

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACTSHEET (Pursuant to NAC 445A.236)

PERMITTEE NAME: Gold Ranch RV Park & Casino

PERMIT NUMBER: NEV94008

LOCATION: Exit 2, Interstate Highway 80
Verdi, Washoe County, Nevada 89439
Latitude: 39°29'37" North
Longitude: 119°59'54" West

FLOW: 30-Day Average: 25,000 gallons per day (gpd)
Daily Maximum: 25,000 gpd

PUBLIC WATER SUPPLY: This site is within 3,000 feet of a well head protection area for well W02 and within 6,000 feet of a well head protection area for well W01. Both wells are ranked as "Highly Vulnerable" due to inorganic compounds.

GENERAL:

Gold Ranch Casino operates a Hydro-Aerobics Package Plant using activated sludge, on/off aeration, and nutrient removal that discharges tertiary-treated effluent to two (2) leach fields just west of Interstate Highway 80 at Exit 2 in Verdi, Nevada. The operation and leach fields are configured approximately 0.25-mile west, topographically upgradient, of the Truckee River.

Domestic wastewater is received from three lift stations that service the casino, main restaurant, recreational vehicle (RV) park (150 spaces) and office, Lotto office, and Jack-In-The-Box. The system has a reported design treatment capacity of 50,000 gpd, but is **only authorized to operate at 25,000 gpd**, in accordance with the assessed treatment capability of the package plant and the capacity of the leach fields. Flow averages since the first quarter 2007 is about 16,500 gpd.

DISCHARGE CHARACTERISTICS:

Wastewater for discharge to the leach field is required to be treated to meet secondary treatment standards. Secondary treatment standards include discharge limitations on 5-day carbonaceous (inhibited) biochemical oxygen demand (CBOD₅), total suspended solids (TSS), and pH. Nitrate (limited as total nitrogen - TN) is limited to restrict and attenuate potential impacts to groundwater. The applicant has generally remained in compliance with permit limitations successfully denitrifying treated effluent using the on/off aeration technique.

Effluent data reported for the monitoring periods between, **2007** and **March 2009** indicate the following typical discharge concentration ranges:

| | |
|-------------------------|----------------|
| CBOD ₅ : | 4 - 5 mg/L |
| Total Suspended Solids: | 12 - 15 mg/L |
| Total Nitrogen: | 1.5 - 2.0 mg/L |
| pH (Standard pH Units) | 7.4 – 7.8 |

Effluent discharge concentrations in excess of permit limits have been reported as follows:

| | | |
|-----------------|---------|----------------|
| December 2008: | 20 mg/L | Total Nitrogen |
| April 2008: | 24 mg/L | Total Nitrogen |
| October 2007: | 22 mg/L | Total Nitrogen |
| September 2007: | 14 mg/L | Total Nitrogen |
| August 2007: | 32 mg/L | Total Nitrogen |
| July 2007: | 20 mg/L | Total Nitrogen |

Monitoring Well # 1 (MW1) data reported for the monitoring periods between, **2007** and **March 2009** indicate the following typical discharge concentration ranges:

| | |
|-------------------------|-----------|
| Total Nitrogen: | 1.4 mg/L |
| Chloride: | 4.2 mg/L |
| Total Suspended Solids: | 160 mg/L |
| pH (Standard pH Units) | 7.6 – 7.9 |

Monitoring Well # 2 (MW2) data reported for the monitoring periods between, **2007** and **March 2009** indicate that this well is dry – no sample was tested. Please note that a replacement for MW2 is included as a schedule of compliance item.

RECEIVING WATER CHARACTERISTICS:

Treated effluent is discharged to groundwaters of the State of Nevada via infiltration. Discharge limitations to groundwater are based, in part, on primary drinking water standards adopted by the State of Nevada (NAC 445A.4525 and NAC 445A.453). The primary drinking water standard for nitrate as nitrogen (as N) is 10 mg/L.

Groundwater monitoring wells are placed upgradient (MW-1) and down-gradient (MW-2) from the waste water treatment facility. MW-2 is has been dry for the last two years; a MW-2 replacement is required under a schedule of compliance item.

PROPOSED LIMITATIONS:

During the period beginning on the effective date of this permit and lasting until the permit expires, the Permittee is authorized to discharge from:

Outfall 001: Treated effluent from the package treatment plant to groundwaters of the State of Nevada via infiltration – 25,000 gallons per day (maximum)

Confirmation samples or discharge parameter measurements shall be collected at the:

Influent: At the intake of the package treatment plant; and,
Effluent: At the discharge of the package treatment plant to the leach fields.

The discharge shall be limited and monitored by the Permittee as specified below:

Table 1: Effluent Limitations

| PARAMETERS | DISCHARGE LIMITATIONS | | MONITORING REQUIREMENTS | | |
|-----------------------------------|-----------------------|---------------|-------------------------|-----------------------|-------------|
| | 30-Day Ave. | Daily Maximum | Monitoring Location | Measurement Frequency | Sample Type |
| Flow (gpd) | 25,000 | 25,000 | Influent | Continuous | Meter |
| Inhibited BOD ₅ (mg/L) | 25 | 40 | Effluent | Bi-weekly | Discrete |
| TSS (mg/L) | 30 | 45 | Effluent | Bi-weekly | Discrete |
| Total Nitrogen as N (mg/L) | 10 | 10 | Effluent | Bi-weekly | Discrete |
| pH (SU) | ----- | 6-9 | Effluent | Bi-weekly | Discrete |

gpd: Gallons per day **BOD₅:** Biochemical oxygen demand (inhibited refers to carbonaceous)
mg/L: milligrams per liter **TSS:** Total suspended solids **N:** As nitrogen **SU:** Standard pH Units

management practices aimed to decrease this total Nitrogen uptrend. EMP must be prepared in a manner which is consistent with WTS – 1B.

- b. Monitoring wells which have total Nitrogen levels higher than **7.0 mg/l** shall be monitored at least quarterly unless otherwise specified by the Division.
- c. If total Nitrogen levels increase to **9.0 mg/l**, the Permittee shall submit a corrective plan of action which shall ensure that there is no further degradation of groundwater.
- d. If total Nitrogen levels increase to **10.0 mg/l**, the reuse site will be in violation of the permit and formal enforcement actions may be initiated.
- e. Additional changes to the current operation and/or testing protocol may be required by the Division if the total Nitrogen levels in these monitoring wells continue with an uptrend.

SCHEDULE OF COMPLIANCE:

Upon issuance, the Permittee shall implement and comply with the provisions of the permit and the following schedule of compliance, including in said implementation and compliance, any additions or modifications the Administrator may make in approving the schedule of compliance.

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. The Permittee shall implement and/or execute the following scheduled compliance requirements:

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. If **MW2** does not produce a discrete water sample for testing for two (2) consecutive quarters during the effective time of this permit, the following permit requirements take effect:
 - i. **The Permittee** shall provide, within thirty (30) days of noncompliance with the above requirement, an approvable plan for the replacement of Monitoring Well 2 (**MW2**) - down gradient monitoring well.
 - ii. Monitoring Well 2 (MW2) plans must be approved by the Division prior to its construction.
 - iii. Monitoring Well 2 (MW2) must be designed by a Professional Engineer licensed in the State of Nevada.
 - iv. Monitoring Well 2 (MW2) must be constructed in accordance to **Water Technical Sheet 4 (WTS4)**
 - v. **The Permittee** shall construct this replacement Monitoring Well 2 (MW2) with thirty (30) of its approval.
 - vi. **The Permittee** shall submit proof of Monitoring Well 2 (MW2) replacement within fourteen (14) of its construction, including final as-built drawings stamped by a Nevada Registered Professional Engineer.
- c. **Within 30 days of the installation of the replacement MW2**, the Permittee shall submit an updated O&M Manual prepared in accordance with guidance document WTS-2: Minimum Information Required for an Operations and Maintenance Manual.
- d. Schedule of compliance documents and evidence of compliance must be submitted to:

**Division of Environmental Protection
Bureau of Water Pollution Control
Attn: Compliance Coordinator
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701**

OPERATION REQUIREMENTS:

Per NAC 445A.232, this wastewater treatment facility requires a Class III certified operator.

PROPOSED DETERMINATION:

The Division has made the tentative determination to renew this permit, under the provisions prescribed, for a 5-year period. Under NAC 445A.232, this permit is classified as a Discharge of Domestic Wastewater - less than 50,000 gallons daily.

PROCEDURES FOR PUBLIC COMMENT:

The Notice of the Division's intent to issue a groundwater 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 **January 9th, 2010 by 5:00 P.M.**

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 on file and may be copied or copies may be obtained by writing or by calling Alexi Lanza, Bureau of Water Pollution Control at **(775)687-9468**; fax: **(775)687-4684**; or email: alanza@ndep.nv.gov. This notice and the fact sheet can be viewed at <http://ndep.nv.gov/admin/public.htm>

Prepared by:

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Nevada Division of Environmental Protection

Bureau of Water Pollution Control – Permits Branch