

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

Drinking Water Protection Area / Wellhead Protection Area: The Rapport Executive Retreat wastewater treatment facility and the agricultural reuse area are within the 1000' Drinking Water Protection Area for the onsite facility water supply well. The wastewater treatment facility and the agricultural reuse area are not within but are close to an established 10-year capture zone with the Wellhead Protection Area for the Alamo Sewer and Water GID public water supply wells.

General: The Permittee operates Rapport Executive Retreat (formerly JFDI Conference & Training Center) on a 70-acre ranch, located approximately 1.5 miles northwest of Alamo, Lincoln County, Nevada. The main building complex includes facilities for conferences (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 Santec Corporation package treatment plant. The treated effluent is reused to irrigate approximately 1 acre of pasture grass, which is harvested for livestock feed (no grazing). The facility maintains backup reuse capabilities for subsurface irrigation on approximately ¼ acre of turf grass located in the conference center parking area. 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, similar to 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 is to be intermittent on an as-needed basis. 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. Due to these exceedances, a monitoring well was installed downgradient of the agricultural reuse field in accordance with *WTS-4: Guidance Document For Design of Groundwater Monitoring Wells (revised 1996)*. The design was submitted and approved by the Division prior to installation

The effluent reuse area is located approximately 250 feet NNE of the package treatment plant. Flood irrigation is used. Appropriate fencing and posting is required, and signage must include a prohibition for public access. Treated effluent from the package plant may also be used on an

alternate effluent reuse area of turf grass and ornamental landscaping, located immediately behind the main building complex. In this ¼ acre area, effluent would be 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 would be percolated to the groundwater. The alternate area is not currently used.

Effluent Flow and Characteristics: The package wastewater treatment plant is permitted for 0.015 MGD (15,000 gpd). From July 2003 to June 2008, the facility reported the following flow and effluent characteristics:

PARAMETER	PERMIT LIMIT	AVERAGE	MAXIMUM	MINIMUM
Flow (MGD)	0.015	0.0021	0.0042	0.0012
BOD5 (mg/L)	45	13.5	57	<2
Total Suspended Solids (mg/L)	45	20.55	67	<10
pH (Standard Units)	6.0 to 9.0	7.81	9.90	7.18
Total Nitrogen (mg/L)	10	9.35	28	0.87
Fecal Coliform (cfu or mpn/100 ml)	200 (geometric mean) 400 (daily Maximum)	1.4	570	<1
Monitor Well Total Nitrogen (mg/L)	10	0.44	1.7	<0.3

Receiving Water Characteristics: Groundwater at the site is relatively shallow. Samples taken from Well #2 in 2001 indicate potable water quality with a static water level of 27 feet. Well #2 is located approximately 550 feet south of the agricultural reuse area. Shallow groundwater at the eastern edge of the building site was encountered within 4 feet below ground surface (bgs). The eastern edge of the building site is approximately 450 feet SSE of the 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. **By MMM DD, 2008 (Within 30 days of permit issuance),** the Permittee shall submit for approval any updates or revisions to the Operations and Maintenance (O&M) Manual.
- c. **By MMM DD, 2008 (Within 90 days of permit issuance),** the Permittee shall submit any updates or revisions to the Effluent Management Plan (EMP).

Proposed Effluent Limitations and Special Conditions:

The facility shall be limited and monitored according to the following:

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)	---	10 Pursuant to Part I.A.2.d	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 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 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 **January 20, 2009 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 renewal of the groundwater discharge (plant/effluent reuse) permit, effective for a period of five (5) years.

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