



# STATE OF NEVADA

Department of Conservation & Natural Resources

*Jim Gibbons, Governor*

*Allen Biaggi, Director*

DIVISION OF ENVIRONMENTAL PROTECTION

*Leo M. Drozdoff, P.E., Administrator*

## FACT SHEET

(Pursuant to NAC 445A.236)

**Permittee Name:** Town of Jackpot  
Elko County Public Works  
155 South 9<sup>th</sup> Street  
Elko, NV 89801  
Elko County

**Permit Number:** NEV80018

**Location:** Jackpot, Elko County, immediately adjacent to and east of the Jackpot airport runway.

Latitude: 41° 58' 41" N  
Longitude: 114° 39' 22" W  
Township 47N, Range 64E, Section 12 and  
Township 47N, Range 65E, Section 7  
Elevation: 5,194 Feet, msl

**General:** The Elko County Public Works Department operates a wastewater treatment facility (WWTF) in Jackpot, which is located north of Elko on the Idaho/Nevada state line. The WWTF serves approximately 1,250 residents, plus numerous casinos, hotels/motels and restaurants. The WWTF consists of two primary aerated lagoons and one secondary aerated lagoon, followed by percolation beds. The primary and secondary lagoons currently have no synthetic liners. The proposed treatment scheme calls for cyclic aeration, allowing for both aerobic and anoxic treatment. The percolation beds are operated on the same principle, with effluent discharges cycled among various cells within the beds. The aerobic/anoxic treatment is intended to reduce nitrogen concentration in the effluent. Furthermore, filtration of the effluent through the soil matrix assists in additional reductions in Five Day Inhibited Biological Oxygen Demand (CBOD<sub>5</sub>) and Total Suspended Solids (TSS). The facility is permitted for 0.63 MGD. There are a number of municipal and domestic water supply wells within a one-mile radius of the facility. The closest well is approximately 0.53 mile (2,775 feet) from the facility.

Issues of Total Nitrogen (TN) and Total Dissolved Solids (TDS) in the North Monitoring Well (MW1) became evident in 1997, and reached a maximum level of 29.0 and 1210 mg/l, respectively, in late 2002. Although these levels have dropped slightly since 2002, the values are still above 20 mg/L and 1,000 mg/L, respectively. NDEP has concluded that these elevated levels are caused by leaking ponds. Jackpot will use American Recovery and Reinvestment Act (ARRA) funds to construct four (4) HDPE-lined partial mix ponds and two (2) HDPE-lined storage basins. These improvements will allow the TN and TDS levels to drop to below

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compliance levels.

**Corrective Actions Sites:** There is no Bureau of Corrective Actions remediation site located within a one-mile radius of the permitted site.

**Wellhead Protection Area:** Facility is within a 6000' capture zone for a municipal well belonging to PWS No. NV0000088. There is a moderate vulnerability to inorganic compounds and volatile organic compounds.

**Flow:** The permitted 30-Day average flow is 0.63 MGD with a maximum daily flow of 0.95 MGD.

**Receiving Water Characteristics:** Groundwater in the area of the WWTF varies from 49 to 81 feet below the ground surface. Background water quality is believed to be that represented by samples taken from monitor well MW2 (South). Analyses indicate the following approximate average concentrations for MW9: Nitrate, 0.9 mg/L; Total Nitrogen, 1.1 mg/L, Chloride, 33 mg/L; and TDS, 240 mg/L.

**Proposed Effluent Limitations, Schedule of Compliance and Special Conditions**  
Discharges from the WWTF to groundwater of the State will be limited as follows:

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	30-Day Average	Daily Maximum	Sample Locations	Measurement Frequency	Sample Type
Flow (MGD)	0.63	0.95	Influent	Weekly	Meter
CBOD <sub>5</sub> (mg/L)	Monitor and Report		Influent	Monthly	Composite
TSS (mg/L)	Monitor and Report		Influent	Monthly	Discrete
CBOD <sub>5</sub> (mg/L) (Effluent)	30	45	Pond Outlet	Monthly	Discrete
	---	10	Lysimeters *		
TSS (mg/L) (Effluent)	M & R	90	Pond Outlet	Monthly	Discrete
	---	10	Lysimeters *		

\* Lysimeters located in the percolation bed cells 5-1 through 6-3 shall be sampled on a monthly basis until the new ponds have been constructed, then they will no longer be used for sampling. If no effluent is present in the lysimeter, this shall be noted and reported on the Discharge Monitoring Report (“DMR”) form.

The monitoring wells, South MW (upgradient of the percolation beds), North East MW, MW-7,

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MW-8, and MW-9 (down gradient of percolation beds), will be monitored per the permit as follows:

PARAMETER	GROUNDWATER LIMITATIONS	MONITORING REQUIREMENTS	
		Frequency	Sample Type
Depth to Groundwater (ft)	Monitor and Report	Quarterly	Discrete
Groundwater Elevation (ft AMSL)	Monitor and Report	Quarterly	Calculate
Nitrate as N (mg/L)	Monitor and Report	Quarterly	Discrete
Total Nitrogen as N (mg/L)	10.0	Quarterly	Discrete
Chlorides (mg/L)	Monitor and Report	Quarterly	Discrete
TDS (mg/L)	Monitor and Report	Quarterly	Discrete

In addition, monitor wells West MW and North MW will be monitored per the above table on an annual basis. These analyses will be reported in the Fourth Quarter DMR.

**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 that the Administrator may make in approving the schedule of compliance.

- a. A revised Operations & Maintenance (O&M) Manual shall be submitted to NDEP by **MonthDay, 2010**, that outlines any changes to the treatment process and/or operation of the facility. The O&M Manual shall follow the requirements for O&M Manuals found in NDEP Publication WTS-2 *Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant*.
- b. Jackpot will notify NDEP in writing **within fourteen (14) days** after the new ponds have been put online.
- c. The lysimeters currently used for sampling water quality parameters will be no longer be used when the new ponds have been constructed and put into use; and
- d. After the new ponds have been put online, water quality samples will be pulled from the pond outlet before the treated effluent is diverted to the rapid infiltration basins and the

results will be submitted with the DMR.

**Proposed Determination**

The Division has made the tentative determination to reissue the proposed permit for a period of five (5) years.

**Rationale for Permit Requirements**

The flow is measured to verify the flow to the treatment plant is consistent with permit limitations, and to determine when design capacity is being approached. Influent and effluent BOD<sub>5</sub> and TSS, and effluent nitrogen are monitored to assess the level of treatment being provided and to verify compliance with permit limitations.

Groundwater monitoring is required to verify that groundwater of the State is not degraded.

**Procedures for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit is being sent to the **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 may do so in writing for a period of 30 days following the date of the public notice. All comments regarding this permit must be received or postmarked by **5:00 PM on Monday, May 10, 2010**. 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 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.

Prepared by: Steve McGoff, P.E.  
Staff Engineer III  
April 2, 2010