TSS	119.24 kg/day	172.24 kg/day	
Additional Technology-Based Effluent Limitation(s)			
pH	Maintained within the limits of 6.0 to 9.0 standard units		

## B. Water Quality-Based Effluent Limitations ("WQBELs")

Water quality-based effluent limitations, or 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 Enforcement and Permits, U.S. EPA, March 1991) and the *U.S. EPA NPDES Permit Writers Manual* (Office of Water, U.S. EPA, December 1996). 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

The Water Quality Protection Ordinance of the White Mountain Apache Tribe of the Fort Apache Indian Reservation establishes water quality criteria for the following beneficial uses in the White River: Warmwater Habitat, Irrigation, Domestic/Industrial Water Supply, Groundwater Recharge, Livestock & Wildlife, Primary Contact, Ceremonial Primary Contact, Gathering of Plants, and Cultural Significance.

### 2. Dilution in the receiving water

Discharge from Outfall 001 is to an unnamed wash that flows across the surface to the White River. This wash may have no natural flow during certain times of the year, as was observed during an EPA site visit in late January 2008. Therefore, no dilution of the effluent has been considered in the development of water quality based effluent limits applicable to the discharge.

### 3. Type of industry

Typical pollutants of concern for discharges from a publicly-owned treatment works (POTW), namely untreated and treated domestic wastewater, include ammonia, nitrate, oxygen demand, pathogens, temperature, pH, oil and grease, and solids. Turbidity may also be of concern due to treatment plant operations.

Additional Concentration Based Effluent Limits			
	30-day Average	Daily Maximum	WMAT Water Quality Protection Ordinance reference
Total Ammonia	Determine from permit attachment D (warmwater <u>chronic</u> exposure)	Determine from permit attachment D (warmwater <u>acute</u> exposure)	Section 3.6 referencing to Warmwater Habitat tables in Appendix A
Total Nitrate		10.00 mg/L	Section 3.6, for Groundwater Recharge use
<i>E. Coli</i>	47 cfu/100 ml	88 cfu/100 ml	Section 3.6, for Primary Contact use
		Minimum	
Dissolved Oxygen		5.0 mg/L	Section 3.6, for Warmwater Habitat

Additional Effluent Limits and monitoring (based on the WMAT Water Quality Protection Ordinance section 3.6)	
pH	Must be in the range of 6.5 to 9.0 standard units

Temperature	Maximum of 32.2° Celsius (Warmwater Habitat standards); monitoring and reporting required to determine ammonia form and limit
Turbidity	25.00 NTU <sup>(1)</sup> (Primary Contact and Ceremonial Primary Contact standards)

<sup>(1)</sup> Nephelometric Turbidity Units

#### 4. History of compliance problems and toxic impacts

See section IV for a summary of compliance problems noted for the previous 5-year permit term.

#### 5. Existing data on toxic pollutants

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.

In this case, the noted exceedences of limits set under the previous permit constitute evidence of reasonable potential, and no statistical analysis is necessary.

#### C. Rationale for Effluent Limits

EPA evaluated the pollutants expected to be present in the discharge effluent as described in the previous sections. In addition to the analysis performed above, guidance for the determination of reasonable potential to discharge toxic pollutants is included in both the *Technical Support Document for Water Quality-Based Toxics Control (TSD)* (Office of Water Enforcement and Permits, U.S. EPA, March 1991) and the *U.S. EPA NPDES Permit Writers Manual* (Office of Water, U.S. EPA, December 1996).

EPA has selected the most stringent of applicable technology based standards or water quality based effluent limitations to be placed in the permit, based on the rationale as described below:

**Flow.** Under the proposed permit, there are no limits established for flow, but flow rates must be monitored and reported. Monitoring is required weekly.

**BOD<sub>5</sub> and TSS.** Concentration limits for BOD<sub>5</sub> and TSS are established for POTWs as described above and are incorporated into the permit. Under 40 CFR Section 122.45(f), mass limits are also required for BOD<sub>5</sub> and TSS. Based on the design flow, the mass based limits are based on the following calculations:

Average Monthly Mass Limits:

Design Flow (daily average)	X Average Monthly Concentration Limit	X Conversion factor	= Weekly Average Mass Limit
0.70 mgd	45 mg/l	3.785	119.24 kg/day

Average Weekly Mass Limits:

Design Flow (daily maximum)	X Average Weekly Concentration Limit	X Conversion factor	= Weekly Average Mass Limit



0.70 mgd	65 mg/l	3.785	172.24 kg/day
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**E. Coli.** In accordance with the White Mountain Apache Tribe Water Quality Protection Ordinance, the Tribe's stated emphasis on E. Coli standards as a more accurate standard for compliance than the Total Fecal Coliforms standard previously in effect from October 1 through April 30, and especially in light of repeated significant exceedences of daily maximum limits in the Total Fecal Coliform data, the facility will be required to monitor the concentration of *E.Coli* in its effluent on a monthly basis.

**pH.** In order to support the tribe's established Ammonia standards, which vary with the pH of the effluent, and to ensure adherence to the minimum and maximum pH levels designated by the tribe for the receiving water, weekly pH monitoring is required in the permit.

**Temperature.** Also to support the tribe's established Ammonia standards and their dependence on temperature, as well as ensure adherence to the maximum temperature established for the Designated Use of Warmwater Habitat, the permit requires weekly temperature monitoring.

**Turbidity.** In order to implement the Tribal standard for Primary Contact use in the receiving water, the permit includes a turbidity standard with monthly monitoring requirement.

**Total Nitrate and Total Phosphorous.** Because of continuous difficulty in removing nutrients to the tribally mandated level, and the resulting recent installation of aeration devices at the facility, this permit retains the Phosphorous monitoring requirements and adds a Nitrate limit as specified in the Tribe's designated uses of Domestic/Industrial Water Supply and Groundwater Recharge. This Nitrate limit also replaces the Total Nitrogen limit set in the previous permit.

**Total Ammonia.** Due to the high concentrations of ammonia reported in the DMR's (suspected to have exceeded the limits set forth in the White Mountain Apache Water Quality Protection Ordinance in a minimum of 29 reports), the proposed permit contains effluent limitations for total ammonia.

**Dissolved Oxygen.** In order to evaluate the secondary effects of discharged nutrients, and to comply with the tribal standards for a designated use of Warmwater Habitat, a minimum standard for dissolved oxygen has been incorporated into the permit.

**Oil and Grease, total recoverable.** In accordance with standard EPA water quality protection requirements for a Publicly-Owned Treatment Works (POTW), an oil and grease standard has been incorporated into the permit.

**Whole-Effluent Toxicity.** Whole-Effluent Toxicity testing is intended to demonstrate that there are no unexpected toxic components of the discharge escaping to the receiving water undetected, and to prompt a response if they are present. It is therefore generally required of all first-time permittees, and as needed thereafter. In the absence of the data collection that has been requested under each previous issuance of this permit, and in acknowledgement of testing that has been initiated shortly before the issuance of this permit, the proposed permit requires chronic toxicity testing to be conducted once during the final year of this permit term.

#### D. Anti-Backsliding.

Section 402(o) of the CWA prohibits the renewal or reissuance of an NPDES permit that contains effluent limits less stringent than those established in the previous permit, except as provided in the statute. The proposed permit establishes less stringent mass- and concentration-based limits for BOD<sub>5</sub> and TSS based on the application of the “Equivalent to Secondary Treatment” designation for pond and lagoon systems (required under 33 USC Section 1314 paragraph (4) and detailed at 40 CFR 133.101(g)), applying the standards at 40 CFR 133.105 under the authority granted at 33 USC Section 1342 paragraph (2)(ii).

#### E. Antidegradation Policy

EPA's antidegradation policy at 40 CFR 131.12 and the White Mountain Apache Tribe Water Quality Protection Ordinance 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.

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, it is not expected that the discharge will adversely affect receiving water bodies.

### VI. NARRATIVE WATER QUALITY-BASED EFFLUENT LIMITS

Section 3.5 of the White Mountain Apache Tribe Water Quality Protection Ordinance contains narrative water quality standards applicable to the receiving water. Therefore, the proposed permit incorporates applicable narrative water quality standards.

### VII. MONITORING AND REPORTING REQUIREMENTS

The permit requires the permittee to monitor for pollutants or parameters with technology-based effluent limits and water quality-based effluent limits in the effluent for the duration of the permit term. Additionally, where effluent concentrations of toxic parameters are unknown or where data is insufficient to determine reasonable potential, EPA may establish monitoring requirements in the permit. These data will be re-evaluated and the permit re-opened to incorporate effluent limitations if necessary.

#### A. Effluent Monitoring and Reporting

The permittee shall conduct effluent monitoring to evaluate compliance with the proposed 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 proposed permit. All monitoring data shall be reported on monthly DMR forms and submitted quarterly as specified in the proposed permit.

Composite samples will be required for BOD<sub>5</sub>, suspended solids, total ammonia, dissolved oxygen, total phosphorous, and total nitrate; which should allow for proper characterization of

the effluent. Grab samples will be required for pH, temperature, turbidity, oil and grease, and *E. Coli*.

## VIII. OTHER CONSIDERATIONS UNDER FEDERAL LAW

### A. 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. Since the issuance of NPDES permits by the EPA is a federal action, consideration of the permitted discharge and its effect on any listed or candidate species or their critical habitat is appropriate.

To determine whether the discharge would affect any endangered species or habitat, EPA reviewed a list of threatened and endangered species associated with aquatic habitats in the White Mountain Apache Reservation. The U.S. Fish and Wildlife Service of Arizona Fishery Resource Office in Pinetop, Arizona concurs with the WMAT's list of threatened and endangered species. The review indicated that there are three bird, two fish, and one amphibian species of concern for Apache County, including the Bald eagle (*Haliaeetus leucocephalus*), Mexican spotted owl (*Strix occidentalis lucida*), Southwestern willow flycatcher (*Empidonax traillii extimus*), Apache trout (*Oncorhynchus apache*), Loach Minnow (*Tiaroga cobitis*), and Chiricahua leopard frog (*Rana chiricahuensis*). The major reason for decline of the Bald eagle is the effect of DDT on the reproductive cycle. The major reason for decline in the remaining species of concern is habitat destruction.

This NPDES Permit authorizes the discharge of effluent from the Whiteriver Sewage Lagoons into receiving water that could be a habitat for the aforementioned threatened and endangered species. However, the discharge is not known to contain toxics or bioaccumulative substances. Additionally, this NPDES permit only authorizes discharge of treated municipal waste into the White River and contains provisions for monitoring conventional pollutants and conducting toxicity testing to ensure an appropriate level of water quality discharged from the facility. Re-opener clauses have been included should new information become available to indicate that the requirements of the permit need to be changed.

In considering all information available during the drafting of this permit, EPA believes that a NO EFFECT determination is appropriate for this federal action. A copy of the draft permit and statement of basis were forwarded to the WMAT Wildlife and Outdoor Recreation Division for review and comment during the pre-public notice review period and 30-day public review period.

### B. 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 proposed permit does not affect land or water use in the coastal zone.

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

### D. 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 proposed 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.

## IX. 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 exceedences of water quality standards.

### B. Standard Provisions

The draft permit requires the permittee to comply with EPA Region IX Standard Federal NPDES Permit Conditions, dated July 1, 2001.

## X. SIGNIFICANT CHANGES TO PREVIOUS PERMIT

- The new permit includes a requirement to develop a Best Management Practices (BMP) plan.
- In accordance with the White Mountain Apache Tribe's stated desire to shift off of Total Fecal Coliforms standard, the year-round bacteria standard has been switched from a seasonably variable Total Fecal Coliforms and *E. Coli* standard to a year-round *E. Coli* standard.
- An effluent temperature monitoring requirement has been added to make analysis of compliance with the Tribe's pH- and temperature-dependent ammonia standard possible.

- An effluent nitrate limit has been added to the permit in order to address concerns with the consistency of the plant's nutrient removal performance and protect the tribe's designated uses.
- The turbidity and dissolved oxygen standards from the Tribal Water Quality Protection Ordinance have been added to the permit.
- Toxicity testing was required but not performed under previous permits, except for one round of chronic Whole Effluent Toxicity testing performed during the period this permit was administratively continued. The language of the chronic toxicity testing requirement has therefore been clarified and a specific date range for required monitoring has been added.

## **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. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit.

### **B. Public Comment Period (40 CFR 124.10)**

Notice of the draft permit will be placed in a daily or weekly newspaper within the area affected by the facility or activity, 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(c))**

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 the Director 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.

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

For States, Territories, or Tribes with EPA approved water quality standards, EPA is requesting certification from the affected State, Territory, or Tribe that the proposed permit will meet all applicable water quality standards. 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.

After the draft permit has been revised to include any relevant comments from the 30-day public comment period, it is forwarded to WMAT for CWA Section 401 certification. This certification ensures that the permit will comply with applicable Federal CWA standards as well as with the WMAT Water Quality Protection Ordinance. EPA Region 9 will not issue this permit until a 401 certification is received.



## **XII. CONTACT INFORMATION**

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

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## **XIII. REFERENCES**

EPA. 1991. *Technical Support Document for Water Quality-based Toxics Control*. Prepared by EPA, Office of Water Enforcement and Permits, in March 1991. EPA/505/2-90-001.

EPA. 1996. *Regions IX & X Guidance for Implementing Whole Effluent Toxicity Testing Programs*, Interim Final, May 31, 1996.

EPA. 2002a. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* - Fifth Edition. Office of Water, EPA. EPA-821-R-02-012.

EPA. 2002b. *National Recommended Water Quality Criteria*. Office of Water, EPA. EPA-822-R-02-047.

EPA. 1996. *U.S. EPA NPDES Basic Permit Writers Manual*. EPA. EPA-833-B-96-003.

White Mountain Apache Tribe, 2001. *Water Quality Protection Ordinance of the White Mountain Apache Tribe of the Fort Apache Indian Reservation*.