



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: EMPIRE MINING CO., LLC
P.O. BOX 157
GERLACH, NV - 89412

Permit Number: NS0050020

Location: TOWN OF EMPIRE WASTEWATER TREATMENT FACILITY, WASHOE
HIGHWAY 447 NORTH, EMPIRE, NV - 89405
LATITUDE: 40.581944, LONGITUDE: -119.345556
TOWNSHIP: 31N, RANGE: 23E, SECTION: 11

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	EFFLUENT	External Outfall		EMPIRE	NV	89405	WASHOE	40.581944	-119.345556	GROUNDWATER

General:

The Permittee, Empire Mining Co., LLC, has applied for the renewal of permit NS0050020 for the Town of Empire Wastewater Treatment Facility (WWTF) in Empire, Washoe County, Nevada. The WWTF consists of the East Plant and the West Plant, two parallel treatment trains which were constructed in 1950 and 1955, respectively, to treat domestic (sanitary) wastewater generated by employee housing units that formerly belonged to U.S. Gypsum Co., a no-longer-operational gypsum mining and drywall manufacturing company.

The East and West Plants each consist of an Imhoff tank for primary treatment and a trickling filter for secondary treatment. The East Plant has been decommissioned and only the West Plant is currently operational. Following primary and secondary treatment, effluent is discharged into the east pond for disposal via percolation and evaporation; the west pond is currently dry and not in use. The east pond has a surface area of 1 acre, and the west pond has a surface area of 0.75 acres. The east pond is equipped with a re-circulation pump for oxygenation / odor control, and dry sludge from the Imhoff tanks is periodically disposed of at Lockwood Landfill in Storey County, Nevada.

The WWTF currently only services the local grocery store and one occupied house. As a result of current low-flow conditions, the re-circulation pump in the east pond is not in use and potable water is supplied to the WWTF's collection system to provide the minimum flow required for continued operation of the West Plant's trickling filter.

Future plans include reopening the gypsum mine and crushing plant and employing an estimated workforce of 16 to 25 employees.

Discharge Characteristics:

The discharge consists of secondary-treated domestic wastewater with the following average characteristics, calculated from daily maximum values reported in 2015:

Biochemical Oxygen Demand (BOD): 3 mg/L
Total Suspended Solids: 5 mg/L

pH: 8.42 standard units
Total Nitrogen: 1.2 mg/L

Receiving Water:

The receiving water is groundwater of the State. The groundwater underlying the WWTF is reportedly 150 feet below ground surface and flows west. The permitted discharge is not expected to negatively impact the groundwater.

Summary of Changes From Previous Permit:

The Permittee has changed from U.S. Gypsum Co. to Empire Mining Co., LLC.

The 30-day average limit for BOD, 5-day has been changed from 45 mg/L to 30 mg/L in order to keep with the secondary treatment standards.

The 30-day average limit for TSS has been changed from 45 mg/L to 30 mg/L in order to keep with the secondary treatment standards.

The requirement to electronically submit Discharge Monitoring Reports (DMRs) within 1 year of permit issuance has been added. The Bureau of Water Pollution Control's Nevada NetDMR system is a website that allows for electronic submission of DMRs. By using Nevada NetDMR, Permittees will save time, see a reduction in paperwork burden, and data will automatically error-check and validate the information prior to submission. The system also allows for electronic submittal of attachments and supplemental documentation and provides instant confirmation of submission.

Due to the new naming conventions at the Nevada Division of Environmental Protection, Bureau of Water Pollution Control, the permit number has been changed from NEV50020 to NS0050020. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

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

WWTP Discharge Limitations Table for Sample Location 001 (Effluent) To Be Reported Monthly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate ^[1]	Daily Maximum	<= 0.060 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER ^[2]
Flow rate ^[1]	30 Day Average	<= 0.050 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER ^[2]
BOD, 5-day	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	WEIR ^[3]
BOD, 5-day	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	WEIR ^[3]
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	WEIR ^[3]
Solids, total suspended	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	WEIR ^[3]
pH, minimum	Minimum Value		>= 6.0 Standard Units (SU)	Effluent Gross	001	Monthly	WEIR ^[3]
pH, maximum	Maximum Value		<= 9.0 Standard Units (SU)	Effluent Gross	001	Monthly	WEIR ^[3]

Notes (WWTP Discharge Limitations Table):

1. East and West Plants combined
2. Pump station timers
3. Clarifier weir

WWTP Discharge Limitations Table for Sample Location 001 (Effluent) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	WEIR ^[1]
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	WEIR ^[1]

Notes (WWTP Discharge Limitations Table):

1. Clarifier weir

Rationale for Permit Requirements:

The permit requirements have been established to assess the level of treatment being provided, to determine when the design capacity is being approached, and to prevent degradation of the groundwater underlying the WWTF.

Special Conditions:

Substantial compliance with the current permit is a condition of permit renewal.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Flow:

Daily Maximum Flow Rate \leq 0.060 million gallons per day (MGD)

30-Day Average Flow Rate \leq 0.050 MGD

Corrective Action Sites:

There are no Bureau of Corrective Actions remediation sites located within one mile of the WWTF.

Wellhead Protection Program:

The WWTF is located outside of a well vulnerability area and down gradient from the Empire Mining Company's #7 well. The permitted discharge is not expected to negatively impact the groundwater.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit an updated Operation and Maintenance (O&M) Manual to the Division. The O&M Manual shall be prepared in accordance with guidance document <i>WTS-2: Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant</i> . If the Permittee can demonstrate that no updates to the O&M Manual are necessary, the Permittee may submit a letter stating the current manual reflects the current operations and contact information.	3/1/2017
2	Within 1 year of permit issuance, all Discharge Monitoring Reports shall be submitted electronically through the Nevada NetDMR website (https://netdmr.ndep.nv.gov/netdmr/public/home.htm).	12/1/2017

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Discharge Monitoring Report	Quarterly	1/28/2017
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 **Reno Gazette 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. **11/14/2016**, 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: **Bonnie Hartley**

Date: **10/3/2016**

Title: **Environmental Scientist**