



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

Colleen Cripps, Ph.D., Administrator

## FACTSHEET (pursuant to NAC 445A.236)

**Permittee Name:** MCGILL-RUTH CONSOLIDATED SEWER & WATER GID  
29 FOURTH ST  
MCGILL, NV - 89318

**Permit Number:** NS0087047

**Location:** RUTH TREATMENT PONDS, WHITE PINE  
1 MILE WEST OF U.S. 50 ON S.R. 485, RUTH, NV - 89318  
LATITUDE: 39.283333, LONGITUDE: -114.9775  
TOWNSHIP: 16, RANGE: 62, SECTION: 3

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	INFLUENT	Internal Outfall		RUTH	NV	89319	WHITE PINE	39.283333	-114.9775	GROUNDWATER
002	EFFLUENT	External Outfall		RUTH	NV	89319	WHITE PINE	39.283333	-114.9775	GROUNDWATER

### General:

The McGill-Ruth Consolidated Sewer & Water General Improvement District owns and operates the Ruth Treatment Ponds, a facultative pond treatment system located approximately 5 miles northwest of the City of Ely, on SR 485. The original treatment system consisted of four unlined facultative ponds (#1 through #4) that were constructed in the 1950's. The new treatment system, which was upgraded in 2008, includes a Palmer-Bowlus flume and ultrasonic flow meter, an influent diversion box, one HDPE-lined 1.5-acre primary treatment pond (pond #1), one HDPE-lined 0.8-acre secondary treatment pond (pond #2), one HDPE-lined 0.8 acre effluent polishing pond (pond #3, formerly pond #1), and three rapid infiltration basins (formerly ponds #2, #3, and #4). All ponds and infiltration basins are operated in series. Pond #1 includes a 30-foot long by 30-foot wide by 6-foot deep sludge sump (fermentation pit) designed to accelerate digestion and reduce the volume of sludge in the pond system. If required, influent can be diverted to any of the three treatment ponds.

Influent flows via gravity to the treatment plant from the community of Ruth. In 2012 the Nevada State Demographer reported the population of Ruth to be 418 residents.

### Discharge Characteristics:

During the term of the previous permit, which began on November 15, 2007, the following average discharge concentrations were reported:

1. 30-day average flow - 0.029 MGD
2. Daily maximum flow - 0.036 MGD
3. CBOD - 20 mg/L
4. TSS - 50 mg/L
5. Nitrogen - 14 mg/L
6. pH - 8.69 S.U.

### Receiving Water:

Receiving water is groundwater of the State. A down-gradient monitoring well boring completed on October 23, 2003, showed no groundwater at a depth of 200 feet below ground surface; therefore, no groundwater

monitoring is required.

**Summary of Changes From Previous Permit:**

In order to maintain consistency with current NDEP policy and the monitoring requirements of similar treatment facilities, the following permit changes have been made:

1. The requirement to monitor sewage influent for CBOD and total suspended solids has been removed from the permit. The requirement to monitor influent is applicable only to facilities that require an NPDES permit.
2. Due to a new Permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV87047 to NS0087047. This change does not reflect a change in the type of permit being issued.

**Proposed Effluent Limitations:**

The Division proposes the following permit limitations and monitoring requirements:

**WWTP Discharge Limitations Table for Sample Location 001 (Internal Outfall) To Be Reported Monthly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 0.060 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER
Flow rate	30 Day Average	<= 0.060 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER

**WWTP Discharge Limitations Table for Sample Location 002 (External Outfall) To Be Reported Quarterly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, carbonaceous, 05 day, 20 C	Value		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
pH, minimum	Minimum Value <sup>[1]</sup>		>= 6.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
pH, maximum	Maximum Value <sup>[1]</sup>		<= 9.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
Solids, total suspended	Value		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, total	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. If fewer than two samples are taken during the monitoring period, enter the result as both the minimum and maximum value.

**Rationale for Permit Requirements:**

The Division's rationale for the proposed monitoring conditions is as follows:

Flow - Influent flow is measured to ensure the design capacity of 0.060 MGD is not exceeded.

CBOD - The Division's maximum secondary treatment standard for pond system effluent is 45mg/L.

TSS - The Division's maximum secondary treatment standard for pond system effluent is 90mg/L.

Total nitrogen - Total nitrogen is monitored to track the amount of nitrogen in the treated effluent.

pH - The Division's secondary treatment standard for effluent is 6.0 - 9.0 Standard Units.

**Special Conditions:**

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

**Flow:**

The design treatment capacity of this facility is 0.060 MGD. Flow is measured at the headworks with an ultrasonic flow meter manufactured by QCEC. This meter was installed in 2006 and replaced a stilling well float meter.

**Corrective Action Sites:**

There are no NDEP Bureau of Corrective Actions remediation sites within a one-mile radius of this facility.

**Wellhead Protection Program:**

This facility is not located within a Drinking Water Protection Area or a Wellhead Protection Area established for any well sources.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies of an updated Operation and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall be prepared by a Nevada Registered Professional Engineer or other qualified person. If no updates or revisions are required, the Permittee shall submit a letter by the due date stating that there have been no changes to the previously approved O&M Manual. <sup>[1]</sup>	1/18/2014

Notes (Schedule of Compliance Table):

- O&M Manuals prepared by Nevada Registered Professional Engineers must be signed and stamped in accordance with NAC 625.610.

**Deliverable Schedule:**

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Discharge Monitoring Reports	Quarterly	1/28/2014
2	Annual Report	Annually	1/28/2014

**Procedures for Public Comment:**

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **The Ely Times and 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 until 5:00 P.M. **10/14/2013**, 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 of EPA Region IX 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.650.

**Proposed Determination:**

The Division has made the tentative determination to issue / re-issue the proposed 5-year permit.

Prepared by: **Arthur B. Marr III**

Date: **9/9/2013**

Title: **P.E.**