

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

Permittee: VBL Environmental Services
P.O. Box 187
Pahrump, Nevada 89041

Permit: NEV2000508 - Renewal

Location: VBL Environmental Services
Artesia at Hafen Ranch Wastewater Reclamation Facility
6591 Jane Avenue
Pahrump, Nye County, Nevada 89061
Latitude: 36° 7' 39" N; Longitude 115° 55' 49" W
Township 21 S, Range 54 E, Section 8 MDB&M

Public Water Supply: The facility is not located within a wellhead protection capture zone or a 7,000 foot public water supply well buffer zone.

General: The Permittee proposes to continue to operate a digested sewage sludge, domestic septage, and food preparation grease trap material dewatering system at the Artesia at Hafen Ranch Wastewater Reclamation Facility (HRWWRF). The permit was initially issued November 20, 2000 to authorize land application of domestic septage, grease trap material, and Class B biosolids to agricultural land located at Hafen Ranch. In October 2003, the permit was modified to include the dewatering system with continued authorization to land apply the materials now being dewatered. Due to the requested elimination of the authorization to land apply, the permit will be re-issued as a zero discharge permit.

Land application ceased in the second quarter of 2004. The dewatering system commenced operation in April 2004.

The dewatering system consists of an 8,000-gallon covered receiving container, a polymer feed system, a 20,000-gallon aerated storage tank, two steel dewatering containers, two 6,000-gallon equalization tanks, and an effluent flow meter. Pumper trucks discharge to the receiving container for removal of grit and inert screenings. Polymer is fed into the aerated storage tank to promote flocculation of solids. The flocculated mixture is pumped to one of the dewatering boxes for filtering with the solid portion retained and the filtrate pumped to the equalization tanks. The effluent is metered from the equalization tanks to the HRWWRF. All dewatering effluent is discharged for treatment to the HRWWRF operated by Pahrump Utility Company, Inc., NEV91004.

Full filter/dewatering containers are removed within one day to prevent septic odor. The dewatered solids, including grit and screenings, are transported to the Nye County Pahrump Valley Municipal Landfill for disposal. This permit does not regulate the quality of material placed in landfills.

A certified operator is not required for this physical separation process. The dewatering system operations and maintenance manual was approved by the Division February 2, 2004. This facility was most recently inspected by the Division February 9, 2006.

Receiving Water Characteristics: The proposed permit does not authorize discharge to waters of the State, therefore, there is no receiving water.

The January 10, 2005, BBC Engineering, Inc., HRWWRF Rapid Infiltration Basin Geotechnical Investigation Report identified the depth to groundwater as ranging from 68 to 72 feet below ground surface (bgs) at the planned NEV91004 discharge site. This is consistent with the Division of Water Resources database that identifies 52 wells within Section 8, Range 54 E, Township 21 S, with depths to groundwater ranging from 35 feet to 90 feet bgs. The majority of these are domestic wells constructed to depths of 140 feet to 160 feet.

The 2000 NEV2000508 Fact Sheet stated that the water table at the nearby biosolids/septage land application area met “Nevada drinking water standards.”

Groundwater monitoring has not been proposed for this zero-discharge facility.

Flow: The Permittee has requested daily maximum and 30-day average flows of 0.030 million gallons per day (MGD) or 20.8 gallons per minute (gpm). This is the design treatment capacity of the dewatering system. The 2005 operational flow was approximately 0.009 MGD or 6.25 gpd.

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

- Dewater digested sewage sludge, domestic septage, and food preparation grease trap material at HRWWRF, Permit NEV91004; and
- Discharge the dewatering filtrate to HRWWRF at a point upgradient of the NEV91004 influent flow measurement.

Samples taken in compliance with the monitoring requirements specified below shall be collected at the following locations:

- i. Effluent flow meter;
- ii. Effluent sampling port;
- iii. Digested sewage sludge delivered to the dewatering facility;
- iv. Domestic septage delivered to the dewatering facility;
- v. Food preparation grease trap material delivered to the dewatering facility; and
- vi. Sludge transported from the dewatering facility for disposal.

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

Effluent Limitations

PARAMETERS	EFFLUENT DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Quarterly Average	Daily Maximum	Sample Location	Measurement Frequency	Sample Type
Flow, gpd	30,000	30,000	i.	Continuous	Flow meter
Carbonaceous Biochemical Oxygen Demand (CBOD), mg/L	500	1,000	ii.	Monthly	Composite
pH, SU	6.0 ≤ pH ≤ 9.0		ii.	Monthly	Discrete
Total Suspended Solids, mg/L	Monitor & Report		ii.	Monthly	Composite

PARAMETERS	EFFLUENT DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Quarterly Average	Daily Maximum	Sample Location	Measurement Frequency	Sample Type
Total Nitrogen as N, mg/L	Monitor & Report		ii.	Monthly	Composite
Digested Sewage Sludge, gal & source	Monitor & Report		iii.	Each Load	Calculation
Domestic Septage, gal	Monitor & Report		iv.	Each Load	Calculation
Grease Trap Material, gal	Monitor & Report		v.	Each Load	Calculation
Sludge Removed, dT	Monitor & Report		vi.	Each Load	Calculation

Notes:

gpd: Gallons per day. gal: Gallons.
 mg/L: Milligrams per liter. dT: Dry tons.
 SU: Standard units.

Schedule of Compliance: The Applicant 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 that the Administrator may make in approving the schedule of compliance.

- a. The Applicant shall achieve compliance with the effluent limitations upon issuance of the permit.

Rationale for Permit Requirements: Permit requirements are necessary to protect the HRWWRF from excessive flows and carbonaceous biochemical oxygen demand and to protect waters of the State.

Flow: The permit allows the Permittee to discharge the maximum flow that HRWWRF is willing to accept from the dewatering facility. This limitation will prevent hydraulic overload of the HRWWRF.

Carbonaceous Biochemical Oxygen Demand: Carbonaceous biochemical oxygen demand is limited to the concentration that HRWWRF is willing to accept. This limitation will prevent overloading of the HRWWRF treatment capacity.

pH: The pH of the discharge to HRWWRF is limited to the NEV91004 pH discharge limitation to prevent system upset and to restrict the placement of inappropriate materials in the dewatering system.

Total Suspended Solids and Total Nitrogen as Nitrogen: Monitoring and reporting of the effluent total suspended solids (TSS) and total nitrogen (TN) concentrations is required because these parameters are limited in the HRWWRF groundwater discharge. Excessive TSS and TN concentrations in the filtrate may negatively affect the NEV91004 effluent quality. .

Proposed Determination: The Division has made the tentative determination to issue the proposed zero-discharge permit for a five (5) year period.

Procedures for Public Comment: Notice of the Division's intent to issue a permit authorizing the Permittee to continue to dewater digested sewage sludge, domestic septage, and food preparation grease trap material at the Artesia at Hefen Ranch Wastewater Reclamation Facility subject to the conditions contained within the permit, is being sent to the **Pahrump Valley Times** 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. April 15, 2006, 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 or interstate agency, or any interested agency, person or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted. Public hearings granted by the Division shall 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.238.

Prepared by: Bruce Holmgren
March 2006

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