

EXhibit S

**Statement of Basis**  
**Final**  
**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT**  
**NO. CA 0005241**

Permittee's Name: Dry Creek Rancheria Band of Pomo Indians

Mailing Address: P.O. Box 607  
Geyserville, CA 95441

Plant Location: 3250 Highway 128 East  
Dry Creek Rancheria, CA 95441

Contact Person Tom Keegan, Director of Environmental Protection  
(707) 473-2178

**I. Status of Permit**

This is a new permit application to allow surface water discharges for an existing facility that currently land applies and/or recycles all wastewater on-site. In accordance with 40 CFR 122.2, this is classified as a new discharger.

**II. General Information**

The Dry Creek Rancheria is located in Sonoma County on Highway 128 in Sonoma County, California near the City of Geyserville.

**III. Facility Information**

The existing waste water treatment plant (WWTP) serves the Dry Creek Rancheria, which includes a casino with an average daily population of approximately 5,000 guests and employees. Wastewater generated by the Rancheria includes sewage, restaurant washwaters, and miscellaneous wastewater from guest support services.

The WWTP was constructed in the first quarter of 2003 and expanded upon in the fall of 2004. The WWTP has an average daily design flow rate of 150,000 gallons per day (gpd) and a maximum capacity of 200,000 gpd. The average daily flow rate in 2003 was 15,000 gpd, rising to 30,000 gpd in 2004 gpd and 40,000 gpd in 2005. The maximum daily flow in the two years was 47,000 gpd. Additional construction planned includes increasing capacity for effluent storage.

Currently, all wastewater generated from the Dry Creek WWTP is either land-applied on site (through landscape irrigation or spray-field irrigation) or re-used on-site (through use in toilet flushing).

The WWTP is anticipated to have an average annual flow of 112,000 gpd at projected use levels. However, the projected flows at a casino facility may differ significantly from weekday to weekend due to usage, and the facility projects an average weekend flow of 141,000 gpd, with a peak capacity of 200,000 gpd. Wastewater generated by the WWTP will continue to be recycled and re-used on site for toilet flushing and on-site irrigation as much as practical. Only the volume of wastewater that cannot be recycled or re-used will be discharged. Due to climatic conditions, a higher percentage of wastewater flow will be dedicated for irrigation use during the summer months than during the winter months.

At the headworks, wastewater is screened by a self-cleaning rotary screen with 1/4" openings that is covered to control odors. Screened materials are collected in the screening bin and trucked off-site.

Wastewater flows to a 31,000 gallon transfer tank and then to 2 parallel sequencing batch reactors (SBR) with 92,000 gallon capacity each. The raw wastewater is fairly high strength with an influent BOD<sub>5</sub> concentration of approximately 650 mg/L due to water use in the casino. The batches are run in cycles to accomplish denitrification of wastewater through timed periods of aeration and nitrification. Approximately 75% of each batch is decanted and pumped to a 31,000 gallon filter flow equalization tank. The decant from the equalization tank is sent to 3 continuous upflow sand filters operated in parallel. A polymer is added to the inflow line prior to the sand filters to enhance coagulation. The sand is continuously backwashed and recirculated back into the media through an air cleaning system. The reject from the continuous upflow air cleaning system is sent to the sludge storage tank, decanted, and shipped off-site. Chlorine is used approximately once per month to clean the sand filter media.

Effluent from the sand filters is disinfected through UV disinfection consisting of 3 banks of 2 UV units in parallel. The system operates so that 2 of the 3 banks are in use, while the 3<sup>rd</sup> bank undergoes cleaning. Effluent to be used on-site is pumped to a 35,200 gallon chlorine contact tank. Disinfected effluent is sent to storage tanks which currently store up to 200,000 gallons of recycled water for emergency overflow.

#### **IV. Receiving Water**

The effluent from the WWTP that cannot be recycled or re-used will be discharged to receiving water Stream P1 (Outfall 001). Stream P1 is located on the Rancheria and is an unnamed tributary to the Russian River. (The Tribe originally requested authorization to discharge effluent to Stream P1 *and* to a receiving water known as Stream A1. The final permit does not include an authorization to discharge effluent to Stream A1. The NPDES permit does not authorize any additional discharges to Stream P1 to compensate for this change.)

Stream P1: Surface water will discharge to Stream P1. Effluent will be conveyed to an existing storm water detention basin located to the south and west of the WWTP. Wastewater from the detention basin will flow through an outlet and down a rip-rap cascade aeration system and sheet flow until it reaches a culvert at the toe of the slope. The culvert transfers water underneath the road into an unnamed ephemeral channel where it travels approximately 500 feet before intercepting Stream P1, a partially ephemeral and partially perennial stream that is a Water of the U.S. The ephemeral section flows southwesterly for several hundred feet until it reaches a segment of the stream that is perennial where the slope levels off. The perennial segment continues for several hundred feet until it reaches a culvert passing under Highway 128. At Highway 128, the perennial flow disappears into the subsurface alluvium. From the Highway, the stream is a straight conveyance channel maintained free of vegetation until it reaches the Russian River for approximately 1/2 mile. The distance of the WWTP to P1's confluence with the Russian River is approximately 1 mile.

**V. Description of Discharge**

The discharge will be tertiary treated municipal wastewater. Disinfection will be primarily by UV disinfection prior to discharge.

The permit application lists the following effluent data for the existing (non-discharging) treatment system:

Pollutant or parameter	Maximum Daily Discharge	Average Daily Discharge Concentration
BOD <sub>5</sub>	< 5 mg/L	<5 mg/L
TSS	22 mg/L	7.7 mg/L
Fecal Coliform	<2 MPN/100ml	<2 MPN/100ml
Ammonia (as N)	4.2 mg/L	1.06 mg/L
Chlorine (total residual)	0.2 mg/L	0.1 mg/L
Dissolved Oxygen	5.14 mg/L	4.83 mg/L
TKN	4.7 mg/L	2.1 mg/L
Oil and Grease	6.1 mg/L	1.0 mg/L
Total Dissolved Solids	1300 mg/L	1117 mg/L

## VI. Regulatory Basis for NPDES Permit Effluent Limitations

Section 301(a) of the Clean Water Act provides that the discharge of any pollutant to waters of the United States is unlawful except in accordance with an NPDES permit. Section 402 of the Act establishes the NPDES program. The program is designed to limit the discharge of pollutants into waters of the U.S. from point sources (40 CFR 122.1 (b)(1)) through a combination of various requirements including technology-based and water quality-based effluent limitations.

### Technology-based effluent limitations

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

The minimum levels of effluent quality attainable by secondary treatment for Settleable Solids, as specified in the EPA Region IX Policy memo dated May 14, 1979, are listed below:

30-day average - 1 ml/l  
Daily maximum - 2 ml/l

EPA developed technology-based treatment standards for municipal wastewater treatment plants in accordance with Section 301(b)(1)(B) of the Clean Water Act. As a municipal wastewater treatment system, the minimum levels of effluent quality attainable by secondary treatment for Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), and pH, as defined in 40 CFR 133.102, are listed below and are incorporated in the permit.

BOD:  
Concentration-based Limits  
30-day average - 30 mg/l  
7-day average - 45 mg/l  
Removal Efficiency - minimum of 85%

TSS:  
Concentration-based Limits

30 - day average - 30 mg/l  
7 - day average - 45 mg/l  
Removal efficiency - Minimum of 85%

pH:  
Instantaneous Measurement: 6.0 - 9.0 standard units (s.u.)

2. Water Quality-Based Effluent Limitations

Sections 402 and 301(b)(1)(C) of the Clean Water Act require that the permit contain effluent limitations that, among other things, are necessary to meet water quality standards. 40 CFR 122.44(d) provides that an NPDES permit must contain:

"Water quality standards and State requirements: any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of CWA necessary to:

(1) Achieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality."

40 CFR 122.44 (d)(1)(i) states:

"Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

40 CFR 122.44 (d) (1) (ii) states:

"When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, 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) (iii) states:

"When the permitting authority determines using the procedures in paragraph (d)(1)(ii) of this section, that a discharge causes, has the reasonable potential to cause or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must

contain effluent limits for that pollutant."

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, dated March 1991 and the U.S.EPA NPDES Permit Writers Manual - Office of Water, U.S. EPA, dated December 1996. EPA's technical support document contains guidance for determining the need for permit limits. In doing so, the regulatory authority must satisfy all the requirements of 40 CFR 122.44(d)(1)(ii). In determining whether the discharge causes, has the reasonable potential to cause or contributes to an excursion of a numeric or narrative water quality criterion for individual toxicants, the regulatory authority must consider a variety of factors. These factors include the following:

- Dilution in the receiving water,
- Existing data on toxic pollutants,
- Type of industry,
- History of compliance problems and toxic impacts,
- Type of receiving water and designated use.

Therefore, based on WWTP operations and projected waste water quality data provided in the application, EPA conducted a "reasonable potential" analysis to compare effluent discharges to water quality standards, as required by 40 CFR 122.44(d)(1)(ii), (iii) and (iv).

A. Dilution in the receiving water

Discharge from Outfall 001 is to stream P1, a tributary to the Russian River. Stream P1 may have no natural flow during certain times of the year. Therefore, no dilution of the WWTP effluent has been considered in the development of water quality based effluent limits applicable to the discharge.

B. Existing data on toxic pollutants

This is a new discharge and therefore no discharge of effluent to surface waters has been reported. The WWTP will serve the Rancheria, including all flows that originate from sanitary uses at the casino. No industrial sources will discharge to the WWTP, although there is a restaurant in the casino.

Although the WWTP has never discharged, operational data for conventional and non-conventional pollutants is available from the current treatment system performance (wastewater is used for re-use) and is presented in Section V of the statement of basis. The available data consists of BOD<sub>5</sub>, TSS, TDS, ammonia, TKN, coliform, oil and grease, dissolved oxygen, residual chlorine, and pH.

Although the tribe does not have an existing NPDES permit and therefore has not discharged to surface waters, the Tribe is currently operating a fully functional wastewater treatment system (recycling/reusing all effluent) and the Tribe therefore was able to conduct a priority pollutant analysis prior to discharge in response to concerns raised by commenters.

The results of the priority pollutant scan indicated results of Non Detect for all parameters with the exception of Aluminum (130 ug/L), Nickel (5.2 ug/L), Zinc (15 ug/L) and chloroform (0.66 ug/L). The results of the priority pollutant scan demonstrated that all priority pollutants are below applicable water quality standards.

Based on hardness data obtained from the effluent (147 mg/L), EPA calculated the most stringent water quality standard for each toxic pollutant found at levels above ND and compared the water quality standard to the projected maximum expected value of the discharge in accordance with EPA guidance procedures in the Technical Support Document for Water Quality Based Toxics Control. Based on these results, EPA conducted the following reasonable potential analysis:

<b>Detected Analyte</b>	<b>Observed value</b>	<b>Projected maximum concentration (based on 95% confidence, 95% probability, Cv=0.6)</b>	<b>Most stringent water quality standards</b>	<b>Reasonable Potential ?</b>
Aluminum	130 ug/L	806 ug/L	1,000 ug/L (drinking water supply)	No
Nickel	5.2 ug/L	32 ug/L	72 ug/L (aquatic life, chronic)	No
Zinc	15 ug/L	93 ug/L	165 (aquatic life, chronic)	No

Therefore, based on a reasonable potential analysis performed by EPA, there is no reasonable potential for a toxic pollutant to cause or contribute to a violation of water quality standards. Therefore, no additional effluent limits are required in the permit at this time. The permit will continue requirements for monitoring, including WET testing, and EPA will continue to evaluate monitoring results to determine if additional effluent limitations are required in the future.



C. Type of Industry

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.

D. Receiving Water

The Tribe does not have approved water quality standards for discharges to waters located on the Rancheria. However, the discharge of wastewater from the WWTP flows to a tributary of the Russian River (via Stream P1) for which the State of California has established water quality standards. Therefore, water quality standards applicable to the Russian River and its tributaries are applicable to the discharge at the point where the discharge enters State waters. EPA has therefore applied water quality standards based on the Water Quality Control Plan for the North Coast Region ("Basin Plan") for the Russian River, Geyserville Hydrologic Subarea in the permit. In order to be conservative, the permit establishes the water quality standards applicable at the State boundary directly to the discharge location of the wastewater treatment plant without the benefit of dilution, i.e., establishing "end-of-pipe" limits. The Basin Plan lists the following beneficial uses:

**MUN** Municipal and Domestic Supply  
**AGR** Agricultural Supply  
**IND** Industrial Service Supply  
**GWR** Groundwater Recharge  
**FRSH** Freshwater Replenishment  
**NAV** Navigation  
**REC-1** Water Contact Recreation  
**REC-2** Non-Contact Water Recreation  
**COMM** Commercial and Sport Fishing  
**WARM** Warm Freshwater Habitat  
**COLD** Cold Freshwater Habitat  
**WILD** Wildlife Habitat  
**RARE** Rare, Threatened, or Endangered Species  
**MIGR** Migration of Aquatic Organisms  
**SPWN** Spawning, Reproduction, and/or Early Development

The following are listed as potential beneficial uses:

**PRO** Industrial Process Supply  
**POW** Hydropower Generation  
**SHELL** Shellfish Harvesting  
**AQUA** Aquaculture

Additionally, the Russian River is listed as an impaired waterbody for sedimentation/siltation and temperature pursuant to Section 303(d) of the Clean Water Act.

E. Rationale for Effluent Limitations

EPA evaluated the typical pollutants expected to be in WWTP discharge effluent and selected the most stringent of applicable technology-based standards or water quality-based effluent limitations. Where effluent concentrations of toxic parameters are unknown or are not reasonably expected to be discharged in concentration that have the reasonable potential to cause or contribute to water quality standards, EPA has established monitoring requirements in the permit. This data will be re-evaluated and the permit re-opened to incorporate effluent limitations if necessary based on additional monitoring data.

*Ammonia*

Treated and untreated domestic wastewater may contain levels of ammonia that are toxic to aquatic organisms. Ammonia is converted to nitrate during biological nitrification process, and then nitrate is converted to nitrogen gas through biological denitrification process. USEPA's Ambient Water Quality Criteria for the Protection of Freshwater Aquatic Life recommends acute and chronic criteria that are pH and temperature dependent. 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 for ammonia.

*Biochemical Oxygen Demand (BOD)*

The Basin Plan contains the requirement that, in addition to flow restrictions, "the discharge of municipal waste during October 1 through May 14 shall be of advanced treated wastewater in accordance with effluent limitations contained in NPDES permits for each affected discharger..."

EPA is interpreting the Basin Plan's requirement to discharge "advanced treated wastewater" to require water quality discharge restrictions for TSS and BOD<sub>5</sub> more stringent than technology-based secondary treatment standards. Therefore, EPA has incorporated water quality based standards for BOD<sub>5</sub> more stringent than technology-based standards that are consistent with the discharge requirements for other municipal wastewater discharges in the north coast regional area. The permit therefore establishes an average monthly limit of 10 mg/L, an average weekly maximum of 15 mg/L, and a daily maximum limit of 20 mg/L. These limits are more stringent than technology-based standards and have been incorporated into the permit.

*Nitrate*

Treated and untreated domestic wastewater may contain levels of ammonia that are toxic to aquatic organisms. Ammonia is converted to nitrate during biological nitrification process, and then nitrate is converted to nitrogen gas through biological denitrification process.

The primary MCL for protection of MUN is 10 mg/L and the USEPA Ambient Water Quality Criteria for the Protection of Human Health is also 10 mg/L for non-cancer effects. Due to the potential for ammonia to be present in sanitary wastewater and due to the conversion of ammonia to nitrate, effluent limitations are established for nitrate (measured as N).

*Total Dissolved Solids/Electrical Conductivity*

To protect the beneficial uses of water for agriculture uses, studies by the United Nations have recommended a goal of 700 umhos/cm for electrical conductivity (EC). The California Department of Health Services has recommended an SMCL for EC of 900 umhos/cm, with an upper level of 1600 umhos/cm and a short term level of 2200 umhos/cm.

Due to lack of discharge data, it is unknown at this time if the discharge from the new WWTP will have the reasonable potential to cause or contribute to an exceedance of water quality standards. Therefore, the draft permit establishes monthly monitoring requirements for EC and TDS to assess reasonable potential.

*pH:*

The basin plan requires that a pH of 6.5-8.5 must be met at all times and that changes in normal ambient pH level not exceed 0.5 units. This is more stringent than technology based requirements for pH, therefore, this limit is included in the permit.

*Total Coliform bacteria:*

Based on the nature of WWTP effluent, there is a reasonable potential for coliform bacteria to violate water quality standards. Based on REC-1 Beneficial Use, total coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed 200/100 ml, nor shall more than 10% of the total number of samples during any 30-day period exceed 400/100 ml - 10% of samples for 30-day period. Based on MUN standards, total coliform must not exceed 2.2 /100mL in a 7 day average. Since the MUN is the most stringent standard, this limit is included in the permit.

Additionally, the basin plan states that the discharge of municipal waste during October 1 through May 14 shall be of advanced treated wastewater in accordance with effluent limitations contained in NPDES permits for each affected discharger, and shall meet a median coliform level of 2.2 mpn/100 ml. The permit requirements based on

MUN are consistent with this requirement.

The effluent is designed to meet California (Title 22) disinfection standards for the re-use of wastewater. Title 22 requires that for spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of public access, wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered and that the effluent total coliform levels not exceed 2.2 MPN/100 ml as a 7-day median.

*Total Suspended Solids (TSS):*

The Basin Plan contains the requirement, in addition to flow restrictions, that "the discharge of municipal waste during October 1 through May 14 shall be of advanced treated wastewater in accordance with effluent limitations contained in NPDES permits for each affected discharger..."

EPA is interpreting the Basin Plan's requirement to discharge "advanced treated wastewater" to require water quality discharge restrictions for TSS and BOD<sub>5</sub> more stringent than technology-based secondary treatment standards. Therefore, EPA has incorporated water quality based standards for BOD<sub>5</sub> more stringent than technology-based standards that are consistent with the discharge requirements for other municipal wastewater discharges in the north coast regional area. The permit therefore establishes an average monthly limit of 10 mg/L, an average weekly maximum of 15 mg/L, and a daily maximum limit of 20 mg/L. These limits are more stringent than technology-based standards and have been incorporated into the permit.

The Russian River is listed as an impaired water body for sedimentation/siltation pursuant to Section 303(d) of the Clean Water Act. A Total Maximum Daily Load has not been established to address sediment loadings. Aspects of the sediment impairing the Russian River include settleable solids, suspended solids, and turbidity. The impact of settleable solids results when they collect on the bottom of a waterbody over time, making them a persistent or accumulative constituent. The impact of suspended solids and turbidity, by contrast, results from their concentration in the water column. EPA concluded that the discharge does not contain sediment (i.e., settleable solids, suspended solids, and turbidity) at levels that will cause, have the reasonable potential to cause, or contribute to increases in sediment levels in the Russian River. This finding is based on the advanced level of treatment provided, including filtration, which reduces settleable solids, total suspended solids and turbidity to negligible levels through filtration of effluent. The summer discharge prohibition, the one-percent flow limitation for winter discharge to the Russian River, and the results of previous solids and turbidity monitoring (conducted for wastewater reuse) also support this conclusion.

*Total Residual Chlorine:*

Chlorine will not be used to disinfect WWTP effluent intended for discharge, which is disinfected through the use of filtration and UV disinfection, although chlorine is used at the WWTP approximately once/month to clean the sand filters. Chlorine will also be added to recycled effluent immediately prior to storage in the recycle water storage tanks. This water is not anticipated to be discharged, but may, in certain circumstances, be discharged after dechlorination.

Although chlorine is not expected to be present in the discharge, EPA believes there is a reasonable potential for chlorine residual to be present due to the use of chlorine at the WWTP and its use for reclaimed water applications. Therefore, effluent limits for residual chlorine have been included in the permit to verify compliance.

Additionally, the permittee will be required to develop a "Surface Water Discharge Operations Plan", which will include the requirement to maintain an on-site log book of chlorine usage and wastewater flows directed to discharge or reclamation to ensure that wastewater intended for discharge is not chlorinated.

#### *Dissolved oxygen*

The basin plan contains the requirement that dissolved oxygen not be reduced below 7.0 mg/L. Therefore, this is included in the permit.

#### *Oil and Grease*

Treated and untreated domestic wastewater may contain levels of oil and grease which may be toxic to aquatic organisms. There are no numeric water quality standards for oil and grease (only narrative standards which have been incorporated into the permit). Therefore, an effluent limit based on Best Professional Judgement is being established. Therefore, this is included in the permit.

#### *Toxicity:*

The basin plan includes a narrative objective for toxicity that requires that: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Therefore, the permit requires monitoring for toxicity based on Whole Effluent Toxicity Procedures to assess the reasonable potential of the discharge to have toxic effects on aquatic organisms.

### 3. Narrative water quality standards:

Narrative water quality standards contained in the permit are based upon water quality objectives contained in the Basin Plan.

F. Flow Limitations

The Basin Plan includes a prohibition against discharge to the Russian River and its tributaries during the period May 15 through September 30 and all other periods when the waste discharge flow is greater than one percent of the receiving stream's flow. From the Basin Plan:

**"WASTE DISCHARGE PROHIBITIONS**

Section 13243 of the Porter-Cologne Water Quality Control Act authorizes the Regional Water Board - in a water quality control plan or in waste discharge requirements - to specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted.

Under this authority and in order to achieve water quality objectives, protect present and future beneficial water uses, protect public health, and prevent nuisance, the Regional Water Board declares that point source waste discharges, except as stipulated by the Thermal Plan, the Ocean Plan, and the action plans and policies contained in the Point Source Measures section of this Water Quality Control Plan, are prohibited in the following locations in the Region:

.....

**North Coastal Basin**

.....

4. The Russian River and its tributaries during the period of May 15 through September 30 and during all other periods when the waste discharge flow is greater than one percent of the receiving stream's flow as set forth in NPDES permits. In addition, the discharge of municipal waste during October 1 through May 14 shall be of advanced treated wastewater in accordance with effluent limitations contained in NPDES permits for each affected discharger, and shall meet a median coliform level of 2.2 mpn/100 ml. 2

<sup>2</sup> For dischargers not in compliance with the waste discharge rate limitation and/or advanced wastewater treatment, time schedules shall be set forth in NPDES permit updates for each discharger. In addition, each discharger not in compliance shall report to the Regional Water Board on progress towards compliance on an annual basis."

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**Flow Limitations for Outfall 001 discharge to Stream P1.**

Outfall 001 is discharged to an unnamed tributary to the Russian River, termed stream P1 for this permit.

In accordance with restrictions contained in Basin Plan, the permit prohibits the discharge of effluent to stream P1 (Outfall 001) from May 15 through September 30 each

year.

During the period of October 1 through May 14, the permit limits the discharge of effluent to P1 (Outfall 001) to not exceed one percent of the natural flow of the Russian River in any one day. The permit establishes flow monitoring requirements to meet the one percent flow restriction based on flow measured at the Cloverdale USGS gaging station # 11463000. The Cloverdale gaging station is the gaging station closest to the discharge location, located upstream of the discharge point. EPA concluded this is consistent with NPDES permits issued by the North Coast Regional Water Quality Control Board, which have established the flow restriction based on the nearest available USGS gaging station.

## **VII. Monitoring Requirements**

### **1. Priority Pollutants**

The discharger must conduct a comprehensive screening test for the Priority Toxic Pollutants listed for the California Toxics Rule in the Code of Federal Regulations (CFR) at 40 CFR Section 131.38 in each year of the permit. If an exceedance of a criteria, or a reasonable potential for exceedance of a criteria is detected the permit may be re-opened to require appropriate limits.

### **2. Whole Effluent Toxicity**

The permit establishes tests for toxicity for chronic toxicity.

Chronic toxicity testing evaluates reduced growth/reproduction at 100 percent effluent. Chronic toxicity is to be reported based on the No Observed Effect Concentration (NOEC). The permittee shall conduct short-term tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test), the fathead minnow, *Pimephales promelas* (larval survival and growth test) and the green alga, *Raphidocelis subcapitata* (growth test). The presence of chronic toxicity shall be estimated as specified by the methods in the 40 CFR Part 136 as amended on November 19, 2002.

## **VIII. Special Conditions**

### **1. Erosion Control**

The Permittee shall implement best management practices to safeguard against erosion from the

discharge and prevent adverse impact to receiving waters.

2. Pretreatment Requirements

As described above, there are no industrial facilities discharging to the WWTP. Therefore, there are no pretreatment requirements in this permit.

3. Re-use Standards

The Rancheria will re-use wastewater for on-site irrigation and non-potable water uses such as toilet flushing. Therefore, the Tribe has agreed to follow the reclamation criteria established by the California Department of Health Services to protect public health and the environment. The California Department of Health Services (DHS) has established statewide reclamation criteria in Chapter 3, Division 4, Title 22, California Code of Regulations (CCR), Section 60304, et seq. (Hereafter Title 22) for the use of reclaimed water. These requirements implement the reclamation criteria in Title 22.

Although the Tribe is not required to comply with these State criteria for wastewater reused on Tribal lands, the Tribe is currently voluntarily willing to follow these criteria for the re-use of its wastewater. These terms are therefore included in the permit.

**IX. Threatened and Endangered Species**

EPA has completed a draft Biological Evaluation (BE) for the proposed permit. EPA has determined that the proposed permit may affect, but is not likely to adversely affect, the endangered Central California Coast coho (*Oncorhynchus kisutch*), the threatened chinook (*Oncorhynchus tshawytscha*). Therefore, EPA initiated informal consultation with NOAA National Marine Fisheries Service and the California Department of Fish and Game, who concurred with EPA's determination.

**XI. Permit Reopener**

The permit contains a reopener clause to allow for modification of the permit if reasonable potential is demonstrated during the life of the permit.

**XII. Standard Conditions**

Conditions applicable to all NPDES permits are included in accordance with 40 CFR, Part 122.

**XIII. Administrative Information**



#### Public Notice

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. This permit was public noticed in a local newspaper after a pre-notice review by the applicant and other affected agencies.

#### Public Comment Period

40 CFR 124.10 requires that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to EPA. In addition, Section 401(a)(2) of the Clean Water Act provides that, where this provision applies, an affected State may determine within 60 days whether a proposed discharge will violate any water quality requirements of the State. EPA has determined that it is appropriate to apply the procedures of Section 401(a)(2) to this permit application and that it is appropriate to allow public comment on the draft permit during the 60 day period provided for the State determination. 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.

#### Public Hearing

EPA held a public hearing on the proposed permit on September 7, 2006.

#### **XIV. Additional Information**

Additional information relating to this proposed permit may be obtained from the following locations:

U.S. Environmental Protection Agency, Region IX  
CWA Standards & Permits Office Mail Code: WTR-5  
75 Hawthorne Street  
San Francisco, California 94105-3901  
Telephone: (415) 972-3518  
Attn: John Tinger

#### **XV. Information Sources**

While developing effluent limitations, monitoring requirements and special conditions for the

draft permit, the following information sources were used:

1. Water Quality Control Plan for the State of California, North Coast Region, as amended.
2. EPA Technical Support Document for Water Quality-based Toxics Control dated March 1991.
3. U.S. EPA NPDES Basic Permit Writers Manual (December 1996).
4. 40 CFR Parts 122, 131, and 133.
5. Interim Final Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs, May 31, 1996.
6. NPDES permit application and Wastewater Engineering Report, February 2005.
7. NPDES permit application forms 2A and 2S, July 2005.
8. Technical Memorandum of Rapid Bioassessment of Drainages P1 and A1, Environmental Science Associates, February 2005.
9. Biological Evaluation, Environmental Science Associates, January 2005.
10. Proposed Adaptive Management Plan for Stream A1, Hydrosience Engineers, April 20, 2006.
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