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NEVADA DIVISION OF ENVIRONMENTAL PROTECTION FACT SHEET (pursuant to NAC 445A.236)

Permittee Name: Rapport Leadership International (formerly Givers Gain, LLC)
P.O. Box 156
Alamo, Nevada 89001

Permit Number: NEV97014

Location: Rapport Executive Retreat (formerly JFDI Conference & Training Center)
Alamo, Lincoln County, Nevada
Located 1.5 mi. NW of Alamo, NV
Latitude: 37° 23' 15"N, Longitude: 115° 10' 30"W
Township 6S, Range 61E, Sections 31-32

General: The Permittee submitted a complete application for a modification to groundwater discharge permit #NEV97014. The Permittee operates Rapport Executive Retreat (formerly JFDI Conference & Training Center) on a 70-acre ranch, which is located approximately 1.5 miles northwest of Alamo, Lincoln County, Nevada. The main building complex includes facilities for conference meeting rooms, food preparation and 18 guest rooms (4 persons/room). Domestic (sanitary) wastewater from the facility is treated on-site in a 0.015 MGD (15,000 gpd) capacity package treatment plant, manufactured by Santec Corp. The treated effluent is currently reused to irrigate approximately ¼ acre of turf grass located in the conference center parking area. JFDI proposes to change the location of the reuse area to approximately 1 acre of pastureland. The package plant's treatment capacity was sized to handle the sanitary wastewater needs of up to 160 guests and employees. The Santec package treatment plant is installed below-grade like a traditional septic tank.

Biological wastewater treatment occurs in two staged aeration reactors, i.e., extended aeration. Two additional reactors have been bypassed and are available for use when flow into the plant increases. The package plant was originally designed to denitrify using a methanol feed reactor. According to the facility's operator, SPB Utilities, Inc., operation of the methanol feed reactor was discontinued after two years of operation. The operator found that the methanol reactor was difficult to maintain because the facility's wastewater flows are highly variable. Between conference sessions, only a small amount of wastewater is generated at this facility. Presently, on/off aeration is used to achieve denitrification, in a treatment manner similar to a sequential batch reactor. Between October 2004 and December 2005 total Nitrogen as N has exceeded the permit limitation during eight months. Reasons for exceedances cited are increases in effluent TSS and insufficient biosolids wasting. Due to these exceedances, a monitoring well shall be installed downgradient of the proposed reuse field in accordance with *WTS-4: Guidance Document For Design of Groundwater Monitoring Wells (revised 1996)*. The design shall be submitted to and approved by the Division prior to installation.

Treated effluent from the package plant is currently dosed to an effluent reuse field, which has been planted with turf grass. The reuse field consists of six adjacent drainfields. Each drainfield measures 30 ft. (width) by 54 ft. (length). The drainfields are located immediately behind the main building complex and provide ornamental landscaping for the center. The total area of the reuse field is approximately ¼ acre. The effluent is delivered to the sod's root zone via one inch diameter distribution lines, which have been buried one foot deep. Excess effluent beyond the grass uptake requirements is percolated to the groundwater. This existing reuse field has recently been showing signs of failure. The Permittee is now requesting that the permit be modified to use approximately one acre of pastureland located approximately 250 feet NNE of the package treatment plant. The Permittee proposes to surface (flood) irrigate the new reuse field. Spray irrigation of the proposed new reuse field shall be prohibited.

The new proposed effluent reuse field shall be fenced and posted as per Shaw Engineering drawings stamped and dated 11/23/05. Signage must include a prohibition for public access.

Flow: The package wastewater treatment plant is permitted for 0.015 MGD (15,000 gpd). Between October 2004 and December 2005 wastewater flows have been recorded between 1,152 to 4,246 gpd (2,092 gpd; average). The package plant incorporates approximately 1½ days of wastewater storage in an equalization basin and an effluent dosing tank.

Receiving Water Characteristics: Groundwater in the vicinity is of potable water quality with a static water level of 27 feet for Well #2, as measured in 2001. Well #2 is located approximately 550 feet south of the new proposed reuse field. . Shallow groundwater at the eastern edge of the building site was encountered within 4 feet bgs. The eastern edge of the building site is approximately 450 feet SSE of the proposed reuse field.

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 compliance with the effluent limitations upon issuance of the permit.
- b. **Within 30 days of permit issuance (April 26, 2006)**, the Permittee shall submit for approval a revised Operations and Maintenance (O&M) Manual.
- c. **Within 90 days of permit issuance (April 26, 2006)**, the Permittee shall submit for approval a revised Effluent Management Plan (EMP).
 - o The EMP shall contain the information required to comply with this permit. Preparation of the EMP in accordance with *WTS-1B – General Criteria for Preparing an Effluent Management Plan* is recommended.
 - o The EMP shall include operation and maintenance procedures for the use and operation of the irrigation systems, including storage ponds.
 - o The EMP shall include copies of documentation used for purposes of hazard notification to grounds keepers, contractors, or exposed personnel.
 - o The EMP shall include a description of sampling and analysis procedures for monitoring requirements specified as a condition of this permit.
 - o The EMP shall include verification of a cross connection control program.
- d. **Within 90 days of permit issuance (June 26, 2006)**, the Permittee shall submit for approval a plan for the installation of a groundwater monitoring well. The plan shall be prepared in accordance with *WTS-4: Guidance Document For Design of Groundwater Monitoring Wells (revised 1996)*. The plan shall include a schedule indicating when the monitoring well will be installed. The monitoring of this well shall be included in the revised O&M Manual as required above.

Proposed Effluent Limitations and Special Conditions:

Table 1: Plant Discharge Limitations

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD	0.015 (15,000 gpd)		Continuous	Flow Meter
BOD ₅ , mg/L (Influent)	Monitor & Report		Monthly	Composite
BOD ₅ , mg/L (Effluent)	30	45	Monthly	Composite
TSS, mg/L (Influent)	Monitor & Report		Monthly	Composite
TSS, mg/L (Effluent)	30	45	Monthly	Composite
Total Nitrogen as N, mg/L (Effluent)	10.0 mg/L		Monthly	Composite
Fecal Coliform, cfu or mpn/100 ml (Effluent)	200 (geometric mean)	400	Monthly	Discrete
pH (Effluent)	Between 6.0 & 9.0 Standard Units		Monthly	Discrete
Total Nitrogen as N, mg/L (Monitoring Well)	Monitor & Report		Monthly	Discrete

Rationale for Permit Requirements:

Flow limit is set to ensure that plant design is not exceeded.

Fecal coliform limits per NAC 445A.278 have been established per the facility’s compliance inspection report, dated April 28, 2003. Public access must be prohibited on the new reuse field.

Effluent monitoring is required to track the quality of the effluent water being discharged to the groundwater of the State through flood irrigation at the proposed reuse field and to ensure that the groundwater of the State is not degraded.

Total Nitrogen as N (groundwater monitoring well) monitoring is required to ensure that effluent reuse is not degrading the groundwater of the State. If Total Nitrogen as N concentrations measured in the groundwater increase as a result of effluent reuse to:

- 7.0 mg/L, the Permittee shall notify the Division immediately (within 5 days of becoming aware of the condition), and within 30 days after notifying the Division, the Permittee shall submit a plan for the reduction of nitrogen in groundwater that includes a proposal for an alternative method of disposal. Modifications to the EMP shall also be contemplated and incorporated in an effort to improve discharge management practices which increase nitrogen uptake by vegetation and/or adjust the nitrogen sources. The plan and the revised EMP are subject to Division approval and must receive approval in order to satisfy this condition.
- 9.0 mg/L, the Permittee shall begin implementation of the plan and shall execute all corrective action necessary to ensure no further degradation of groundwater.
- 10.0 mg/L, the Permittee shall discontinue the use of reclaimed wastewater and the discharge to groundwater shall cease, unless otherwise authorized by the Division.

It shall be the responsibility of the Permittee to determine the cause of the increase in Total Nitrogen measurements.

Procedures for Public Comment: The Notice of the Division's intent to issue a permit authorizing the operation of the treatment and reuse facility, subject to the conditions contained within the permit is being sent to the **Lincoln County Record** and the **Las Vegas Review-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 **March 27, 2006 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.

Proposed Determination: The Division has made the tentative determination to issue the proposed modification to the groundwater discharge (plant/effluent reuse) permit. This permit will expire on May 28, 2008.

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