



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

**Permittee Name:** MCGILL-RUTH CONSOLIDATED SEWER AND WATER GENERAL  
IMPROVEMENT DISTRICT  
29 FOURTH STREET  
MCGILL, NV - 89318

**Permit Number:** NS0087046

**Location:** MCGILL WASTEWATER TREATMENT FACILITY, WHITE PINE  
29 FOURTH STREET, MCGILL, NV - 89318  
LATITUDE: 39.392778, LONGITUDE: -114.789167  
TOWNSHIP: 18 N, RANGE: 64 E, SECTION: 29

| 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 |              | MCGILL       | NV            | 89318       | WHITE PINE     | 39.392778 | -114.789167 | GROUNDWATER     |
| 002                | EFFLUENT               | External Outfall |              | MCGILL       | NV            | 89318       | WHITE PINE     | 39.392778 | -114.789167 | GROUNDWATER     |
| 003                | MONITORING WELL - MW-1 | Monitoring Well  |              | MCGILL       | NV            | 89318       | WHITE PINE     | 39.3940   | -114.7870   | GROUNDWATER     |
| 004                | MONITORING WELL - MW-2 | Monitoring Well  |              | MCGILL       | NV            | 89318       | WHITE PINE     | 39.3880   | -114.7943   | GROUNDWATER     |
| 005                | MONITORING WELL - MW-3 | Monitoring Well  |              | MCGILL       | NV            | 89318       | WHITE PINE     | 39.3915   | -114.79     | GROUNDWATER     |

**General:**

The McGill/Ruth Consolidated Sewer and Water District Wastewater Treatment Facility (WWTF) is located approximately 1.5 miles south of McGill in White Pine County. Domestic (sanitary) wastewater is treated biologically in a single-lined pond that is divided in two by a curtain and this provides a dual-cell, partial mix/aerated lagoon. After primary treatment in the first cell, effluent flows through an opening in the curtain into the second cell for further treatment. Effluent from the second facultative cell is discharged to groundwater via percolation through six Rapid Infiltration Basins (RIBs). The facility serves approximately 1,100 residents, and is currently permitted for 25,000 gallons per day of wastewater.

During this permit cycle, McGill will decommission one of the six RIBs and convert it into a polishing pond for further treatment prior to disposal into the remaining RIBs. This pond will also provide redundancy should the primary pond need to be taken off-line during an emergency or maintenance.

McGill also installed two additional monitoring wells, one up-gradient (MW-1) and one down-gradient (MW-2) in the summer of 2015. The up-gradient well will be sampled to provide baseline water quality results. The down-gradient well was installed 250-feet south-southeast from the furthest RIB. Samples from this well will provide a more accurate picture about any impact on the groundwater from disposal of treated effluent in the RIBs.

### **Discharge Characteristics:**

The discharge from the wastewater treatment plant is secondarily-treated effluent. The effluent is pumped to the RIBs, which distribute the effluent into the groundwater of the State. The treated effluent meets State and Federal standards for secondary treatment.

### **Receiving Water:**

Groundwater at the facility that meets drinking water standards is encountered 15-feet below ground surface. Recent monitoring well data indicates that one of the existing monitoring wells occasionally exceeds the total nitrogen limit of 10 mg/L. This was most likely due to its location immediately adjacent to one of the RIBs. McGill recently installed a new down-gradient monitoring well and future water quality data will show whether groundwater is impacted.

### **Summary of Changes From Previous Permit:**

During this permit cycle, McGill will decommission one of the six RIBs and convert it into a polishing pond for further treatment prior to disposal into the remaining RIBs. This pond will also provide redundancy should the primary pond need to be taken off-line during an emergency or maintenance.

McGill also installed two additional monitoring wells, one up-gradient and one down-gradient in the summer of 2015. The up-gradient well (MW-1) will be sampled to provide baseline water quality results and the down-gradient well (MW-2) was installed 250-feet south-southeast from the furthest RIB so samples will provide a more accurate picture about any impact on the groundwater from disposal of treated effluent in the RIBs.

Due to the new naming conventions at the Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control, the permit number has been changed from NEV87046 to NS0087046. This change does not reflect a change in the type of permit being issued.

### **Proposed Effluent Limitations:**

The discharge shall be limited, sampled and monitored by the Permittee as specified below:

**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 |
| BOD, carbonaceous, 05 day, 20 C | Monthly Maximum       |  | M&R Milligrams per Liter (mg/L) | Raw Sewage Influent     | 001        | Monthly               | DISCRT      |
| Flow rate                       | Monthly Maximum       | <= 0.25 Million Gallons per Day (Mgal/d) |                                 | Raw Sewage Influent     | 001        | Weekly                | METER       |
| Flow rate                       | Monthly Average       | <= 0.18 Million Gallons per Day (Mgal/d) |                                 | Raw Sewage Influent     | 001        | Weekly                | METER       |

**WWTP Discharge Limitations Table for Sample Location 002 (External Outfall) To Be Reported Monthly<sup>[1]</sup>**

| Discharge Limitations           |                 |          |                                   | Monitoring Requirements |            |                       |             |
|---------------------------------|-----------------|----------|-----------------------------------|-------------------------|------------|-----------------------|-------------|
| Parameter                       | Base            | Quantity | Concentration                     | Monitoring Loc          | Sample Loc | Measurement Frequency | Sample Type |
| Solids, total suspended         | Monthly Maximum |          | <= 90 Milligrams per Liter (mg/L) | Effluent Gross          | 002        | Monthly               | DISCRT      |
| BOD, carbonaceous, 05 day, 20 C | Monthly Maximum |          | <= 45 Milligrams per Liter (mg/L) | Effluent Gross          | 002        | Monthly               | DISCRT      |

Notes (WWTP Discharge Limitations Table):

1. Sample effluent prior to RIBs.

**Groundwater Monitoring Wells Table for Sample Location 003 (Monitoring Well - Mw-1) To Be Reported Quarterly**

| Parameter  | Discharge Limitations |               |                                 | Monitoring Requirements |            |                       |                       |
|--|-----------------------|---------------|---------------------------------|-------------------------|------------|-----------------------|-----------------------|
|  | Base                  | Quantity      | Concentration                   | Monitoring Loc          | Sample Loc | Measurement Frequency | Sample Type           |
| Depth to water level ft below landsurface <sup>[1]</sup> | Quarterly Maximum     | M&R Feet (ft) |                                 | Groundwater             | 003        | Quarterly             | VISUAL <sup>[2]</sup> |
| Solids, total dissolved                                  | Quarterly Maximum     |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 003        | Quarterly             | DISCRT                |
| Chloride (as Cl)   | Quarterly Maximum     |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 003        | Quarterly             | DISCRT                |
| Nitrogen, total  | Quarterly Maximum     |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 003        | Quarterly             | DISCRT                |

Notes (Groundwater Monitoring Wells Table):

1. Depth to Groundwater, ft.
2. Field measurement.

**Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well - Mw-2) To Be Reported Quarterly**

| Parameter  | Discharge Limitations |               |                                   | Monitoring Requirements |            |                       |                       |
|--|-----------------------|---------------|-----------------------------------|-------------------------|------------|-----------------------|-----------------------|
|  | Base                  | Quantity      | Concentration                     | Monitoring Loc          | Sample Loc | Measurement Frequency | Sample Type           |
| Solids, total dissolved                                  | Quarterly Maximum     |               | M&R Milligrams per Liter (mg/L)   | Groundwater             | 004        | Quarterly             | DISCRT                |
| Chloride (as Cl)   | Quarterly Maximum     |               | M&R Milligrams per Liter (mg/L)   | Groundwater             | 004        | Quarterly             | DISCRT                |
| Nitrogen, total  | Quarterly Maximum     |               | <= 10 Milligrams per Liter (mg/L) | Groundwater             | 004        | Quarterly             | DISCRT                |
| Depth to water level ft below landsurface <sup>[1]</sup> | Quarterly Maximum     | M&R Feet (ft) |                                   | Groundwater             | 004        | Quarterly             | VISUAL <sup>[2]</sup> |

Notes (Groundwater Monitoring Wells Table):

1. Depth to Groundwater, ft.
2. Field measurement.

**Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well - Mw-3) To Be Reported Quarterly**

| Parameter  | Discharge Limitations |               |                                   | Monitoring Requirements |            |                       |                       |
|--|-----------------------|---------------|-----------------------------------|-------------------------|------------|-----------------------|-----------------------|
|  | Base                  | Quantity      | Concentration                     | Monitoring Loc          | Sample Loc | Measurement Frequency | Sample Type           |
| Solids, total dissolved                                  | Quarterly Maximum     |               | M&R Milligrams per Liter (mg/L)   | Groundwater             | 005        | Quarterly             | DISCRT                |
| Chloride (as Cl)   | Quarterly Maximum     |               | M&R Milligrams per Liter (mg/L)   | Groundwater             | 005        | Quarterly             | DISCRT                |
| Nitrogen, total  | Quarterly Maximum     |               | <= 10 Milligrams per Liter (mg/L) | Groundwater             | 005        | Quarterly             | DISCRT                |
| Depth to water level ft below landsurface <sup>[1]</sup> | Quarterly Maximum     | M&R Feet (ft) |                                   | Groundwater             | 005        | Quarterly             | VISUAL <sup>[2]</sup> |

Notes (Groundwater Monitoring Wells Table):

1. Depth to Groundwater, ft.
2. Field measurement.

**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 permit limits. The Permittee is in substantial compliance with its current discharge permit.

**Special Conditions:**

SA – Special Approvals / Conditions Table

| Item # | Description   |
|--------|---|
| 1      | The Permittee shall submit plans to NDEP for review and approval prior to converting the RIB to a lined treatment pond. No work shall begin on the project until NDEP has approved the plans. |

**Flow:**

Flow: 0.180 MGD 30-Day average flow  
0.250 MGD maximum flow

**Corrective Action Sites:**

There are no Bureau of Corrective Actions remediation sites located within a one-mile radius of the wastewater treatment facility site.

**Wellhead Protection Program:**

The proposed wastewater treatment facility site is not located within 6,000-feet of a municipal water supply well Drinking Water Protection Area. The new monitoring well, designated as MW-1, is located within the groundwater protection area so future water quality results will show whether the groundwater is impacted by discharging through the RIBs.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

| Item # | Description  | Due Date |
|--------|--|----------|
| 1      | The Permittee shall submit two copies of an updated Operations and Maintenance (O&M) Manual to NDEP for review. The manual shall be prepared in accordance with the Division's WTS-2 guidance document: <i>Minimum Information Required for an Operations and Maintenance Manual</i> . If no revisions are needed, the Permittee shall submit a letter stating that the O&M Manual has no revisions. | 7/4/2016 |
| 2      | The Permittee shall use a method approved by NDEP to determine the sludge depth in its ponds. The levels shall be tested in the 4th quarter of each year of this permit and reported in the Annual Report as the total depth of the ponds and the depth of sludge in each pond. The plan for monitoring the sludge depths shall be submitted with O&M Manual.  | 7/4/2016 |

**Deliverable Schedule:**

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

| Item # | Description    | Interval  | First Scheduled Due Date |
|--------|----------------|-----------|--------------------------|
| 1      | Quarterly DMRs | Quarterly | 7/28/2016                |
| 2      | Annual Report  | Annually  | 1/28/2017                |

**Procedures for Public Comment:**

The Notice of the Division's intent to issue 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, 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. **2/8/2016**, 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.605.

**Proposed Determination:**

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

Prepared by: **Steve McGoff**  
Date: **4/24/2013**  
Title: **Staff Engineer III**