

US EPA ARCHIVE DOCUMENT

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

Permittee Name: Hon-Dah Regional Wastewater Treatment Facility

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

Facility Location: Hon-Dah  
Whiteriver, AZ 85941

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

NPDES Permit No.: AZ0024589

## **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 Hon-Dah Regional Wastewater Treatment Facility to a wash flowing into Bootleg Lake 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 AZ0024589 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 Hon-Dah Regional Wastewater Treatment Facility uses a set of 4 parallel anaerobic/facultative digestion ponds for treatment, in a modification of what is commonly known as the AIWPS (Advanced Integrated Wastewater Pond System) or Oswald process, followed by an artificial wetland for nutrient removal and an ultraviolet disinfection system. This series of treatment steps produces effluent that is roughly equivalent to secondary treatment. This facility has a design capacity of 0.4 million gallons per day (1514.16 m<sup>3</sup> per day). The annual average of daily flow has been 0.26, 0.27, and 0.4 mgd in the previous 3 years and maximum daily flow rate through the outfall has been 0.7, 0.6, and 0.6 mgd in those same years, indicating that the lagoons have been brought into full-scale operation since their initial discharge in February 2005 and are now operating at the upper bound of their intended capacity, possibly due to infiltration. The outfall is located at 34° 03' 49" N Latitude and 109° 55' 26" W Longitude in Navajo county, Arizona, on the Fort Apache Reservation.

Wastewater influent is received from the nearby Hon-Dah Homesites development, the town of McNary, and the Apache Dawn & Casino facility, for a total population served of roughly 1,350 people, and is almost entirely residential in origin. There are no significant contributions from industrial discharges.

### 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 Bootleg Lake as a lake with warmwater habitat. Designated uses of Bootleg Lake include, irrigation, groundwater recharge, livestock & wildlife, primary contact, secondary contact, ceremonial primary contact, cultural significance, and flood control.

### IV. DESCRIPTION OF DISCHARGE

#### A. Process Description

Upon entering the plant, flows are split in half, then in half again, resulting in 4 parallel flows of nominally equal volume. No screening for large objects or grit removal is performed beyond incidental removal of debris occurring at the influent manhole orifice. Each of the 4 flows enters the deep, clay-lined central fermentation pit of an AIWPS pond, where organic solids undergo anaerobic decomposition. By design, the wastewater then diffuses upward and outward to the much shallower and wider (aerobic and anaerobic) facultative bacteria section of the pond, which is lined with high-density polyethylene. The partially-treated wastewater discharges from the upper part of the ponds, via flow-measurement flumes, to a constructed wetland where plants and their associated microbial communities consume remaining excess nutrients. The wetland discharge passes through a narrow channel in which UV disinfection is applied before being collected in one of two storage ponds which then discharge into a shallow wash that flows into Bootleg Lake.

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

The existing permit requires the permittee to sample at the outfall for flow, 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>), and pH, and report results monthly. Quarterly reporting was established for temperature, total phosphorous, and total ammonia. The permit also required once-annual monitoring and reporting of the levels of Kjeldahl nitrogen, nitrate/nitrite, dissolved oxygen, oil and grease, TDS, aluminum, arsenic (inorganic), boron, cadmium, dissolved chromium (sum of ionization states III+VI), cobalt, copper, lead, molybdenum, selenium, vanadium, radium, 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 February 2005 (first discharge) and June 2007 was reviewed for the purpose of developing this permit. The following summarizes the DMR data for the discharge from the facility:

**Flow:** The 32 values reported range from 0.01 to 0.7 MGD (and one month of no discharge), exceeding the design capacity of the plant on 15 occasions, the first of which occurred in its second month of discharge. These data suggest that the facility either suffers from excessive

infiltration to the treatment ponds/wetland during the wet season, was designed with insufficient capacity to handle the wastewater flow of the nearby developments, or both.

**BOD:** Average concentration values ranged from 9.5 to 83 mg/L in the 31 reported values. The average monthly permit limitation of 30 mg/L was exceeded in 20 reports and the average weekly concentration limit of 45 mg/L in 11 reports. Average mass flow values were reported for all months of discharge except for May 2007, resulting in a total of 30 values; these values ranged from 1.32 to 114 kg/day, exceeding the average monthly limit of 46 kg/day on 11 occasions and the weekly average mass limitation of 68 kg/day on 6 occasions. The 31 calculable values of effluent BOD removal percentage ranged between 39% and 93%, and did not meet the 85% removal standard in 24 of the 31 submitted values. All but 5 of these instances of insufficient removal were associated with exceedence of the effluent concentration limit, suggesting that the difficulty in meeting the percent removal criterion is not due to low influent BOD.

**Total Suspended Solids:** Average concentration values ranged between 10 and 100 mg/L in the 31 reported values, exceeding the average monthly permit limitation of 30 mg/L on 18 occasions and the average weekly concentration limit of 45 mg/L on 10 occasions. Average mass flows were only reported for 30 monitoring periods (as for BOD) and fell between 0.76 and 106 kg/day; exceeding the average monthly limitation of 46 kg/day 11 times and also the average weekly mass limitation of 68 kg/day on 9 of those occasions. Suspended solids removal ranged between -28% and 95%; removal of less than the required 85% occurred in 24 of the 31 months, and was net-negative (greater TSS in effluent than influent) in 4 months. 17 of the 24 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):** 11 values of this indicator organism were reported out of 13 monthly monitoring periods for which it applied (no bacterial data of either type were submitted for July and August 2005). Additionally, in October 2005 a value of E. Coli was reported even though Fecal Coliforms are the applicable indicator organism for that month; however that value was given as "<1" which is not consistent with the laboratory's detection threshold (minimum 10 CFU/100 mL) and has therefore not been included in the 11 values noted above. The reported values range from 10 to 2500 colony forming units (CFUs) per 100 mL, and 6 of the values exceed the WMAT maximum monthly geometric mean of 47 CFU/100 mL; 5 values also exceed the WMAT single sample maximum of 88 CFU/100 mL.

**Fecal Coliform Bacteria (indicator organism from October 1 through April 30):** Values ranged between 10 and 31000 CFU (colony forming units) per 100 mL in the 16 reported counts (although the January 2007 count reported only as ">200" is not specific enough to be useful). As mentioned previously, *E. Coli* data were submitted for October 2005 although Fecal Coliforms are the applicable indicator organism for that month. The monthly average permit limit of 1000 cfu per 100 mL sample was exceeded in at least 5 of the reports (the ">200" value for January 2007 must also be treated as a potential exceedence in the absence of more specific data), and the daily maximum effluent limit of 4000 cfu per 100 mL sample was exceeded in 4 of those reports.

**pH:** Values ranged between 6.6 and 9.4 in the 28 values reported (pH was not reported for February through April 2006 because for the duration of that time the tribal utility was “in the process of ordering a new pH/Temperature meter”). 2 of the reported values were not within the tribal water quality standards range of 6.5 to 9.0 pH units, although these exceedences only occurred in the early (second and third) months of discharge from the facility.

**Temperature:** Effluent temperature was reported for 21 of the 32 months in the reviewed period. If we exclude one nonsensical value of “30 F” (below freezing, equivalent to -1.1 °C), these values ranged from 1.4° Celsius to 21.6° Celsius. While none of these values approach the WMAT warmwater habitat standard of 32.2° C, those standards also dictate a maximum temperature *increase* above natural levels of 2.0 °C for such habitat, which is impossible to test for without pre- and post-discharge monitoring of the receiving water.

**Total Phosphorous:** Reported values over the 20 monitored months (this value was given as “N/A” for 11 of the 31 months of discharge) ranged from 0.7 mg/L to 4.9 mg/L. There is no applicable EPA or WMAT Phosphorous limit for warmwater lakes, but monitoring of this nutrient is required because it can lead to algal blooms, such as the one observed in the post-discharge pond at Hon-Dah Regional WWTF.

**Total Ammonia:** Reported values ranged between 0.12 and 23.8 mg/L in 20 months (“N/A” was again reported for 11 of the 31 months of discharge). The existing permit does not contain effluent limitations for total ammonia, but it does contain a requirement to monitor and report monthly. 12 of the values exceed the applicable White Mountain Apache Tribe standards for chronic levels in warmwater habitat and 10 also exceed the acute standards for 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, aluminum, arsenic (inorganic), boron, cadmium, dissolved chromium (sum of ionization states III+VI), cobalt, copper, lead, molybdenum, selenium, vanadium, radium, and zinc, but this testing was not performed during the course of the previous permit.

## 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 Hon-Dah Regional Wastewater Treatment Facility into Bootleg Lake, 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 Hon-Dah 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>	68.1 kg/day	98.4 kg/day	
TSS	68.1 kg/day	98.4 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 Bootleg Lake: Warmwater Habitat, Irrigation, Groundwater Recharge, Livestock & Wildlife, Primary Contact, Secondary Contact, Ceremonial Primary Contact, Cultural Significance, and Flood Control.

**2. Dilution in the receiving water**

Discharge from Outfall 001 is to an unnamed wash that flows across the surface to Bootleg Lake. This wash may have no natural flow during certain times of the year. 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

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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 under 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
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0.40 mgd	45 mg/l	3.785	68.13 kg/day
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Average Weekly Mass Limits:

Design Flow (daily maximum)	X Average Weekly Concentration Limit	X Conversion factor	= Weekly Average Mass Limit
0.40 mgd	65 mg/l	3.785	98.41 kg/day

**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.

**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, weekly temperature monitoring is required in the permit.

**Turbidity.** In order to implement the Tribal standard for Primary Contact use in the receiving water, a turbidity standard with monthly monitoring requirement has been included in the 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 10 reports), the proposed permit contains effluent limitations for total ammonia.

**Total Phosphorous.** Because of present ineffectiveness in removing nutrients (average reported discharge of Phosphorous is 2.43 mg/L, which raises concerns about causing nuisance algal growth in the receiving waters.), this permit retains the Phosphorous monitoring requirements.

**Total Nitrate.** This permit adds a Nitrate limit as specified in the Tribe's designated uses of Domestic/Industrial Water Supply and Groundwater Recharge.

**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 total ammonia, dissolved oxygen, total phosphorous, total nitrate, BOD<sub>5</sub>, and total suspended solids, which should allow for proper characterization of the effluent. Grab samples will be required for *E. Coli*, pH, oil and grease, temperature, and turbidity.

## 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 Hon-Dah Regional Wastewater Treatment Facility 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 Bootleg Lake 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.
- A more frequent phosphorous monitoring requirement and a total nitrate limit have been added to the permit in order to address variability of the plant's nutrient removal performance and protect the Groundwater Recharge use designated by the tribe for Bootleg Lake.
- 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**

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