

**NEVADA DIVISION OF ENVIRONMENTAL PROTECTION**

**FACT SHEET**  
(pursuant to NAC 445A.236)

**Permittee Name:** City of Winnemucca

**Permit Number:** NEV40037

**Description of Discharge**

**Location:** South of Jungo Road, West of the old WPRR Winnemucca rail station, north of the Humboldt River, northwest of central Winnemucca

SE1/4, NE1/4 Section 25, T. 36 N., R. 37 E. MDB&M

Latitude: 40° 58' 00"N; Longitude: 117° 44' 00"W  
Humboldt County, Nevada

**Characteristics:**

The City of Winnemucca Wastewater Treatment Pond system is designed and operated to treat municipal wastewater generated by residential and commercial properties within the City of Winnemucca service area to meet pond system effluent standards. Biological and physical treatment occurs in five partial mix aerated ponds operated in series. Solar powered mixers have been installed in these lagoons to enhance mixing in the ponds. The pond system's treated effluent is dispersed to the environment in the region via evapotranspiration/percolation in a series of five Rapid Infiltration Basins and at a land application area adjacent to the RIB number 10.

This pond system has been in operation for over 30 years and has seen few modifications over the years.

Recently the Division and City have entered into discussions on elimination of the use of the RIB's and overland flow area for effluent dispersal. Therefore, as a key part of this permits renewal, the City is to prepare an engineering plan to eliminate the use of the present effluent disposal system and replace it with a new disposal system or alternative treatment and dispersal method that the Division can approve. Detailed schedules with completion dates for the preferred alternative will be due by the end of this five year permit cycle.

The City has followed a plan to mitigate the I & I (inflow & infiltration) issues on its collection system by slip lining portions of the collection system in the floodplain, by eliminating roof drains previously connected to the sewer mains, by conducting manhole inspections, and by sealing manholes in the floodplain. Additionally, they have investigated and repaired breaches in collection system which had allowed floodwater flows from the river to enter into the system.

**Flow:** The current treatment pond system is rated for a hydraulic capacity of 2.50 MGD 30-Day Average and 3.50 MGD daily maximum. It has an organic rated treatment capacity of 2640 lbs/day on an average basis.

**Site Crosschecks:** The facility is not located within a high risk well head capture zone or within a Bureau of Corrective Actions remediation site.

**Permit Monitoring and Limitations:**

The discharge shall be limited and monitored by the permittee as specified below:

**TABLE ONE: Plant Discharge Limitations**

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	30 Day Average	Daily Maximum	Sample Location(s)	Measurement Frequency	Sample Type
Influent Flow (MGD)	2.50	3.50	From Headworks	Continuously	Meter
Influent CBOD <sub>5</sub> (lbs/day)	2640	M & R <sup>1</sup>	From Headworks	Monthly	Composite
Influent TSS (mg/l)	Monitor and Report		From Headworks	Monthly	Composite
Effluent CBOD <sub>5</sub> (mg/l)	30	45	Effluent from ponds prior to RIBs' or overland flow	Monthly	Discrete
Effluent TSS (mg/l)	Monitor and Report	90	Effluent from ponds prior to RIBs' or overland flow	Monthly	Discrete
pH (S.U.)	Between 6.0 to 9.0		Effluent from ponds prior to RIBs' or overland flow	Monthly	Discrete

Total N, NO <sub>3</sub> -N, and NH <sub>3</sub> -N (mg/l)	Monitor and Report	Effluent from ponds prior to RIBs' or overland flow	Monthly	Discrete
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There are three shallow groundwater monitoring wells installed between the River and the treatment facility. The table below lists the permit sampling requirements:

I.A.2.a. **GROUNDWATER MONITORING WELLS:** MW #: 1A, 2B, 3C

Each monitoring well shall be monitored as follows.

**TABLE TWO: Groundwater Monitoring Limitations**

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
Total Nitrogen as N (mg/l)	10.0	Quarterly	Discrete
Nitrate as N (mg/l)	Monitor and Report	Quarterly	Discrete
Chlorides (mg/l)	Monitor and Report	Quarterly	Discrete
Total Phosphorus as P (mg/l)	Monitor and Report	Quarterly	Discrete

**General:** The City of Winnemucca has undergone a fluctuation and reduction in its population within the last permit period due to cycles in mining activities and tourism in the area and the related service ancillaries that support those activities. A very slow growth rate for the area is anticipated so increases in capacity will not be needed during this next permit period. A loading limit originally imposed on the permit has been retained for this permit period to ensure that facility capacity based on BOD loading is not exceeded. The original design capacity of the facility is 3.5 MGD.

**Receiving Water Characteristics:** The receiving water remaining after evapotranspiration is the ground water underlying the rapid infiltration basin and overland flow basin sites. Depth to groundwater averages eight to eighteen feet. The Humboldt River is several hundred feet south of the RIBs and overland flow area. The shallow aquifer along the river corridor floodplain functions such that depending on the river stage, the flood plain becomes an area of both recharge and discharge.

**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 **RENO GAZETTE-JOURNAL and the HUMBOLDT SUN** 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.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, 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 scheduled by the Administrator must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines 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 reissue the proposed permit. The permit will be for a five (5) year period.

**Schedule of Compliance and Special Conditions**

See Permit Part I.A.19. for detailed Compliance requirements

**Rationale for Permit Requirements**

Monitoring is required to assess the treatment pond system performance and to track groundwater quality.

March 2010