ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	**6A181554001**
Discharger	**Susanville Sanitary District**
Name of Facility	**Wastewater Treatment Plant, Susanville**
Facility Address	**476-200 Bunyan Road** **Susanville, CA 96130** **Lassen County**
Facility Contact, Title and Phone	**Randy O'Hern, General Manager, (530) 257 – 5665**
Authorized Person to Sign and Submit Reports	**Randy O'Hern, General Manager, (530) 257 - 5665**
Mailing Address	**45 S. Roop Street** **P.O. Box 152** **Susanville, CA 96130**
Billing Address	**SAME AS MAILING ADDRESS**
Type of Facility	**POTW**
Major or Minor Facility	**Major**
Threat to Water Quality	**1**
Complexity	**A**
Pretreatment Program	**No**
Reclamation Requirements	**N/A**
Facility Permitted Flow	**2.0 MGD**
Facility Design Flow	**2.0 MGD**
Watershed	**Susan River Hydrologic Area**
Receiving Water	**Jensen Slough**
Receiving Water Type	**Inland Surface Water**

A. Susanville Sanitary District (hereinafter Discharger) is the owner and operator of the Susanville Treatment Plant (hereinafter Facility), a wastewater treatment plant. For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. The Discharger discharges secondary treated disinfected wastewater to an unlined constructed irrigation channel. The effluent is used during the growing season to irrigate ranches and/or finally reaches the Jensen Slough which is a tributary of the Susan River. Both the Jensen Slough and the Susan River are waters of the United States. The discharge is currently regulated by Order No. R6T-2002-0031 which was adopted on May 8, 2002 and expired on May 8, 2007. The terms and conditions of the current Order have been administratively continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.

The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on November 7, 2006. Supplemental information was requested on March 23, 2007 and received on March 23, 2007. Site visits were conducted on June 25, 2007 and on April 1, 2008, to observe operations and collect additional data to develop permit limitations and conditions.

II. Facility Description

A. Description of Wastewater and Biosolids Treatment or Controls

The existing Facility provides for secondary wastewater treatment that consists of: screening, grit removal, extended aeration (oxidation ditches), activated sludge processing, secondary clarification, disinfection (chlorine), de-chlorination processes (box and open ponds) and a wetland complex where the treated effluent resides prior to discharge via outfall EFF-001.

The influent flows into the headworks, which consist of fine screening and a grit chamber. Then the wastewater flows to a distribution box that can convey the wastewater to the emergency storage ponds (see below) or to the two oxidation ditches for treatment. The two oxidation ditches are designed to be able to be run in parallel and may be operated in series. The wastewater is passed through a secondary clarifier and a chlorine disinfection process. From the disinfection process, the wastewater may be discharged into the emergency storage ponds or continue in an underground pipe (that acts as a chlorine contact chamber) and discharge into a dechlorination box and an open pond to remove the chlorine. From the open pond the treated effluent passes through a polishing wetland prior to being discharged into an unlined channel (EFF-001). The effluent is used to irrigate rangelands and finally discharges into Jensen Slough.

There are two emergency storage ponds, No. 1 and No. 2. The emergency storage ponds are unlined, cover approximately 8.2 acres, and are some four feet deep providing an estimated 10.7 million gallons of storage if needed. The ponds have the ability to receive effluent from the headworks and/or from the disinfection process. The raw or partially treated wastewater flows by gravity to a lift station that pumps the wastewater back into the headworks screening process. These ponds are used during emergencies, high flow, power outages, maintenance and system failures.

Sludge handling and treatment systems at the Facility include an aerobic digester, sludge storage tank and a centrifuge to dewater the sludge. Chemical analyses of the sludge indicate that concentrations of toxic constituents are below hazardous waste limits

specified in Title 26 of the California Code of Regulations. Sludge is dewatered by centrifuge and relinquished to others for application to agricultural lands in Lassen County. Dewatered sludge is also transported to a landfill in Nevada.

The Facility is currently capable of treating, and disposing an annual average flow of 2.0 MGD of municipal wastewater with current flows averaging approximately 1.12 MGD. There is a maximum average annual flow of 1.486 MGD, a peak wet weather design flow of 3.1 MGD, and a maximum hydraulic capacity of 4.0 MGD.

B. Discharge Points and Receiving Waters

Chlorinated wastewater effluent is dechlorinated by aeration in a dechlorination box and finishes dechlorination in open storage ponds. Dechlorinated effluent flows through a constructed polishing wetland prior to being discharged to a constructed discharge channel (irrigation channel) traversing adjacent agricultural lands.

The water from this irrigation channel is used by others (not the Discharger) for irrigation (during the growing season), and livestock watering. Unused water in the irrigation channel and applied tailwater flows into the Jensen Slough and is used on other agricultural lands. The Jensen Slough receives water from a diversion on the Susan River, and is a tributary to the Susan River. The wastewater effluent, water from the irrigation channel and slough system, and agricultural return flows eventually discharge into the Susan River as shown on Attachment B (Effluent Discharge Location Map), which is made part of this Order.

The discharge point for the effluent to the constructed irrigation channel is Discharge point EFF-001 and is located at latitude 40° 24' 50" N and longitude 120° 37' 0" W.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

1. Flow Limitations

   The average rate of effluent flow from the facility in any one-month period shall not be more than 2.0 MGD.

2. Effluent Limitations

   Effluent limitations contained in the existing Order for discharges from Discharge Point EFF-001 and representative monitoring data from the term of the previous Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From December 2000 – To January 2007)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Biological Oxygen Demand	mg/L	30	45	---	21	32	32
Suspended Solids	mg/L	30	45	---	37	48	48
pH	Standard Units	---	---	6.5 – 8.5			7 – 8.36[1]
Removal Efficiency for BOD	%	85	---	---	92[2]	---	---
Removal Efficiency for TSS	%	85	---	---	84[2]	---	---
Total Coliform	MPN	23	23	240	---	---	---

[1] This represents the range of reported pH values in the effluent.
[2] This value represents the lowest reported removal efficiency for BOD and TSS. The limitation for removal efficiency for TSS was violated once (June 2001), at 84%.

D. Compliance Summary

In April 2004, Lahontan Water Board Staff conducted a Facility compliance inspection and identified that fecal coliform in effluent taken at discharge from the wetland (the then-designated point of compliance) exceeded the effluent limit. It was noted that coliform levels immediately after chlorination meet the limit, but it was considered that the wildlife activity in the open pond and wetland reintroduce coliform, as the wildlife activity is substantial.

Beginning in March 2004, the Discharger began submitting effluent fecal coliform data that was collected at the chlorine contact chamber in addition to what was collected from the discharge point from the wetland to the irrigation channel. The samples collected from the chlorine contact chamber's discharge were consistently in compliance with the Discharger's permit limits, while the majority of the samples collected from the discharge from the wetland were not in compliance. This indicates that the wildlife in the wetland reintroduce coliform into the wastewater. As a result, the point of compliance for fecal coliform will be moved from EFF-001 to EFF-002.

In February 2005, turbidity exceeded the existing effluent limit. The water level was increased in the wetland to reduce turbidity. The Discharger provided turbidity data that showed a decrease in turbidity after corrective action was taken.

E. Planned Changes

The Discharger will be discharging wastewater into emergency storage ponds, including discharging vacuum truck waste collected from spills and collection system maintenance, and discharges from the wastewater treatment system for routine maintenance activities within the treatment plant.

During the upcoming permit term, the Discharger is considering changing disinfection systems, from operating a liquid chlorine system to an ultraviolet (UV) system.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) adopted a Water Quality Control Plan for the Lahontan Region, Basin (hereinafter Basin Plan) on March 31, 1995 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements of this Order implement the Basin Plan.

   The Basin Plan on page 2-3 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan does not specifically identify beneficial uses for the Jensen Slough, but does identify present and potential uses for the Susan River, to which the Jensen Slough is tributary. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Thus, beneficial uses for the receiving water for the discharge are as follows:

Table F-3a. Surface Water Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Jensen Slough (and Susan River)	Municipal and domestic water supply (MUN); Agricultural supply (AGR); Industrial supply (IND); Ground water recharge (GWR); Freshwater replenishment (FRSH); Navigation (NAV); contact (REC-1) and non-contact (REC-2) water recreation; Commercial and sport fishing (COMM); Warm freshwater habitat (WARM); Cold freshwater habitat (COLD); Wildlife habitat (WILD); Migration of aquatic organisms (MIGR); Spawning, reproduction and development (SPWN).

The Basin Plan on page 4.6.1 also identifies beneficial uses of ground water that are applicable to all subsurface waters in the Lahontan Region. Beneficial uses of specific ground water basins in the Lahontan Region are designated in Table 2-2 of the Basin Plan. The facility is located within the Honey Lake Ground Water Basin. Unless otherwise designated by the Lahontan Water Board, all ground waters are considered suitable, or potentially suitable, for municipal or domestic water supply (MUN).

Table F-3b. Ground Water Basin Plan Beneficial Uses

Basin Name	Beneficial Use(s)
Honey Lake Ground Water Basin	Municipal and domestic water supply (MUN); Agricultural supply (AGR); Industrial supply (IND); Freshwater replenishment (FRSH); Wildlife habitat (WILD).

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Lahontan Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

5. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under

the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

6. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Lahontan Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

7. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

D. Impaired Water Bodies on CWA 303(d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants,

- the Lahontan Water Board plans to develop and adopt total maximum daily loads (TMDL) that will specify Waste Load Allocation (WLA) for point sources, and load allocations (LAs) for non-point sources, as appropriate.

On June 28, 2007 USEPA gave final approval to California's 2006 section 303(d) List of Water Quality Limited Segments. The Susan River is listed as an impaired water body for toxicity pursuant to Section 303(d) of the CWA. US EPA testing in 1990 on the Susan River identified toxicity to larval fish and the aquatic plant, duckweed. The cause(s) of toxicity were not identified.

The Susan River was placed on the federal Clean Water Act, Section 303(d) list of impaired water bodies for unknown toxicity. While the toxicity observed in the Susan River samples is a violation of the Lahontan Water Board's Basin Plan narrative water quality objective for toxicity, potential impacts of the toxicity results on biological communities in the Susan River is incompletely known. The Susan River will continue to be 303(d)-listed for "unknown toxicity," but a TMDL is not currently recommended as the appropriate regulatory response since the pollutant(s) causing toxicity has not been decisively identified.

This order includes water quality objectives for toxicity and requires annual whole-effluent toxicity testing. This testing is to ensure discharges do not cause or contribute to toxic conditions in the receiving waters.

E. Other Plans, Polices and Regulations – Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

Effluent limitations for Discharge Point 001 in the previous Order were established for biological oxygen demand, suspended solids, pH, and total coliform; thus effluent limitations for these parameters have been established in this Order. The existing permit established numeric receiving water limitations for total dissolved solids, chloride, total nitrogen, total phosphorus, sulfate, un-ionized ammonia, and boron in addition to numerous narrative limitations for a number of pollutants for the further protection of water quality based upon requirements in the Basin Plan. These requirements have been carried over into this Order. Compliance determination for the coliform limitation will be evaluated at EFF-002 as discussed in section II.D. Compliance Summary.

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. Section 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitation on a case-by-case basis limitation based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

A. Discharge Prohibitions

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board plans and policies, the California Water Code, and previous permit provisions, and are consistent with the requirements set for other discharges in the Lahontan Region.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133 and Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3.

Regulations promulgated in section 125.3(a)(1) require technology-based effluent limitations for municipal Dischargers to be placed in NPDES permits based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards.

The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established the minimum performance requirements for POTWs [defined in section 304(d)(1)]. Section 301(b)(1)(B) of that Act requires that such treatment works must, as a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator.

Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in Part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH.

2. Applicable Technology-Based Effluent Limitations

As required by Section 301(b)(1)(B) of the CWA, the U.S. EPA developed wastewater treatment standards for POTWs to identify the minimum level of effluent quality attainable by secondary treatment. These technology-based effluent limitations establish a treatment performance level in terms of Biochemical Oxygen Demand (BOD5), suspended solids, and pH. As described in 40 CFR Part 133, secondary treatment shall achieve the following effluent standards:

a. BOD and Suspended Solids
   i. The 30-day average shall not exceed 30 mg/l.
   ii. The 7-day average shall not exceed 45 mg/l.
   iii. The 30-day average percent removal shall not be less than 85 percent.

b. The pH shall be maintained within the limits of 6.0 to 9.0.

The technology-based effluent limitations for the discharge from the treatment system through Discharge Point No. 001 at Monitoring Location EFF-001 are summarized in Table F-4:

Summary of Technology-based Effluent Limitations
Discharge Point 001

Table F-4. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Daily Effluent Flow	MGD	2.0	---	---	---	---
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	30	45	---	---	---
	lbs/day[1]	500	751	---	---	---
Total Suspended Solids (TSS)	mg/L	30	45	---	---	---
	lbs/day[1]	500	751	---	---	---
pH	pH units	---	---	---	6.0	9.0
30-day Removal Efficiency for BOD and TSS	%	85	---	---	---	---

"---" No effluent limitation is applicable.
1 The mass-based effluent limitations are based on a design capacity of 2.0 MGD.

c. Basis for Limitations

This facility meets the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD5), TSS, and pH as summarized in Table F-4. Previous Order No. R6T-2002-0031 established technology-based effluent limits to meet applicable secondary treatment standards. These effluent limitations have been carried over from the previous Order. Further, mass-based effluent limitations are based on a design flow rate of 2.0 MGD.

Table F-5. Basis for Limitations

Constituents	Basis for Limitations
Biochemical Oxygen Demand (BOD)	Discharges to waters that support aquatic life forms that are dependent on oxygen. Organic matter in the discharge may consume oxygen as it breaks down. Receiving waters may be effluent dominated at times.
Total Suspended Solids (TSS)	High levels of suspended solids can adversely impact aquatic habitat. Untreated or improperly treated wastewater can contain high amounts of suspended solids. Receiving waters may be effluent dominated at times.
Hydrogen Ion (pH)	Hydrogen ion (pH) is a measure of hydrogen ion concentration in the water. A range between 6.0 and 9.0 ensures suitability for biological life. The Basin Plan specifies pH of the receiving water must be between 6.5 and 8.5. Receiving waters may be effluent dominated at times.
Flow	The design capacity of the treatment plant based on average daily flow is currently 2.0 MGD.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Table F-6 summarizes the applicable water quality criteria/objectives for priority pollutants reported in detectable concentrations in the effluent. These criteria were used in conducting the Reasonable Potential Analysis for this Order.

Some water quality criteria are hardness dependent. The Discharger provided hardness data for the receiving water (Jensen Slough) as part of their required CTR monitoring. The hardness value reported for the Jensen Slough is 110 mg/L $CaCO_3$. The Discharger provided a single hardness value; therefore, 110 mg/L was used for evaluation of reasonable potential.

Jensen Slough does not have specific receiving water quality objectives. The nearest numeric surface water quality objective established downstream of the discharge is for the Susan River at Litchfield, a location several miles away from the point of wastewater discharge and subject to the influences of land and water uses in the areas below the point of wastewater discharge.

The receiving water quality objectives have not been used as effluent limits in prior Permits for the Facility. However, the discharge may not cause or contribute to

violations or excursions from receiving water objectives. In preparing this permit, Water Board staff reviewed a limited amount of data on the Susan River at Litchfield that has been collected for other purposes. A summary table of this data is presented below, together with effluent data from the Discharger. Table F-6 shows that the water quality objective (annual average) for total dissolved solids is exceeded but total nitrogen and total phosphorus has not been exceeded (on an annual average).

Table F-6. Comparison of Water Quality Objectives vs Effluent

	Water Quality Objective			
	Annual Average mg/l	Maximum mg/l	Susan River at Litchfield[1] mg/l	Effluent [2] mg/l
Total Dissolved Solids	185	250	234	339
Total Nitrogen	0.65	0.85	0.49	8.2
Total Phosphorus	0.25	0.3	0.13	4.5
Boron	0.1	0.2	No data	17.3

1 Based of Water Board data from the Surface Water Ambient Monitoring program (averages)
2. Based of a summary data table from data from self monitoring report Mar 2001 – Feb 2005 (averages)

Based on the data in the table, the TDS concentrations from the discharge may cause or contribute to the elevated levels of TDS at Litchfield, whereas both the total nitrogen and total phosphorus appear to be attenuated (these water quality objectives are not violated). The receiving water quality objectives for the Susan River were not used as effluent limits but remain as receiving water limits.

This permit includes revised monitoring and reporting requirements and monitoring of the receiving water in a manner which has not been done previously, to better understand the impacts of the discharge on the receiving waters. The additional information will assist in determining if the discharge is causing or contributing to violations of receiving water quality objectives, and whether additional WQBELs are needed.

Table F-7. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
13	Zinc	129.89	129.89	129.89	N/A	N/A	--	--
26	Chloroform	No Criteria	--	--	N/A	N/A	--	--
39	Toluene	6800	--	--	N/A	N/A	6800	200,000

"N/A" indicates the receiving water is not characterized as saltwater, nor are the water quality criteria for the protection of human health for the consumption of water and organisms applicable.

Priority pollutant water quality criteria in the CTR are applicable to the Jensen Slough. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Jensen Slough, a water of the United States in the vicinity of the discharge.

The receiving water may be effluent dominated during summer months and at that time there is no significant amount of receiving water at the point of discharge. Therefore, no mixing zone allowance is included in the calculation of effluent limits. Consequently, compliance with the effluent limits is required to be determined at a location prior to where the discharge enters the receiving water.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Lahontan Water Board conducts a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Lahontan Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Lahontan Water Board identifies the MEC and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

a. Trigger 1 – If the MEC ≥ C, a limit is needed.

b. Trigger 2 – If the background concentration (B) > C and the pollutant is detected in the effluent, a limit is needed.

c. Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Lahontan Water Board to conduct the RPA. Upon review of the data, and if the Lahontan Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

Three sets of CTR tested discharge data are available for Discharge Point 001. One set of receiving water data for the Jensen Slough was available, but it was determined that this data had been influenced by the effluent and unacceptable for use in the RPA calculations.

The Discharger provided data collected from 2002 to 2006 to evaluate reasonable potential. The RPA was performed for the priority pollutants for which effluent data were available, as summarized in Table F-7. The Lahontan Water Board evaluated monitoring data for zinc, chloroform, and toluene and determined WQBELs were not required for these pollutants. In accordance with Section 1.2 of the SIP, the Lahontan Water Board shall have discretion to consider if any data are inappropriate for use in determining reasonable potential. Further, to provide additional data for evaluating reasonable potential, this Order requires the Discharger to conduct annual effluent monitoring for priority pollutants and submit the laboratory results in accordance with the requirements contained in Section 2.4.2 of the SIP.

Table F-8. Summary Reasonable Potential Analysis

CTR No.	Priority Pollutant	Applicable Water Quality Criteria (C)	Max Effluent Conc (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
		µg/L	µg/L	µg/L		
13	Zinc	129.89	70	N/A[1]	No	Ud;MEC<C & no B
26	Chloroform	No Criteria	0.83	N/A[1]	No	No Criteria
39	Toluene	6800	2.3	N/A[1]	No	Ud;MEC<C & no B

[1] There was insufficient data for detected receiving water concentrations, additionally the receiving water is effluent dominated for part of the year.

4. WQBEL Calculations

The Reasonable Potential Analysis conducted on monitoring data CTR constituents submitted by the Discharger found the discharge did not have a reasonable potential to cause or threaten to cause an exceedance of applicable water quality standards. Therefore, this Order does not implement any water quality based effluent limits (final) in this Order for CTR constituents.

5. WQBELs Based on Basin Plan Objectives

a. In fresh waters with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters of the Region, the pH shall not be depressed below 6.5 nor raised above 8.5.

b. For waters designated WARM, water temperature shall not be altered by more than five degrees Fahrenheit (5°F) above or below the natural temperature. For waters designated COLD, the temperature shall not be altered.

c. Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high quality waters, the concentration of settleable materials shall not be raised by more that 0.1 milliliter per liter.

d. The effluent shall not contain trace elements, pollutants, contaminants, or combinations thereof, in concentrations which are more toxic or harmful to human, aquatic, terrestrial plant or animal life.

6. WQBELs Based on Title 22 "California Heath Laws Related to Recycled Water"

Section 60301.225. Disinfected secondary-23 recycled water states that: "Disinfected secondary-23 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not

exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.

7. WQBELs Based on State Water Board Policy

a) Chlorine Residual. The Basin Plans general surface water objectives state that all waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Chlorine is known to be toxic to aquatic life. The previous Order establishes numeric for total chlorine that stated: "For the protection of aquatic life, total chlorine residual shall not exceed either a median value of 0.002 mg/L or a maximum value of 0.003 mg/L."

The State Water Resources Control Board has issued a draft policy, the "Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California" which establishes total residual chlorine objectives that apply to all inland surface waters and enclosed bays and estuaries in California. The draft Policy proposes effluent limitations for Total Chlorine Residual as: Average Monthly Effluent Limitation - 0.01 mg/L and the Instantaneous Maximum Effluent Limitation - 0.02 mg/L.

This Policy when final will supersede any and all numeric total residual chlorine objectives and implementation provisions previously contained in Regional Water Quality Control Plans (Basin Plans) for the same waters. The Lahontan Water Board has decided to apply these limits at this time of renewal – compliance schedules are appropriate for existing discharges if requested from the permitting authority.

Summary of Water Quality-based Effluent Limitations
Discharge Point 001

Table F-9. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	Standard Units	--	--	--	6.5	8.5
Residual Chlorine	mg/L	0.01	--	--	--	0.02

8. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. In this case the receiving waters may consist solely or mainly of effluent during certain times of the year. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time

period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota.

The Basin Plan states, at page 3-16, that for acute toxicity, compliance shall be determined by short-term toxicity tests on undiluted effluent using an established protocol (e.g., American Society for Testing and Materials [ASTM], American Public Health Association, USEPA, State Board). For chronic toxicity, compliance shall be determined using the critical life stage (CLS) toxicity tests. At least three approved species shall be used to measure compliance with the toxicity objective. If possible, test species shall include a vertebrate, an invertebrate, and an aquatic plant. After an initial screening period, monitoring may be reduced to the most sensitive species. Dilution and control waters should be obtained from an unaffected area of the receiving waters. For rivers and streams, dilution water should be obtained immediately upstream of the discharge. Standard dilution water can be used if the above sources exhibit toxicity greater than 1.0 chronic toxicity units (TU_c).

Annual acute toxicity data for 2006 submitted by the Discharger indicate greater than 90% survival rates. Consistent with Basin Plan requirements, this Order carries over the narrative acute toxicity limitations from the previous Order, monitoring requirements have been modified.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. The discharges from Discharge Point 001 could contribute to long-term toxic effects within the receiving water. Annual chronic toxicity data for the 2006 Discharger indicated a chronic toxicity of 1 TU_c. Consistent with Basin Plan requirements, this Order carries over the narrative acute toxicity limitations from the previous Order. Monitoring requirements have been modified to increase monitoring for both acute and chronic toxicity and will include alga whole effluent testing.

D. Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.

2. Satisfaction of Antidegradation Policy

Section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Lahontan Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16 and the final limitations in this Order are in compliance with antidegradation requirements and meet the requirements of the SIP because these limits hold the Discharger to performance levels that will not cause or contribute to water quality impairment or further quality degradation that could result from and increase in permitted design flow or a reduction in the level of treatment. This Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge.

The Order allows only the level of discharge authorized in the previous permit and thus there will be no change in water quality beyond the level that was authorized in the last permit. Findings authorizing degradation are thus not appropriate.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD_5, TSS, and removal efficiency for both BOD and TSS. Restrictions on the above pollutants are discussed in Section IV.B.1. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These requirements include limitations for chlorine residual that are more stringent than required by the CWA.

This Order contains pollutant restrictions that are more stringent than applicable federal requirements and standards. Specifically, this Order includes effluent limitations for pH that are more stringent than applicable federal standards, but that are nonetheless necessary to meet numeric objectives or protect beneficial uses. The rationale for including these limitations is explained in Section VI.C.3.

Summary of Final Effluent Limitations
Discharge Point 001

Table F-10. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Daily Effluent Flow	MGD	2.0	---	---	---	---
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	30	45	---	---	---
	lbs/day[1]	500	751	---	---	---
Total Suspended Solids (TSS)	mg/L	30	45	---	---	---
	lbs/day[1]	500	751	---	---	---
pH	pH units	---	---	---	6.5	8.5
Removal Efficiency for BOD and TSS	%	85	---	---	---	---
Residual Chlorine	mg/L	0.01	---	---	---	0.02

"---" No effluent limitation is applicable.
[1] The mass-based effluent limitations are based on a design capacity of 2.0 MGD.

a) In fresh waters with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters of the Region, the pH shall not be depressed below 6.5 nor raised above 8.5.

b) For waters designated WARM, water temperature shall not be altered by more than five degrees Fahrenheit (5°F) above or below the natural temperature. For waters designated COLD, the temperature shall not be altered.

c) Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high quality waters, the concentration of settleable materials shall not be raised by more than 0.1 milliliter per liter.

d) The effluent shall not contain trace elements, pollutants, contaminants, or combinations thereof, in concentrations which are more toxic or harmful to human, aquatic, terrestrial plant or animal life.

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Reclamation Specifications- Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in the Order are based upon the water quality objectives contained in the Basin Plan. As such, they are a required part of the Order.

A. Surface Water

1. The receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan and are carried forward from the previous Order. As such, they are a required part of the proposed Order.

2. The discharge shall not cause the following limits to be exceeded in the Susan River and its tributaries:

Table F-11. Receiving Water Limitations

Parameter	Units	Receiving Water Limitation	
		Annual Mean	Maximum
Total Dissolved Solids	mg/L	185	250
Chloride	mg/L	4.2	7.5
Total Nitrogen	mg/L	0.65	0.85
Total Phosphorus	mg/L	0.25	0.30
Sulfate	mg/L	25	40
Un-ionized Ammonia	mg/L	--	0.025
Boron	mg/L	0.1	0.2
ASAR	--	2.5	--

The Adjusted Sodium Adsorption Ratio (ASAR) is calculated by the following equation. All values of Ca, Na and Mg must be reported as milliequivalents per liter.

$$ASAR = \frac{Na}{\sqrt{\frac{Ca+Mg}{2}}} \times (1+(8.4-pHc))$$

The values for pHc can be found in the Water Boards Basin Plan Appendix E.

3. If the constituent concentration of the receiving water just above the discharge point exceeds the level in Table F-10, the discharge shall not cause a statistically significant increase (at a 90 percent confidence level) in the concentration below the discharge point when compared to the concentration upstream of the discharge.

4. Water Quality Objectives Which Apply to All Surface Waters: these narrative and numerical water quality objectives apply to all surface waters (including wetlands)

within the Lahontan Region and can be found at section 3-3 of the Basin Plan. The discharge of flows, generated within, or as a result of the facility, to surface water shall not cause a violation of the following water quality objectives for the waters of the Susan River Hydrologic Area, They include:

Ammonia	Pesticides
Bacteria, Coliform	pH
Biostimulatory Substances	Radioactivity
Sediment	Settleable Materials
Chemical Constituents	Suspended Materials
Chlorine, Total Residual	Taste and Odor
Color	Temperature
Dissolved Oxygen	Toxicity
Floating Materials	Turbidity
Oil and Grease	

Non-degradation of Aquatic Communities and Populations

5. Water Quality Objectives for Certain Water Bodies: some narrative and numerical water quality objectives are directed toward protection of surface waters (including wetlands) in specific areas. To the extent of the overlap, these site specific water quality objectives supersede all "Water Quality Objectives Which Apply to All Surface Waters" described above. The areas for which site specific objectives have been adopted are determined by hydrologic units (HU) and hydrologic areas (HA) within the Lahontan Region. The facility is within the Susanville HU, (Figure 3-3 of the Basin Plan) and specific water quality objectives can be found on Table 3-9 of the Basin Plan.

6. The Basin Plan does not have specific water quality objectives for the Jensen Slough. The Jensen Slough originates from a diversion structure on the Susan River and is used to irrigate ranchlands and/or supply water for livestock before returning to the Susan River. Lands served by the Jensen Slough are pastures for non-milk-producing animals. There may be periods in which little or no freshwater flow (from diversion) is present in Jensen Slough.

   Effluent discharged to the constructed irrigation channel (Discharge Point 001) enters the Jensen Slough at a point just above Monitoring Point RSW-002 unless the effluent is fully used for irrigation. The Jensen Slough, after its confluence with the irrigation channel, continues toward the Susan River. Unused water in the Jensen Slough returns to the Susan River and may be a mixture of freshwater and wastewater mixed with tailwater returned as overland flow from irrigation operations. There are times during the winter season when little or no irrigation occurs and flow in Jensen Slough reaches the Susan River directly.

   The nearest location on the Susan River with numeric water quality objectives downstream of the confluence with Jensen Slough is the Susan River at Litchfield, which is several miles below the confluence of the constructed irrigation channel and the Jensen Slough. Previous permits have used the water quality objectives for the Susan River at Litchfield as the receiving water objectives for the permit. Because the Jensen Slough is tributary to the Susan River, this permit continues to use the

water quality objectives for the Susan River at Litchfield based on the Basin Plan's "'tributary rule,' which provides that water quality standards for specific waterbodies apply upstream to tributaries for which no site-specific standards have been adopted."

B. Groundwater

1. The ground water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan and are carried forward from the previous Order. As such, they are a required part of the proposed Order.

2. The discharge shall not cause a violation of the following water quality objectives for the waters of the Honey Lake Ground Water Basin:

Bacteria, Coliform	Chemical Constituents
Radioactivity	Tastes and Odors

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Lahontan Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

This Order carries forward the treatment plant influent monitoring requirements.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP. This provision requires compliance with the Monitoring and Reporting Program, and is based on sections 122.44(i), 122.62, 122.63 and 124.5. The MRP is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Lahontan Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the CWC, and Lahontan Water Board's policies. The MRP also contains sampling program specific for the Discharger's wastewater treatment facility. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with section 1.3 of the SIP, periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate

reasonable potential to cause or contribute to an excursion above a water quality standard

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

This WET testing requirement establishes conditions and protocols by which compliance with the Basin Plan narrative water quality objective for toxicity will be demonstrated and is in accordance with section 4.0 of the SIP. Conditions include required monitoring and evaluation of the effluent for acute and chronic toxicity and numerical values for chronic toxicity evaluation to be used as 'triggers' for initiating accelerated monitoring and toxicity reduction evaluation(s).

The WET testing requirements contained in the MRP, Section V were developed based on the Draft National Whole Effluent Toxicity Implementation Guidance Under the NPDES Program developed by USEPA (Docket ID. No. OW-2004-0037). This is the most current guidance available to the Lahontan Water Board. This Order includes a reopener to allow the requirements of this section to be revised pending the issuance of final guidance or policies developed by either the USEPA or State Water Board.

D. Receiving Water Monitoring

1. Surface Water

Surface water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water pursuant to the SIP and Basin Plan. Monitoring frequencies for all constituents carried forward from the previous Order have been retained. In addition to downstream surface water monitoring, receiving water monitoring has been established upstream of the effluent discharge point (RSW-001). In the event that no receiving water is present at station RSW-002, receiving water monitoring may be suspended until receiving water flow is present. Further, receiving water monitoring has been established at locations upstream from the confluence points of the Jensen Slough and Susan River; RSW-003 represents a monitoring location in the Jensen Slough above the confluence with the Susan River, and RSW-004 represents a monitoring location in the Susan River above the confluence with the Jensen Slough. These data will assist in evaluating existing receiving water conditions, assimilation capacity, and effects of the Facility's discharge on the receiving waters.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements

Sludge Monitoring

Sludge monitoring and reporting requirements are based on the minimum information needed to determine appropriate sludge management.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR Part 123. The Lahontan Water Board may reopen the permit to modify permit conditions and requirements under certain circumstances and with proper notice. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Lahontan Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

a. Priority Pollutant Monitoring. This provision is based on the SIP. This provision requires the Discharger to implement monitoring and reporting methods established in the SIP, sections 2.3 and 2.4.

b. Toxicity Identification Evaluations or Toxicity Reduction Evaluations. This provision is based on the SIP, section 4, Toxicity Control Provisions.

3. Best Management Practices and Pollution Prevention

Pollutant Minimization Program. This provision is based on the requirements of section 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR §122.41(e) and the previous Order.

5. Special Provisions for Municipal Facilities (POTWs Only)

Sludge Disposal Requirements. Requirements are based on the minimum information needed to determine appropriate sludge management.

6. Other Special Provisions – Not Applicable

7. Compliance Schedules – Not Applicable

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Susanville Sanitary District Wastewater Treatment Plant. As a step in the WDR adoption process, the Lahontan Water Board staff has developed tentative WDRs. The Lahontan Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Lahontan Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the Lassen County Times on June 10 and 24, 2008. As of June 20, 2008, no written comments were received.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning draft WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Lahontan Water Board at the address above on the cover page of this Order.

To be fully considered by staff and the Lahontan Water Board, written comments should be received at the Lahontan Water Board offices by 5:00 p.m. on June 27, 2008.

C. Public Hearing

The Lahontan Water Board will hold a public hearing on the proposed WDRs during its regular Board meeting on the following date and time and at the following location:

Date: July 23-24, 2008
Time: **To be determined**
Location: Town of Truckee Council Chambers
10183 Truckee Airport Road, Truckee CA 96161

Interested persons are invited to attend. At the public meeting, the Lahontan Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/lahontan/ where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Lahontan Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Lahontan Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, proposed effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Lahontan Water Board by calling (530) 542-5400.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Lahontan Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Rob Tucker at (530) 542-5467.

ATTACHMENT G – LIST OF PRIORITY POLLUTANTS

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
1	Antimony	7440360	EPA 6020/200.8
2	Arsenic	7440382	EPA 1632
3	Beryllium	7440417	EPA 6020/200.8
4	Cadmium	7440439	EPA 1638/200.8
5a	Chromium (III)	16065831	EPA 6020/200.8
5a	Chromium (VI)	18540299	EPA 7199/1636
6	Copper	7440508	EPA 6020/200.8
7	Lead	7439921	EPA 1638
8	Mercury	7439976	EPA 1669/1631
9	Nickel	7440020	EPA 6020/200.8
10	Selenium	7782492	EPA 6020/200.8
11	Silver	7440224	EPA 6020/200.8
12	Thallium	7440280	EPA 6020/200.8
13	Zinc	7440666	EPA 6020/200.8
14	Cyanide	57125	EPA 9012A
15	Asbestos	1332214	EPA/600/R-93/116(PCM)
16	2,3,7,8-TCDD	1746016	EPA 8290 (HRGC) MS
17	Acrolein	107028	EPA 8260B
18	Acrylonitrile	107131	EPA 8260B
19	Benzene	71432	EPA 8260B
20	Bromoform	75252	EPA 8260B
21	Carbon Tetrachloride	56235	EPA 8260B
22	Chlorobenzene	108907	EPA 8260B
23	Chlorodibromomethane	124481	EPA 8260B
24	Chloroethane	75003	EPA 8260B
25	2-Chloroethylvinyl Ether	110758	EPA 8260B
26	Chloroform	67663	EPA 8260B
27	Dichlorobromomethane	75274	EPA 8260B
28	1,1-Dichloroethane	75343	EPA 8260B
29	1,2-Dichloroethane	107062	EPA 8260B
30	1,1-Dichloroethylene	75354	EPA 8260B
31	1,2-Dichloropropane	78875	EPA 8260B
32	1,3-Dichloropropylene	542756	EPA 8260B
33	Ethylbenzene	100414	EPA 8260B
34	Methyl Bromide	74839	EPA 8260B
35	Methyl Chloride	74873	EPA 8260B
36	Methylene Chloride	75092	EPA 8260B
37	1,1,2,2-Tetrachloroethane	79345	EPA 8260B
38	Tetrachloroethylene	127184	EPA 8260B
39	Toluene	108883	EPA 8260B
40	1,2-Trans-Dichloroethylene	156605	EPA 8260B

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
41	1,1,1-Trichloroethane	71556	EPA 8260B
42	1,12-Trichloroethane	79005	EPA 8260B
43	Trichloroethylene	79016	EPA 8260B
44	Vinyl Chloride	75014	EPA 8260B
45	2-Chlorophenol	95578	EPA 8270C
46	2,4-Dichlorophenol	120832	EPA 8270C
47	2,4-Dimethylphenol	105679	EPA 8270C
48	2-Methyl-4,6-Dinitrophenol	534521	EPA 8270C
49	2,4-Dinitrophenol	51285	EPA 8270C
50	2-Nitrophenol	88755	EPA 8270C
51	4-Nitrophenol	100027	EPA 8270C
52	3-Methyl-4-Chlorophenol	59507	EPA 8270C
53	Pentachlorophenol	87865	EPA 8270C
54	Phenol	108952	EPA 8270C
55	2,4,6-Trichlorophenol	88062	EPA 8270C
56	Acenaphthene	83329	EPA 8270C
57	Acenaphthylene	208968	EPA 8270C
58	Anthracene	120127	EPA 8270C
59	Benzidine	92875	EPA 8270C
60	Benzo(a)Anthracene	56553	EPA 8270C
61	Benzo(a)Pyrene	50328	EPA 8270C
62	Benzo(b)Fluoranthene	205992	EPA 8270C
63	Benzo(ghi)Perylene	191242	EPA 8270C
64	Benzo(k)Fluoranthene	207089	EPA 8270C
65	Bis(2-Chloroethoxy)Methane	111911	EPA 8270C
66	Bis(2-Chloroethyl)Ether	111444	EPA 8270C
67	Bis(2-Chloroisopropyl)Ether	108601	EPA 8270C
68	Bis(2-Ethylhexyl)Phthalate	117817	EPA 8270C
69	4-Bromophenyl Phenyl Ether	101553	EPA 8270C
70	Butylbenzyl Phthalate	85687	EPA 8270C
71	2-Chloronaphthalene	91587	EPA 8270C
72	4-Chlorophenyl Phenyl Ether	7005723	EPA 8270C
73	Chrysene	218019	EPA 8270C
74	Dibenzo(a,h)Anthracene	53703	EPA 8270C
75	1,2-Dichlorobenzene	95501	EPA 8260B
76	1,3-Dichlorobenzene	541731	EPA 8260B
77	1,4-Dichlorobenzene	106467	EPA 8260B
78	3,3'-Dichlorobenzidine	91941	EPA 8270C
79	Diethyl Phthalate	84662	EPA 8270C
80	Dimethyl Phthalate	131113	EPA 8270C
81	Di-n-Butyl Phthalate	84742	EPA 8270C
82	2,4-Dinitrotoluene	121142	EPA 8270C
83	2,6-Dinitrotoluene	606202	EPA 8270C
84	Di-n-Octyl Phthalate	117840	EPA 8270C

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
85	1,2-Diphenylhydrazine	122667	EPA 8270C
86	Fluoranthene	206440	EPA 8270C
87	Fluorene	86737	EPA 8270C
88	Hexachlorobenzene	118741	EPA 8260B
89	Hexachlorobutadiene	87863	EPA 8260B
90	Hexachlorocyclopentadiene	77474	EPA 8270C
91	Hexachloroethane	67721	EPA 8260B
92	Indeno(1,2,3-cd)Pyrene	193395	EPA 8270C
93	Isophorone	78591	EPA 8270C
94	Naphthalene	91203	EPA 8260B
95	Nitrobenzene	98953	EPA 8270C
96	N-Nitrosodimethylamine	62759	EPA 8270C
97	N-Nitrosodi-n-Propylamine	621647	EPA 8270C
98	N-Nitrosodiphenylamine	86306	EPA 8270C
99	Phenanthrene	85018	EPA 8270C
100	Pyrene	129000	EPA 8270C
101	1,2,4-Trichlorobenzene	120821	EPA 8260B
102	Aldrin	309002	EPA 8081A
103	alpha-BHC	319846	EPA 8081A
104	beta-BHC	319857	EPA 8081A
105	gamma-BHC	58899	EPA 8081A
106	delta-BHC	319868	EPA 8081A
107	Chlordane	57749	EPA 8081A
108	4,4'-DDT	50293	EPA 8081A
109	4,4'-DDE	72559	EPA 8081A
110	4,4'-DDD	72548	EPA 8081A
111	Dieldrin	60571	EPA 8081A
112	alpha-Endosulfan	959988	EPA 8081A
113	beta-Endosulfan	33213659	EPA 8081A
114	Endosulfan Sulfate	1031078	EPA 8081A
115	Endrin	72208	EPA 8081A
116	Endrin Aldehyde	7421934	EPA 8081A
117	Heptachlor	76448	EPA 8081A
118	Heptachlor Epoxide	1024573	EPA 8081A
119	PCB-1016	12674112	EPA 8082
120	PCB-1221	11104282	EPA 8082
121	PCB-1232	11141165	EPA 8082
122	PCB-1242	53469219	EPA 8082
123	PCB-1248	12672296	EPA 8082
124	PCB-1254	11097691	EPA 8082
125	PCB-1260	11096825	EPA 8082
126	Toxaphene	8001352	EPA 8081A

ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS

The State Water Board Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with Section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the State Water Board and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs. The MLs in this appendix are in parts per billion (□g/L).

Table H-1 Volatile Substances

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethylene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Methyl Bromide	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethylene	0.5	2
Toluene	0.5	2
Trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table H-2 Semi-Volatile Substances

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Benzo (a) Anthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
Bis 2-(1-Chloroethoxyl) methane		5		
Bis(2-chloroethyl) ether	10	1		
Bis(2-Chloroisopropyl) ether	10	2		
Bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

*With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

**Phenol by colorimetric technique has a factor of 1.

Table H-3 Inorganics

Table 2c – INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1,000
Arsenic		2	10	2	2	1		20	1,000
Beryllium	20	0.5	2	0.5	1				1,000
Cadmium	10	0.5	10	0.25	0.5				1,000
Chromium (total)	50	2	10	0.5	1				1,000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1,000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1,000
Selenium		5	10	2	5	1			1,000
Silver	10	1	10	0.25	2				1,000
Thallium	10	2	10	1	5				1,000
Zinc	20		20	1	10				1,000

*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table H-4 Pesticides and PCBs

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

*The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

Techniques:

GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR – Colorimetric

ATTACHMENT I – COVER SHEET

Date _____

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Facility Name: _____

Address: _____
_____
_____

Contact Person: _____
Job Title: _____
Phone: _____
Email: _____

WDR/NPDES Order Number: _____
WDID Number: _____

Type of Report (circle one): Monthly Quarterly Semi-Annual Annual Other

Month(s) (circle applicable month(s)* **JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC**

***Annual Reports** **Year**_____
(circle the first month of the reporting period)

Violation(s)? (Please check one): _____NO _____YES*
***If YES is marked complete a-g (Attach Additional information as necessary)**

a) Brief Description of Violation:_____
_____
_____
_____
_____

b) Section(s) of WDRs/NPDES Permit Violated: _____
_____
_____
_____

c) Reported Value(s) or Volume: _____

_____

_____

_____

d) WDRs/NPDES Limit/Condition: _____

_____

_____

_____

e) Date(s) and Duration of Violation(s): _____

_____

_____

_____

f) Explanation of Cause(s): _____

_____

_____

_____

_____

_____

g) Corrective Action(s) (Specify actions taken and a schedule for actions to be taken)

_____

_____

_____

_____

_____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please contact _____at the number provided above.

Signature: _____

Name: _____
Title: _____