

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445.42525)

Permittee Name: Mountain City Water and Sewer Users Inc.
207 Davidson Street
Mountain City, NV 89831
Elko County

Permit Number: NEV40023

General:

The Mountain City Water & Sewer Users Inc. operates a wastewater treatment facility (WWTF) that serves approximately 35 residents of the village of Mountain City, Nevada. The WWTF consists of an aerated lagoon, followed by a polishing pond, providing secondary treatment. The treated effluent discharges to groundwater via percolation through four Rapid Infiltration Basins (RIBs). The treatment lagoon is design rated for secondary treatment at 0.048 MGD (48,000 gallons per day).

Based on the Divisions' recent inspection findings and its standards for treatment lagoon lining, this permit cycle will require the lining of the earthen treatment lagoons to state standards.

Location:

The Mountain City Water & Sewer Users WWTF is located approximately 1/2 mile northwest of the village of Mountain City. The Rapid Infiltration Basins (RIBs') are approximately 1/2 mile south of the treatment plant and 1/4 mile west of the Owyhee River.

Latitude: 41° 50' N.

Longitude: 115° 58' W.

Township 46 N, Range 53 E, Section 36

Receiving Water Characteristics:

Groundwater in the area of the RIBs is 15 to 25 feet below surface. Monitor well data indicates groundwater does not exceed Profile I Maximum Concentration Levels (MCL's) for monitored constituents chloride, nitrate, and Total Dissolved Solids (TDS).

Effluent characteristics:

The discharge from the wastewater treatment plant is secondary treated effluent. Average effluent values are: 16 mg/l Five Day Inhibited Biological Oxygen Demand (BOD₅) and 22 mg/l Total Suspended Solids (TSS). Over the last several years, the flow rate has consistently

averaged around 18,000 gallons per day, roughly 40% of the design capacity of the plant. The effluent is pumped to the RIBs, which distribute the effluent into the groundwater of the State. The treated effluent meets the state and federal standards for secondary treatment.

The facility has a design capacity of 0.048 MGD (48,000 gallons/day). The facility is currently permitted for the following flow limitations:

Flow: 0.048 MGD 30-Day Average flow
0.072 MGD Maximum flow

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 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, 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 445.150.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445.274.

Proposed Determination:

The Division has made the tentative determination to renew the permit for a five (5) year period.

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	Maximum	Sample Locations	Measurement Frequency	Sample Type
Flow (MGD)	0.048	0.072	Influent	Weekly	Pump Timer
CBOD ₅ (mg/l)	Monitor and Report		Influent	Quarterly	Composite
TSS (mg/l)	Monitor and Report		Influent	Quarterly	Discrete
CBOD ₅ (mg/l)	30	45	Effluent Prior to RIB's	Quarterly	Composite
TSS (mg/l)	Monitor and Report	90	Effluent Prior to RIB's	Quarterly	Discrete

The two monitoring wells, MW-1, up gradient of RIBs, and MW-2, down gradient of RIBs, will be monitored per the permit as follows:

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

* Sampling of the monitor wells shall be performed in the second and fourth quarters of each year, and the results shall be submitted with the second and fourth quarter Discharge Monitoring Reports.

Rationale for Permit Requirements:

Monitoring is required to ensure that groundwaters of the State of Nevada are not degraded. Monitoring is also required to assess the level of treatment being provided, and to determine compliance with discharge volume limitations.

Revised by: Joseph L. Maez, P.E.
Staff Engineer III
Bureau of Water Pollution Control
February 26, 2009

