

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET (pursuant to NAC 445A.236)

Permittee Name: McDermitt Sewer District
McDermitt Wastewater Treatment Facility
P. O. Box 36
McDermitt, NV 89421
Humboldt County

Permit Number: NEV93005

General:

The McDermitt Sewer District operates a wastewater treatment facility (WWTF) at McDermitt, Nevada, in northern Humboldt County. The WWTF serves approximately 160 residents of the town of McDermitt, located at the Nevada-Idaho state line off of Highway U.S. 95. The influent wastewater flow is measured by pump timers at the treatment ponds. The WWTF consists of a 1.3-acre baffled, HDPE lined, aerated treatment pond, and a 1-acre evaporation/percolation pond. During the summer months, effluent can be piped from the evaporation pond over to an adjacent agricultural field for irrigation. The facility also has an emergency overflow pond located between the two ponds for use as needed.

Location:

The McDermitt WWTF is located approximately 0.6 mile southwest of the town of McDermitt, and 0.44 mile due south of the Nevada-Idaho state line. The facility is located at the following coordinates:

Latitude: 41° 59' 32" N
Longitude: 117° 43' 39" W

Township 48N, Range 38E, Section 32

Receiving Water Characteristics:

Groundwater is encountered at about 8 feet below ground surface. Groundwater upgradient of the facility is typically 120 mg/l in chlorides and less than 0.5 mg/l in nitrate as Nitrogen. Groundwater gradient is toward the southwest. Downgradient monitoring indicates an average of 1.5 mg/l total nitrogen and 650 mg/l chloride. The facility is located within the 6000-foot drinking water protection area (DWPA) for two McDermitt public water system wells, which are completed in deeper, confined water-bearing formations (greater than 189 feet below surface). These wells have been determined to be highly vulnerable to potential contamination from synthetic organic compounds and inorganic compounds.

Effluent Characteristics:

The effluent from the aerated wastewater treatment system has not consistently met the state and federal standards for secondary treatment. The effluent has not been monitored frequently enough to determine compliance with the 30-Day Average standard of 30 mg/l CBOD5. During the term of the current permit, the effluent CBOD5 has exceeded the Daily Maximum permit limitation of 45 mg/l on two (2) occasions and the TSS limit of 90 mg/l once.

The following table lists the average and maximum values for effluent characteristics for the current permit period

PARAMETER	AVERAGE	MAXIMUM
Flow (MGD)	0.030	0.050
Daily Maximum Effluent CBOD ₅ (mg/l)	30	50
Daily Maximum Effluent TSS (mg/l)	43	120

Proposed Effluent Limitations, Schedule of Compliance and Special Conditions

Discharges from the WWTF to groundwater of the State will be limited and monitored as follows:

PARAMETER		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)		0.050	0.060	Continuous	Meter
Influent	CBOD5 (mg/l)	Monitor and Report		Quarterly	Discrete
	TSS (mg/l)	Monitor and Report		Quarterly	Discrete
Effluent	CBOD5 (mg/l)	---	45	Quarterly	Discrete

	TSS (mg/l)	---	90	Quarterly	Discrete
	pH (Standard Units)	6.0 - 9.0		Quarterly	Discrete
Ponds	Staff Gauges (Feet of Freeboard)	Monitor & Report		Weekly	Discrete

Monitor wells are installed at this facility. The upgradient well, Well #1, is located approximately 150 feet east of the primary pond. The downgradient well, Well #2 is located approximately 150 feet west of the percolation pond. Well #2 is approximately 1120 feet downgradient of Well #1. The wells will be monitored per the permit as follows:

PARAMETER	MONITORING REQUIREMENT OR LIMITATION	MEASUREMENT FREQUENCY	SAMPLE TYPE
Depth to Groundwater (feet)	Monitor and Report ^(a)	Quarterly	Discrete
Groundwater Elevation (feet AMSL)	Monitor and Report	Quarterly	Discrete
Total Nitrogen as N (mg/l)	10	Quarterly	Discrete
Nitrate as N (mg/l)	Monitor and Report ^(b)	Quarterly	Discrete
Chlorides (mg/l)	Monitor and Report	Quarterly	Discrete

^(a) If well is dry, report as dry.

^(b) Limited according to Part I.A.12.

Schedule of Compliance

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit. 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.
- b. A revised Operations and Maintenance Manual shall be submitted to NDEP for review and approval by **April 5, 2011**. The O&M Manual shall include a section outlining sample collection and handling procedures.
- c. A certification letter detailing the completion of the pond rehabilitation project shall be submitted to NDEP by **April 5, 2011**.

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 **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. In order to be considered, written comments must be hand-delivered, sent via mail (postmarked), emailed or faxed no later than 5:00 P.M. on **February 23, 2011**. 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 445A.605.

Proposed Determination:

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

Rationale for Permit Requirements:

Monitoring is required to ensure that groundwater 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 flow limitations. Effluent to be used for irrigation purposes will be treated and disinfected to appropriate levels to ensure that the site poses no appreciable threat to public health.

Updated by: Joseph Maez, P.E.
Staff Engineer III, Bureau of Water Pollution Control
December 2010