



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: RLP RANCH INC.
PO BOX 2172
ELKO, NV - 89803

Permit Number: NS2001507

Location: RLP RANCH INC., ELKO
255 11TH STREET, ELKO, NV - 89801
LATITUDE: 40.956389, LONGITUDE: -115.544722
TOWNSHIP: 36N, RANGE: 57E, SECTION: 33

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	60 ACRE SITE	Land Application Site		ELKO	NV	89801	ELKO	40.956389	-115.544722	GROUNDWATER
MW1	MW-1	Monitoring Well		ELKO	NV	89801	ELKO	40.956389	-115.544722	GROUNDWATER

General:

This permit renewal allows for the continued application of domestic septage, portable toilet fluid, and grease interceptor material (domestic septage) to a 60-acre parcel of nutrient deficient agricultural land at the RLP Ranch, located approximately half a mile north of I-80, Elburz, Exit 317, Devil's Gate Interchange in Elko County, Nevada. The Permittee, RLP Ranch Inc., has been authorized to beneficially use domestic septage as a soil amendment and source of crop nutrients at this site since October 1999 under TNEV2000424 and since July 2001 under NEV2001507.

The Permittee is a licensed septage pumper. The volume of domestic septage pumped varies seasonally depending on the demand for this service. Based on data submitted quarterly to the Division, the greatest flows are typically generated in summer and fall.

The RLP Ranch site has been subdivided and fenced into several fields for better control of the domestic septage application rate. All fields within the site have previously received domestic septage. The Permittee has attempted to grow crested wheatgrass, Alkar wheatgrass, Johnson tall grass, and alfalfa; crops that do not require a large volume of water but are dependent on precipitation. The Permittee has not been successful in growing the aforementioned crops and plans to reattempt to grow crested wheatgrass.

The facility has two on-site underground storage tanks (USTs) for the storage of up to 25,000 gallons of domestic septage. The steel UST has a capacity of 12,000 gallons and the other UST, a surplus rail tanker, has a 13,000-gallon capacity. The facility also has an on-site rotary barrel screen with 3/4-inch screen openings, a portable power generator, and an underground storage tank used to store water from the on-site irrigation well. An injector truck that reportedly injects the domestic septage eight inches below ground surface has been used to apply domestic septage in the past. The injector truck is not currently being used. Instead, the domestic septage is being disked into the soil after being land applied by a pumper truck.

Discharge Characteristics:

The discharge consists of domestic septage. Only domestic septage may be land applied under this permit. No analysis of the domestic septage is required.

Receiving Water:

The receiving water is groundwater of the State underlying the land application site. The groundwater at the application site has been reported by the Permittee to be 7 feet below ground surface. According to the State of Nevada Division of Water Resources Well Log Database, the static water level at an on-site irrigation well is 3.4 feet below ground surface. The shallow groundwater is reportedly potable but no water quality data has been provided for the site.

Summary of Changes From Previous Permit:

The 2008 permit indicates that domestic septage is land applied to a 70-acre site. The Permittee has indicated that the domestic septage is land applied to a 60-acre site. Additionally, the injector truck that has previously been used to apply domestic septage to the site is not currently being used. Instead, the domestic septage is being disked into the soil after being land applied by a pumper truck.

The 2008 permit required a Profile 1 analysis of the RLP Ranch production well groundwater to obtain general receiving water quality information. This requirement has been removed from the permit in order to maintain consistency with other permits for the land application of domestic septage.

The 2008 permit required the Permittee to submit documentation of the irrigation water rights for the permitted parcel. This requirement has been removed from the permit. An on-site irrigation well and wheel-line sprinkler are used for crop irrigation.

The 2008 permit required the Permittee to submit photographic documentation of the posted warning signs and the installed storage tank labels required by the permit. A 2013 walkthrough inspection of the site determined compliance with the signage/labeling requirements. As a result, the requirement to submit photographic documentation of signage/labeling has been removed from the permit. Signage/labeling shall be maintained as required by the permit.

The 2008 permit required the Permittee to submit a quarterly map identifying the area(s) where domestic septage was applied during the past five years. The requirement to identify the area(s) where domestic septage was applied during the past five years has been removed from the permit in order to maintain consistency with other permits for the land application of domestic septage. The quarterly map shall be submitted as required by the permit.

The requirement to submit photographic evidence of crop growth has been added to the permit. This requirement has been added due to shallow groundwater depth at the land application site and uncertainty concerning successful crop growth during previous permit cycles.

Quarterly groundwater monitoring requirements and annual crop yield reporting requirements have been added to the permit due to shallow groundwater depth at the land application site and uncertainty concerning successful crop growth during previous permit cycles.

The requirement to construct a groundwater monitoring well at the land application site has been added to the permit. This requirement has been added to enable groundwater monitoring at the land application site.

Due to new naming conventions at the Nevada Division of Environmental Protection, Bureau of Water Pollution Control, the permit number has been changed from NEV2001507 to NS2001507. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

Permits for the land application of domestic septage do not include flow limitations, provided that adequate land is available for application. The annual application rate (AAR), however, shall be based on the agronomic uptake rate of the crop to be grown.

Groundwater Monitoring Wells Table for Sample Location Mw1 (Monitoring Well Mw-1) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT
Depth to water level ft below landsurface ^[1]	Value	M&R Feet (ft)		Groundwater	MW1	Quarterly	VISUAL ^[2]
Nitrogen, total	Value		<= 10 Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. If the depth to groundwater is less than 3.0 feet, the Permittee shall immediately cease land application and shall not resume land application until the depth to groundwater equals or exceeds 3.0 feet.
2. Field measurement

Septage Limitations / Requirements for Sample Location 001 (Land Application Site) To Be Reported Annually

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Crop yield	Annual Total	M&R Pounds per Acre (lb/acr)		Beneficial Reuse	001	Continuous	CALCTD

Rationale for Permit Requirements:

Permit requirements are necessary to protect the public health and prevent the land application site from becoming a public nuisance and source of groundwater pollution.

The crop to be planted and the crop yield shall be monitored to verify utilization of the applied nitrogen.

Special Conditions:**Substantial compliance with the current permit is a condition of permit renewal.**

SA – Special Approvals / Conditions Table

Item #	Description
1	The crop used to determine the annual application rate shall be planted within one year of the land application of domestic septage.
2	Dry land farming is not authorized. The party responsible for the cropping shall have irrigation water rights for the site prior to land application of domestic septage.
3	<p><u>Addendum to Permit Section B.SP.20.3.</u></p> <p>If the harvested crop yield is less than the crop yield used to determine N, the domestic septage application rate shall be reduced a proportional amount in subsequent years.</p> <p>If commercial nitrogen fertilizer or nitrogen from any other sources is applied to the site, N shall be reduced by a proportional amount.</p> <p>The annual application rate for material pumped from portable toilets, holding tanks, or similar devices where the material is unlikely to have been anaerobically digested shall be one-sixth of the annual application rate for domestic septage.</p>
4	Quarterly sampling of monitoring well MW-1 shall begin within 30 days of well completion.

Flow:

The AAR, in gallons of septage per acre per year, shall be based on the amount of nitrogen required by the planned crop and the design crop yield.

$$\text{AAR (gallons/acre/year)} = \text{nitrogen required by crop (pounds/acre/year)} \div 0.0026$$

Example: For a crop with an annual nitrogen requirement of 130 pounds per acre, septage may be applied at a maximum rate of 50,000 gallons per acre per year.

88,500 gallons of domestic septage were applied in 2014. According to the Permittee, less than 30,000 gallons of domestic septage will be applied per 30-day period. This volume is consistent with the monthly reported flows.

Corrective Action Sites:

There are no Bureau of Corrective Actions remediation sites located within one mile of the RLP Ranch.

Wellhead Protection Program:

The RLP Ranch is not located within a Drinking Water Protection Area or a Wellhead Protection Area.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit a new Operations and Maintenance (O&M) manual to the Division. The O&M manual shall be prepared in accordance with guidance document WTS-42.	10/1/2015
2	The Permittee shall submit a summary of the nitrogen applied to all fields receiving domestic septage, the crops grown on these fields, the estimated nitrogen removed by these crops, the estimated excess nitrogen applied, if appropriate, and the plan and schedule to utilize the excess nitrogen, if excess nitrogen has been applied.	10/1/2015
3	The Permittee shall submit, with the annual report, photographic evidence of crop growth in the area(s) where domestic septage was land applied throughout the previous calendar year. <i>Example:</i> The annual report due on January 28, 2016 shall include photographic evidence of crop growth in the area(s) where domestic septage was land applied in 2015.	1/28/2016
4	The Permittee shall submit to the Division for review, a plan for the installation of one new monitoring well (MW-1) on the land application site.	9/1/2015
5	The Permittee shall install the new monitoring well (MW-1) on the land application site. The monitoring well shall be constructed in accordance with "WTS-4: Guidance Document for the Design and Construction of Groundwater Monitoring Wells" (NDEP, Revised July 2012).	11/1/2015
6	The Permittee shall submit a copy of the well log and as-built drawings for the completed monitoring well (MW-1).	12/1/2015

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Reports	Quarterly	10/28/2015
2	Annual Reports	Annually	1/28/2016

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Reno Gazette Journal, Elko Daily Free Press** 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 until 5:00 P.M. **5/20/2015**, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX 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 determined to be appropriate. All public hearings must be conducted to 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 / re-issue the proposed 5-year permit.

Prepared by: **Alan Pineda**

Date: **4/9/2015**

Title: **Staff I Associate Engineer**