



# STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

## FACTSHEET (Pursuant to NAC 445A.236)

**PERMITTEE NAME:** Tahoe Reno Industrial Center  
General Improvement District (TRIC-GID)  
9476 Double R Blvd Suite A  
Reno NV 89521

**PERMIT NUMBER:** NS2000502

**LOCATION:** TRIC - GID - Wastewater Treatment Plant  
145 Britain Way  
McCarran, Storey County, 89434

**COORDINATES:** Latitude 39° 33' 30" N Longitude. -119° 30' 00" W  
Township - 20N, Range - 22E, Section - 34.

**FLOW:** Maximum flow - 1.20 MGD

**PUBLIC WATER SUPPLY:** There are no public supply wells within one (1) mile of this facility.

**CORRECTIVE ACTIONS SITES:** There are no Bureau of Corrective Actions remediation sites located within a five-mile radius of this facility.

**WELLHEAD PROTECTION AREA:** This facility is located outside of the 6,000 feet Drinking Water Protection Area (DWPA).

**GENERAL:** This permit is for the Tahoe Reno Industrial Center - General Improvement District (TRIC-GID). TRIC-GID is the wastewater treatment plant serving the Tahoe Reno Industrial Center, an industrial park in the Truckee River Canyon, east of Reno. This wastewater treatment plant, which has been in operation since 2002, consists of head-works, four (4) sequencing batch reactors (SBRs), two (2) aerated digesters, a chlorine contact basin, and three (3) sludge drying beds. Treated wastewater is collected in a reservoir which may be used for landscape irrigation and dust controlled activities under the terms of the permit. TRIC-GID serves an industrial park and requires pretreatment of industrial wastewater; influent to the treatment plant has been historically industrial in nature.

A new additional proposed discharge point is proposed for Outfall 001; this new point is approximately 110 yards above the current discharge point and will be located at the following coordinates: 39 32 49.25 & N -119 29 03.83 W; both discharges will be operational. Reclaimed

water from this additional discharge point will be collected in the same effluent storage pond.

During the period beginning on the effective date of this permit and lasting until the permit expires, the Permittee is authorized to discharge to **Ground Waters of the State of Nevada** via infiltration from its effluent storage pond. The Permittee is also authorized to use its reclaimed wastewater for landscape irrigation and construction irrigation/dust control activities.

**PROPOSED OPERATIONAL CONDITIONS:** Effluent water samples shall be monitored as specified below in Table - 1: Proposed Operational Conditions. Effluent water samples shall be monitored as specified below: **Table 1 - Effluent Discharge Limitations**. Samples shall be taken from:

- a. Storage reservoir - **Outfall 001**;
- b. Landscape irrigation - **Outfall 002**;
- c. Construction site irrigation / dust control activities - **Outfall 003**.
- d. **Table - 1: Effluent Discharge Limitation**

Parameter	Permit Limits		Monitoring Requirements		
	Limit - 30 Day Average	Maximum Single Value	Sample location	Frequency	Sample Type
Flow (MGD) - 30 Day average	1.20	Monitor & Report	Effluent - 001	Continuous	Flow Meter
Irrigation Reuse (MGD)	Monitor & Report		Irrigation system - 002	Monthly	Discrete
Construction Reuse (MGD)	Monitor & Report		Truck load - 003	Monthly	Discrete
Biochemical Oxygen Demand (mg/l)	30	45	Effluent - 001	Monthly	Discrete
Total Suspended Solids (mg/l)	30	45	Effluent - 001	Monthly	Discrete
Total Nitrogen (mg/l)	10		Effluent - 001	Monthly	Discrete
Total Petroleum Hydrocarbon(mg/l) <sup>1</sup>	1.0		Effluent - 001	Quarterly	Discrete
pH - Standard Units	6.0 - 9.0		Effluent - 001	Monthly	Discrete
Fecal Coliform (CFU/100mL)	2.2	23	Effluent - 001	Monthly	Discrete
Priority Pollutants <sup>2</sup>	Monitor & Report		Effluent - 001	Quarterly	Discrete

e. **Table - 1 Applicable definitions:**

- 1. EPA Method 8015B - purgeable & extractable;
- 2. EPA Method 624 - Appendix A.
- 3. Priority pollutants monitoring may be change from quarterly to semi-annually if test results show non-detect values for four (4) straight quarters.
- 4. **Applicable Definitions:** MGD - Million gallons per day, mg/L - Milligrams per liter;

CFU/100mL - Colony forming units per 100 milliliters.

Additional monitoring requirements may be added at the Division’s discretion. The Permittee is required to implement an Operations & Maintenance (O & M) manual with operational policies that ensure proper equipment operation and compliance with the terms and conditions of this permit. Additionally, an Effluent Management Plan (EMP) is required for the irrigation and dust control activities authorized by this permit.

**DISCHARGE FLOW AND CHARACTERISTICS:** During the previous permit cycle (January 2006 through December 2011) the average monthly discharge from the Permittee’s treatment unit was **0.188 MGD** (15.7 % of capacity) and the highest monthly discharge was **0.223 MGD** (18.6 % of capacity); both these values are within permit limits. With very few exceptions, permit limits were met during the current permit period. TRIC-GID generally meets all its discharge limits.

**GROUNDWATER MONITORING:** Discrete groundwater samples shall be collected to confirm the effective protection of groundwater under the established discharge conditions of this permit.

- a. All monitoring wells shall be monitored in accordance with the parameters established in Table 2: Groundwater Testing Protocol.

b. Table 2: Groundwater Testing Protocol

Parameters	Discharge Limitations	Monitoring Requirements		
		Sample Location	Measuring Frequency	Sample Type
Depth to Groundwater (feet)	Monitor & Report	MW-1, MW-2, MW-3 & MW-4	Quarterly	Measure
Total Nitrogen (mg/L)	10.0	MW-1, MW-2, MW-3 & MW-4	Quarterly	Discrete
Chlorides (mg/L)	Monitor & Report	MW-1, MW-2, MW-3 & MW-4	Quarterly	Discrete
pH (standard units)	6.0 - 9.0	MW-1, MW-2, MW-3 & MW-4	Quarterly	Discrete
Total Dissolved Solids (mg/L)	Monitor & Report	MW-1, MW-2, MW-3 & MW-4	Quarterly	Discrete

c. Table 2: Applicable Definitions

mg/L:	milligrams per liter.	N:	as Nitrogen.
MW - 1:	Monitoring well 1	MW - 2:	Monitoring well 2
MW - 3:	Monitoring well 3	MW - 4:	Monitoring well 4

**NITROGEN CONCENTRATION ACTION ITEMS** - The detection of concentrations of total nitrogen as nitrogen (N) in groundwater samples invoke the following limitations and response requirements:

- a. If the total nitrogen (N) concentration increases to 7.0 mg/L, an alternate method of reclaimed water discharges, approved by the Division, shall be selected;

- b. If the total nitrogen (N) concentration increases to 9.0 mg/L, construction of the approved alternate process reclaimed water discharge shall begin; and
- c. If the total nitrogen (N) concentration increases to 10.0 mg/L, reclaimed water discharge to groundwater shall cease.

**SCHEDULE OF COMPLIANCE:** The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall achieve and/or maintain compliance with all effluent limitations upon issuance of the permit; and
- b. By **MMM DD, 2013 (60 Days)**, the Permittee shall submit to NDEP two (2) copies of an updated **Operations & Maintenance Manual (O & M) and Effluent Management Plan (EMP)** for this facility.

**PROPOSED EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS AND SPECIAL CONDITIONS:** Effluent discharge compliance samples are collected prior to discharge into the collection system. Permit requirements are designed to be consistent with all applicable wastewater treatment standards.

**FLOW:**

The discharge flow rate is limited by the design capacity of the treatment system. Maximum permitted flow is **1.20 MGD**. Average discharge volume for this facility was **0.188 MGD** (15.7 % of capacity) and highest monthly discharge was **0.223 MGD** (18.6 % of capacity); both these values are within permit limits.

**BIOCHEMICAL OXYGEN DEMAND (BOD) & TOTAL SUSPENDED SOLIDS (TSS)**

**BOD Limit:** 30 mg/L (30 day average) - 45 mg/L daily maximum.

**TSS Limit:** 30 mg/L (30 day average) - 45 mg/L daily maximum.

Although the secondary limits established by the U.S. EPA for these parameters are 30 mg/l as a monthly average and 45 mg/l as a daily maximum, the monthly sampling interval specified by the permit precludes determining an average, so the 30 mg/l limits have been applied as maximum, or discrete, values.

**NITROGEN SPECIES:**

**Total Nitrogen Limit:** 10 mg/L

**Other Nitrogen Species:** Monitor & Report

The numerical limit is a conservative application of the drinking water standard for nitrate, that has been applied to both the discharge and monitoring wells. This precludes excessive ammonia discharges that could later result in a nitrate violation. Since total nitrogen is calculated from the sum of separate analyses for nitrate, nitrite, and Kjeldahl nitrogen the permit requires reporting of those species as well. The Kjeldahl portion consists of the organic and ammonia fractions.

**FECAL COLIFORM:**

Monthly average: 2.2 CFU/100 mL

Daily Maximum: 23 CFU/100 mL

These limits correspond to the **Class B reuse category** defined at **NAC 445A.276**. The sampling frequency was changed from monthly to weekly so that a monthly average could be obtained; this is especially important since the monthly average limit is an order of magnitude lower than the daily maximum.

**pH**

pH range: 6.0 to 9

**PRIORITY POLLUTANTS**

**Limit:** Quarterly testing and reporting - **EPA Method 624**. The priority pollutant list, Appendix A, compiled by the U.S. EPA in response to Section 307 of the Clean Water Act, consists of 126 substances: organic chemicals (including pesticides), metals, dioxin, cyanide, and asbestos. The list is given at 40 CFR Part 131 Section 36, 40 CFR Part 123 Appendix A, and Attachment A of the permit. As the list encompasses a wide range of chemicals used in or resulting from manufacturing processes, quarterly testing intended to detect any unknown industrial inputs and to serve as a check on the pretreatment program. Per permit conditions, priority pollutants monitoring may be change from quarterly to annually if test results show non-detect values for four (4) straight quarters.

**PERMIT REQUIREMENTS & RATIONALE:**

The permit requires routine monitoring, implementation of Best Management Practices (BMP), **O & M Manual**, **Effluent Management Plan (EMP)** and reporting to ensure the site is performing at a level that minimizes water pollution and protects public health and the environment.

**OPERATION REQUIREMENTS:**

The Permittee shall operate the facility in compliance with permit provisions and requirements and in accordance with the Division-approved **O & M Manual** and **Effluent Management Plan (EMP)**. The **O & M Manual** and **EMP** shall contain information required to comply with this permit. The storage, distribution and reclaimed water irrigation practices for this facility shall be documented in an **EMP**. It is recommended that the Permittee utilize "**WTS-1B: General Criteria for Preparing an Effluent Management Plan**", as a guidance to prepare the **EMP**. Furthermore, this wastewater treatment facility shall be operated by a Nevada Certified Class III (or higher) wastewater Operator.

**PROPOSED DETERMINATION:**

The division has made the tentative determination to renew the proposed permit, under the provisions prescribed, for a 5-year period. Under **NAC 445A.232**, this permit is classified discharge of domestic wastewater flows in excess of 1,000,000 gallons per day but less than 2,000,000 gallons per day.

**PROCEDURES FOR PUBLIC COMMENT:**

The Notice of the Division's intent to issue a discharge permit to the applicant, subject to the conditions contained within the permit is being sent to the **Reno Gazette Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **5:00 P.M. on Monday January 7<sup>th</sup>, 2013.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with **NAC 445A.238**. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to **NRS 445A.605**.

The application and proposed permit are on file and may be copied or copies may be obtained by writing or by calling **Alexi Lanza, P.E.**, Bureau of Water Pollution Control at **(775)687-9468**; fax: **(775)687-4684**; or email: **[alanza@ndep.nv.gov](mailto:alanza@ndep.nv.gov)**. This notice and the fact sheet can be viewed online at the following web address: **<http://ndep.nv.gov/admin/public.htm>**

Prepared by:

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