

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

Permittee Name: **U.S. Department of the Interior**
 National Park Service
 Great Basin National Park
 100 Great Basin National Park
 Baker, Nevada 89311-9701

Permit Number: **NEV87068**

Location: Great Basin National Park, White Pine County, Nevada
 Section 10, T 13N, R 69E
 Latitude: 39° 01.06' N
 Longitude: 114° 12.65' W

Permitted Flow: 30-Day Average: 0.024 MGD
 Daily Maximum: 0.0375 MGD

Wellhead Protection:
 The facility is not within a Wellhead Protection capture zone. There are no community water supply wells within 6000 feet of the facility.

General:
 The wastewater treatment facility is designed to treat domestic sewage generated in the service area to secondary standards. The facility consists of two Hypalon-lined, aerated lagoons operated either in series or in parallel, depending on need. The aeration process is a low intensity system creating non-turbulent mixing to allow a large portion of the solids to settle to the lagoon bottom for eventual anaerobic digestion. Evaporation takes place in both the primary and secondary lagoons.

Receiving Water Characteristics:
 Discharge of treated effluent is to two, in-series lined evaporation lagoons. This is a zero discharge facility. Effluent will not be discharged to waters of the State of Nevada.

Effluent Flow and Characteristics: During the period from April 2008 to September 2008, the following was reported for effluent discharged to the two treatment lagoons:

MONITORING LOCATIONS & PARAMETERS		DISCHARGE DATA		MONITORING REQUIREMENTS	
		30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Influent Flow (MGD)		0.024	0.0375	Weekly	Visual/calculate
Cell 1 & Cell 2 Outfalls 001 & 002	BOD ₅ (mg/l) –North Lagoon	34.5	46	Monthly (April –September)	Discrete
	South Lagoon	68.5	111		
	Total Suspended Solids (mg/l)	95.5	231	Monthly (April –September)	Discrete
	North Lagoon	422.2	693		
South Lagoon					

Proposed Effluent Limitations and Special Conditions: The following are the proposed effluent limitations and monitoring requirements proposed for the renewal of the permit:

a. **Influent & Groundwater Monitoring:** Samples taken in compliance with the monitoring requirements specified below shall be taken at the following locations: influent flow sampling point - manhole with Palmer Bowlus flume (trapezoidal flume) prior to discharge into the primary lagoon. BOD₅, TSS, pH, and DO samples to be collected in the alternating corners of Cell #1, and Cell #2 in accordance with the time frames specified below.

The influent flow and lagoon samples shall be limited and monitored by the Permittee as specified below:

CELL MONITORING LOCATIONS & PARAMETERS		DISCHARGE LIMITATION		MONITORING REQUIREMENTS	
		30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Influent Flow (MGD)		0.024	0.0375	Weekly	Visual/ calculate
Cell 1 & Cell 2 Outfalls 001 & 002 Total Flow *	BOD ₅ (mg/l)	M&R	M&R	Monthly (April – September)	Discrete
	Total Suspended Solids (mg/l)	M&R	M&R	Monthly (April – September)	Discrete
	pH (Standard Units)	M&R	M&R	Weekly (April – September)	Discrete
	DO (mg/l)	M&R	M&R	Weekly (April – September)	Discrete

Notes: * See I.A.13.

M&R: Monitor and Report

The groundwater samples shall be limited and monitored by the Permittee as specified below:

MONITORING WELL LOCATIONS & PARAMETERS		DISCHARGE LIMITATION		MONITORING REQUIREMENTS	
		30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Ground-water Wells (North & South Wells) **	TDS (mg/l)	M&R	M&R	Quarterly	Discrete
	Chlorides (mg/l)	M&R	M&R	Quarterly	Discrete
	Total Nitrogen (mg/l) *	10	10	Quarterly	Discrete
	Nitrate as N (mg/l) *	M&R	M&R	Quarterly	Discrete
	Static Water Level (ft)	M&R	M&R	Quarterly	Discrete
	Groundwater Elevation (ft)	M&R	M&R	Quarterly	Discrete

Notes: * See I.A.13.

M&R: Monitor and Report

b. **Lehman Creek Monitoring:** Creek samples shall be taken monthly, during normal park operations, April through September, at the following locations:

1. Upstream from the wastewater treatment lagoons.
2. Downstream from the treatment lagoons, and upstream of Park View Estates.

3. Within Park View Estates, down-gradient from the majority of residences.

The creek samples shall be limited and monitored by the Permittee as specified below:

LEHMAN CREEK MONITORING LOCATIONS & PARAMETERS		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
				Measurement Frequency	Sample Type
Stream Flow Rates (gpm)		M&R	M&R	Monthly (April –September)	Grab
Up-gradient location #1	TDS (mg/l)	M&R	M&R	Monthly (April –September)	Grab
	Chlorides (mg/l)	M&R	M&R		
	Sulfates (mg/l)	M&R	M&R		
	Nitrate as N (mg/l)	M&R	M&R		
Down- gradient locations #2 and #3	TDS (mg/l)	M&R	M&R	Monthly (April –September)	Grab
	Chlorides (mg/l)	M&R	M&R		
	Sulfates (mg/l)	M&R	M&R		
	Nitrate as N (mg/l)	M&R	M&R		

Notes: M&R: Monitor and Report

Schedule of Compliance:

The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.

- a. **Operations & Maintenance (O&M) Manual:** Within ninety (90) days of the permit issuance date, the Permittee shall submit an updated O&M Manual, prepared in accordance with the Division’s WTS-2 guidance: *Minimum Information Required for an Operations and Maintenance Manual*. The O&M Manual shall be prepared and wet stamped by a Nevada Registered Professional Engineer (NV P.E.).
- b. **Effluent Management Plan (EMP):** Within 90 days of the permit issuance date, the Permittee shall submit an updated EMP, prepared in accordance with the Division’s WTS-1B guidance: *General Criteria for Preparing an Effluent Management Plan*. The EMP shall be prepared and wet stamped by a NV P.E.
- c. **Monitoring Wells:** The Permittee shall continue sampling and reporting the groundwater monitoring wells identified in the Groundwater Monitoring Wells Table, Section I.A.1. Within thirty (30) days following two (2) consecutive quarters where the sampling of a monitoring well has not occurred due to insufficient water levels, the permittee shall notify, in writing, the BWPC Compliance Coordinator. In the notification to BWPC, a plan and schedule of corrective action to resume sampling shall be submitted for review and approval. All monitoring wells shall be designed, drilled and constructed in accordance with the Division’s WTS-4: General Guidance for Design of Groundwater Monitoring Wells. <http://ndep.nv.gov/bwpc/wts-4.pdf>
- d. **Pond Management:** The permittee shall operate and maintain all ponds in accordance with the Division’s WTS-6: Guidance Document for Wastewater Pond System O&M <http://ndep.nv.gov/bwpc/wts-6.pdf>. Within one (1) week of the discovery of a damaged ponds, or liners the permittee shall notify, in writing, the BWPC Compliance Coordinator. A plan and schedule for the repair shall be submitted to NDEP for review and approval within 90 days of the discovery. The damaged pond or liner shall be repaired in accordance with the Division’s WTS-5: Guidance Document for Design of Wastewater Treatment Ponds <http://ndep.nv.gov/bwpc/wts5.pdf> . Repair/replacement

design and inspection reports shall be prepared, submitted and wet stamped by a NV P.E.

Rationale for Permit Requirements:

The monitoring proposed by this permit is consistent with practices at similar facilities, to protect groundwater quality.

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to two in-series, lined treatment lagoons (zero discharge evaporation lagoons) subject to the conditions contained within the permit, is being sent to 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 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. The deadline for receipt at the Division Office of all comments pertaining to this public notice period is **5:00 P. M., October 21, 2009**.

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 determined 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 renewal permit for a five year period.