



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

Colleen Cripps, Ph.D., Administrator

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

**Permittee Name:** BARRICK EXPLORATION  
293 SPRUCE ROAD  
ELKO, NV - 89801

**Permit Number:** NS2013511

**Location:** THE LODGE AT PINE VALLEY, EUREKA  
JD RANCH, 40 MILES SOUTH OF CARLIN, NV, N/A, NV - 89316  
LATITUDE: 40.100226, LONGITUDE: -116.273990  
TOWNSHIP: T26N, RANGE: R51E, SECTION: S30

| Outfall / Well Num | Outfall / Well Name           | Location Type    | Well Log Num | Outfall City | Outfall State | Outfall Zip | Outfall County | Latitude  | Longitude   | Receiving Water |
|--------------------|-------------------------------|------------------|--------------|--------------|---------------|-------------|----------------|-----------|-------------|-----------------|
| 001                | 25,000 GALLON SEPTIC TANK     | External Outfall |              | CARLIN       | NV            | 89316       | EUREKA         | 40.101701 | -116.274680 | GROUNDWATER     |
| MW1                | UP-GRADIENT MONITORING WELL 1 | Monitoring Well  |              | CARLIN       | NV            | 89316       | EUREKA         | 40.101701 | -116.274680 | GROUNDWATER     |
| MW2                | UP-GRADIENT MONITORING WELL 2 | Monitoring Well  |              | CARLIN       | NV            | 89316       | EUREKA         | 40.101701 | -116.274680 | GROUNDWATER     |
| MW3                | DOWN-GRADIENT MONITORING WELL | Monitoring Well  |              | CARLIN       | NV            | 89316       | EUREKA         | 40.101701 | -116.274680 | GROUNDWATER     |

### General:

Barrick Exploration is proposing to discharge domestic waste via a 25,000 gallon onsite sewage disposal system (the system) at the Lodge at Pine Valley (the Lodge). The Lodge is approximately 48 miles south of Carlin, NV, along State Route 278 in Eureka County. The Lodge will serve as temporary housing for Barrick personnel during an exploration project. The system will serve four dormitory buildings, an administration building, a kitchen and dining building, a recreational building, an operational building, a mechanic shop, and a boot wash building. The system is for the treatment and disposal of domestic waste only; industrial waste disposal is prohibited.

### Discharge Characteristics:

The discharge will consist of domestic wastewater treated via a chamber leach field system. The system includes a 25,000 gallon septic tank and 3,200 linear feet of absorption trenches capable of handling up to 25,000 gallons per day of domestic waste. The absorption field will consist of eight zones. Four dosing tanks will be used to alternate the discharge between the zones, with a maximum of three doses per 24 hours for a given zone. The kitchen area sewer drain will have a 4000 gallon grease interceptor.

### Receiving Water:

The receiving water is groundwater. Shallow groundwater is approximately 10 feet below ground surface. Drinking water for the site originates from a well drilled to 620 feet below ground surface (sealed to 300 feet) and is located more than 500 feet from the absorption field. Two upgradient monitoring wells and one downgradient monitoring well will be installed to ensure groundwater quality is not degraded.

### Summary of Changes From Previous Permit:

This is a new permit; as such, there are no changes from a previous permit.

**Proposed Effluent Limitations:**

The Permittee shall monitor the depth of sludge, scum, and total liquids in all septic tanks at least once a year. Septic tanks shall be pumped when the combined scum and sludge depth is equal to or greater than 50% of the total liquid depth. In lieu of this monitoring requirement, the Permittee may submit documentation every year showing that the septic tanks have been pumped by a licensed septage hauler in the previous 12 months. Additional conditions specific to this permit can be found in the Special Approvals / Conditions Table.

Groundwater monitoring well installation and subsequent sampling have been implemented to ensure groundwater in this area is not being impacted by this facility.

In accordance with NAC 445A.286 and 445A.289, a Grade I Wastewater Operator is required to oversee an OSDS system of greater than 10,000 gallon capacity.

**Groundwater Monitoring Wells Table for Sample Location Mw1 (Monitoring Well) To Be Reported Quarterly**

| Parameter                                 | Discharge Limitations |               |                                 | Monitoring Requirements |            |                       |                  |
|---|-----------------------|---------------|---------------------------------|-------------------------|------------|-----------------------|------------------|
|   | Base                  | Quantity      | Concentration                   | Monitoring Loc          | Sample Loc | Measurement Frequency | S a m p l e Type |
| Depth to water level ft below landsurface | Value                 | M&R Feet (ft) |                                 | Groundwater             | MW1        | Quarterly             | DISCRT           |
| Nitrogen, total                           | 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           |
| Chloride (as Cl)                          | Value                 |               | M&R Milligrams per Liter (mg/L) | Groundwater             | MW1        | Quarterly             | DISCRT           |

**Groundwater Monitoring Wells Table for Sample Location Mw2 (Monitoring Well) To Be Reported Quarterly**

| Parameter                                 | Discharge Limitations |               |                                 | Monitoring Requirements |            |                       |                  |
|---|-----------------------|---------------|---------------------------------|-------------------------|------------|-----------------------|------------------|
|   | Base                  | Quantity      | Concentration                   | Monitoring Loc          | Sample Loc | Measurement Frequency | S a m p l e Type |
| Depth to water level ft below landsurface | Value                 | M&R Feet (ft) |                                 | Groundwater             | MW2        | Quarterly             | DISCRT           |
| Nitrogen, total                           | Value                 |               | M&R Milligrams per Liter (mg/L) | Groundwater             | MW2        | Quarterly             | DISCRT           |
| Solids, total dissolved                   | Value                 |               | M&R Milligrams per Liter (mg/L) | Groundwater             | MW2        | Quarterly             | DISCRT           |
| Chloride (as Cl)                          | Value                 |               | M&R Milligrams per Liter (mg/L) | Groundwater             | MW2        | Quarterly             | DISCRT           |

**Groundwater Monitoring Wells Table for Sample Location Mw3 (Monitoring Well) To Be Reported Quarterly**

| Parameter                                 | Discharge Limitations |               |                                 | Monitoring Requirements |            |                       |                  |
|---|-----------------------|---------------|---------------------------------|-------------------------|------------|-----------------------|------------------|
|   | Base                  | Quantity      | Concentration                   | Monitoring Loc          | Sample Loc | Measurement Frequency | S a m p l e Type |
| Depth to water level ft below landsurface | Value                 | M&R Feet (ft) |                                 | Groundwater             | MW3        | Quarterly             | DISCRT           |
| Nitrogen, total                           | Value                 |               | M&R Milligrams per Liter (mg/L) | Groundwater             | MW3        | Quarterly             | DISCRT           |
| Solids, total dissolved                   | Value                 |               | M&R Milligrams per Liter (mg/L) | Groundwater             | MW3        | Quarterly             | DISCRT           |
| Chloride (as Cl)                          | Value                 |               | M&R Milligrams per Liter (mg/L) | Groundwater             | MW3        | Quarterly             | DISCRT           |

**NS OTHER - Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Annually**

| Parameter | Discharge Limitations |                                  |               | Monitoring Requirements |            |                           |             |
|-----------|-----------------------|----------------------------------|---------------|-------------------------|------------|---------------------------|-------------|
|           | Base                  | Quantity                         | Concentration | Monitoring Loc          | Sample Loc | Measurement Frequency     | Sample Type |
| Flow rate | Daily Maximum         | <= 25000 Gallons per Day (gal/d) |               | Effluent Gross          | 001        | See Permit <sup>[1]</sup> | CALCTD      |

Notes (NS OTHER - Discharge Limitations Table):

1. Refer to the Special Approvals / Conditions Table for monitoring and reporting details.

**Special Conditions:**

SA – Special Approvals / Conditions Table

| Item # | Description  |
|--------|--|
| 1      | Septic tank treatment and disposal systems shall be used only for the treatment of domestic sewage. Domestic sewage is defined in NAC 445A.9532 and means any liquid and water-borne waste that is derived from the ordinary living process and is of such a character as to permit its satisfactory disposal into a public sewer or an on-site sewage disposal system without special treatment. The term does not include industrial waste. The discharge of toxic, hazardous, industrial, or laboratory waste material to any permitted OSDS is prohibited.     |
| 2      | The Permittee shall conduct regular and routine inspections and maintenance in accordance with the Division-approved O&M Manual.   |
| 3      | The Permittee shall submit an Annual Large-Capacity Septic System Evaluation Report to the Division on or before January 28th of each year. The depth of scum, sludge, and total liquid in all septic tanks shall be measured annually and reported as the annual report. Measurements may be made at any time during the 12 month reporting period. In lieu of the septic system evaluation report, the Permittee may submit documentation on or before January 28th of each year showing that the septic tank(s) have been pumped within the previous 12 months. |
| 4      | The rated treatment capacity of each septic tank shall not be exceeded.  |
| 5      | Surfacing of any substance from a septic system is prohibited.   |
| 6      | All leachfields shall be posted. Vehicular traffic and the movement of heavy equipment over the leachfields shall be prevented.  |
| 7      | Septic tanks shall be pumped by a licensed septage hauler whenever the combined depth of scum and sludge equals or exceeds 50% of the total liquid depth, or more frequently as necessary to maintain efficient solids removal. The date, tank number, volume of septage removed, and the name of the septage hauler shall be maintained onsite in accordance with Part A.11. of the permit. Sludge disposal shall be in accordance with applicable regulations.   |

**Flow:**

The system has been designed to treat up to 25,000 gallons of domestic waste per day. The capacity is based on the projected flow from the facility.

**Corrective Action Sites:**

There are no corrective actions sites within one mile of the facility.

**Wellhead Protection Program:**

The facility is not within a wellhead protection area, nor is it within a drinking water protection area.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

| Item # | Description   | Due Date |
|--------|---|----------|
| 1      | The Permittee shall submit two (2) copies of a septic system Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M shall be prepared by a Nevada registered Professional Engineer or a Division-Approved Qualified Person. If prepared by a Nevada Professional Engineer, the O&M shall be wet stamped.  | 1/1/2015 |
| 2      | The Permittee shall submit for review and approval design plans for the installation of three groundwater monitoring wells. The design plans shall submitted by a hydrogeologist or Nevada Registered Professional Engineer in accordance with NDEP guidance document WTS-4, "A Guidance Document for the Design and Construction of Groundwater Monitoring Wells for Use at Wastewater Treatment Facilities." <sup>[1]</sup> | 1/1/2015 |

Notes (Schedule of Compliance Table):

- O&M Manuals and/or Monitoring Well Design Plans prepared by Nevada Registered Engineers must be signed and stamped in accordance with NAC 625.610.

**Deliverable Schedule:**

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

| Item # | Description    | Interval  | First Scheduled Due Date |
|--------|----------------|-----------|--------------------------|
| 1      | Annual Reports | Quarterly | 1/28/2015                |

**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 **Elko Daily Free Press, 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 until 5:00 P.M. **9/22/2014**, 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: **Peter Lassaline**  
 Date: **8/12/2014**  
 Title: **Environmental Scientist**